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Destination FAA

FAA Policy

Program and Program Managers

Community of Practice

# ACQUISITION WORKFORCE PLAN

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2011



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# FOREWORD

Every day the Federal Aviation Administration (FAA) safely and efficiently moves over 70,000 flights across the skies. Modernizing the National Airspace System (NAS) that helps guide and direct this flight traffic represents a core dimension of FAA's mission and it is FAA's acquisition workforce professionals who fulfill this role. As might be expected, modernizing such a complex, highly sophisticated system requires an acquisition workforce of the highest caliber. This 2011 Acquisition Workforce Plan outlines FAA's plans for ensuring we meet that requirement.

This Plan addresses recruitment, staffing, development and retention strategies targeted to FAA employees directly engaged in acquiring the technologies and systems that provide the backbone of the NAS and in overseeing their development and implementation. Originally published in 2009 and updated in 2010, this Plan updates projected workforce needs and:

- Presents an updated acquisition workforce profile.
- Extends the workforce planning horizon through FY 2015.
- Adds or further defines FAA professions included in the acquisition workforce.
- Emphasizes strategies to develop our existing workforce.
- Reports our progress toward achieving the 2010 workforce plan strategies.

## SINCE PUBLICATION OF THE 2010 ACQUISITION WORKFORCE PLAN, THE AGENCY:

- Met 92 percent of the overall acquisition workforce requirements projected last year for FY 2011 Capital Investment Plan programs. For critical, hard to fill professions, this includes meeting 96 percent of Research and Engineering workforce requirements, 99 percent of Program/Project Management requirements, and 97 percent of Contracting Officer/Specialist requirements.
- Met its FY 2011 goal of certifying Contracting Officers/Specialists within 15 months of hire.
- Is on target to meet its FY 2011 goal of certifying 95 percent of targeted program managers by the end of FY 2011.

- Provided almost 5,000 acquisition-related training opportunities, with over 550 seats in contracting and procurement training programs and over 4,000 seats in more than 200 classes for the development of Program/Project Managers, Systems Engineers, Contracting Officer Technical Representatives, and Financial Management/Cost Estimators.
- Provided monthly reporting on acquisition workforce metrics to the Acquisition Workforce Council to support resource decision-making across FAA's acquisition organizations.

We are proud of our accomplishments and we recognize the need to continuously develop FAA's acquisition workforce to meet critical workforce requirements. While recognizing the reality of budgetary constraints and intense competition for qualified acquisition employees, this Plan articulates FAA's commitment to ensuring that we continue to grow and develop the acquisition workforce talent base; enabling the agency to move forward with NAS modernization, and the nation to maintain the world's safest and most efficient air transportation system.



# EXECUTIVE SUMMARY

FAA's acquisition professionals are focused on modernizing the National Airspace System (NAS) to increase flight capacity, meet future air traffic demands, and enable the nation to continue to benefit from safe, efficient air travel and a healthy aviation industry. This Acquisition Workforce Plan provides a blueprint for developing a high-performing acquisition workforce capable of successfully meeting these objectives. While recognizing the contribution and role of our contractors, this plan focuses on the federal workforce only. The purpose and focus of the Acquisition Workforce Plan is to ensure FAA has a stable cadre of federal employees to provide consistent, long-term staffing and maintain core in-house capabilities necessary to successfully manage FAA's major systems acquisitions.

The approximately 1,530 acquisition professionals defined in this Plan are instrumental in successfully acquiring the technologies and systems that make gains in safety and efficiency possible. While the acquisition workforce represents only 3 percent of the approximately 47,000 FAA employees, these professionals manage core programs with a total life cycle investment of over \$39 billion.

Acquisition professionals include the Contracting Officers/Specialists, Program/Project Managers, Researchers, Engineers, Contracting Officer's Technical Representatives (COTRS), Business/Financial Managers, Test and Evaluators, Procurement Attorneys, and Integrated Logistics Support Specialists whose advanced technical and leadership skills are critical to modernizing the NAS. Technologically, these professionals must stay abreast of rapidly evolving developments across many professions, introduce and leverage new and emerging technologies, expertly manage multi-year development cycles, and ensure that billions of taxpayers' dollars are used wisely.

Acquisition professionals must demonstrate considerable leadership skills. It can take years to develop complex large-scale air traffic systems. Development doesn't move forward without widespread stakeholder support from airlines, local and state governments, sophisticated suppliers, and Congress. The FAA's acquisition professionals must bring these diverse stakeholders together; managing diverse interests, building support for new ways of doing business, and integrating the contributions of each stakeholder to achieve a final solution.

As defined in this Plan, FAA's acquisition managers and executives project an increase in workforce requirements of approximately 10 percent, or 150 acquisition professionals, in FY 2012. Workforce requirements across the acquisition programs are projected to stabilize after FY 2012 through FY 2015.

These requirements are driven by current program requirements that could, and likely will, be impacted by changes in budgets and implementation schedules.

Approximately 17 percent of FAA's acquisition workforce is eligible to retire this year, and almost 40 percent will be eligible within 5 years. The potential loss of these highly trained professionals increases the importance and urgency of growing and developing the professionals that will remain.

Recognizing that anticipated budgetary constraints will reduce FAA's ability to hire new employees to meet near-term requirements, the Plan places primary and significant emphasis on the strategies required to develop the existing workforce to most effectively and efficiently accomplish FAA's objectives. It fully supports FAA's Destination 2025 goal of having a Workplace of Choice, with the right people with the right skills in the right positions at the right time. In doing so, we will pursue multiple avenues from certification and continuous learning, to hands-on mentoring, and other developmental activities to continuously develop our employees into the federal government's premier acquisition workforce.

This Plan recognizes the progress FAA has made to develop its acquisition workforce. It also describes the actions FAA will take in FY 2012 to continue that development. FAA embraces acquisition workforce development because we recognize that we must have the highest caliber acquisition professionals if we are to fulfill our mission. We recognize that the expertise and performance of our acquisition workforce has a direct impact on the safety of air transportation and, ultimately, U.S. economic growth.



# 1. INTRODUCTION TO THE PLAN

## THIS ACQUISITION WORKFORCE PLAN:

- Presents an updated acquisition workforce profile.
- Extends the workforce planning horizon through FY 2015.
- Adds or further defines FAA professions included in the acquisition workforce.
- Emphasizes strategies to develop our existing workforce.
- Reports our progress toward achieving the 2010 workforce plan strategies.

The FAA's Acquisition Workforce Council, comprised of acquisition executives from across the agency, sets acquisition workforce-related requirements and oversees plan development and implementation. The Director of Acquisition Policy and Oversight chairs the Council. This position reports directly to the agency's Chief Acquisition Officer.

The Council annually reviews and refines long-term planning projections to reflect changes in scope, definition of the acquisition workforce, and workload. The FAA uses these planning numbers as important guideposts for setting near-term strategies and enhancing decision-making.

The estimated staffing requirements presented in this Plan are forecasts based on the expert knowledge of the acquisition community. They represent planning figures that are reviewed and refined annually to accommodate changes in workload and of the workforce itself. The FAA continues to refine and improve its methodology and mature the tools used to identify and track the workforce and to estimate and translate future workload requirements into a forecast for the number and type of professionals needed. We recognize that as a forecast our estimates will not be exact and that actual numbers may vary depending on future budgets and program scenarios, but they will provide important guidance to our planning efforts.

# GUIDING PRINCIPLES

The Council established the following guiding principles for acquisition workforce planning:

**1. Leverage Existing Programs and Best Practices from Across Government.**

While FAA faces unique challenges and drivers, its overall acquisition workforce needs are similar to those of other federal agencies. The FAA will capitalize on acquisition workforce best practices and programs developed across government and industry to reduce the time and cost of developing tools and strategies.

**2. Staff and Shift Resources to Best Meet Needs.**

As acquisition programs move through the phases of the acquisition life cycle, staffing needs change. The FAA must staff according to these shifting needs. The FAA will staff with consideration for overall agency needs and priorities first, and individual programs and organizations second. The agency will identify the best fit for each position and will look internally and externally to close skill gaps.

**3. Use an Appropriate Balance of Federal Employees and Contractors.**

The FAA will use federal employees to provide consistent, long-term staffing and maintain core in-house capabilities, and will supplement this workforce with a flexible level of contractors to meet staff and skill requirements that fluctuate over time. This plan focuses on the staffing and development needs of the federal workforce.

**4. Implement Innovative Workforce Strategies.**

The FAA will implement aggressive strategies for recruitment, staffing, training and development, and retention. The agency will create multiple paths for attracting and retaining acquisition workforce talent.

**5. Update the Acquisition Workforce Plan Annually and Consider It a Living Document.**

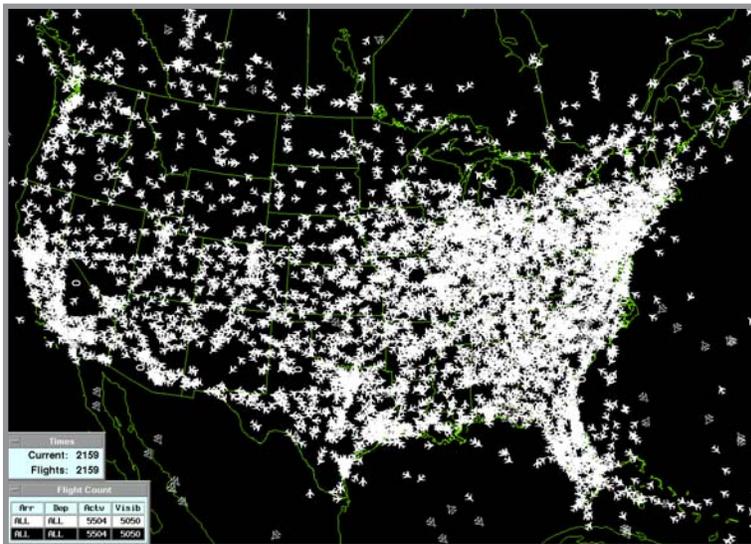
The FAA views workforce planning as a continuous process, and this Plan will be treated as a “plan in motion.” The Acquisition Workforce Council will track progress against our strategies and revise and update strategies as necessary to meet evolving needs and lessons learned from work-to-date.

## 2.

# THE NATIONAL AIRSPACE SYSTEM (NAS) AND THE ACQUISITION WORKFORCE

FAA's multi-billion dollar investment in the NAS ensures the health and vitality of the aviation industry. As recently as 2009, civil aviation contributed an estimated \$1.3 trillion annually to the national economy, and constituted 5.3 percent of the gross domestic product. It generated more than 10 million jobs, with earnings of \$397 billion.<sup>1</sup> Fueling this economic engine requires FAA to sustain and innovatively enhance the U.S. air traffic infrastructure; continually introducing new technologies and systems that improve overall safety and efficiency while increasing capacity and reducing delays. FAA's latest estimates, which are sensitive to traffic and fuel price forecasts, indicate that by 2018, technology enhancements will reduce total delays (in flight and on the ground) by about 35 percent compared with what would happen if we did nothing. That delay reduction will provide, through 2018, an estimated \$23 billion in cumulative benefits to aircraft operators, the traveling public and FAA. In the process, we will save about 1.4 billion gallons of aviation fuel during this period, reducing carbon dioxide emissions by 14 million tons.<sup>2</sup>

The United States' air traffic control system is the safest in the world. To keep it that way, FAA works continuously to improve the technologies, processes, hardware, and software that comprise the overall system. This includes incorporating new equipment and facilities as well as determining where that equipment and those facilities will be most effective.



**Figure 2.1**

*Representation of the Volume of Air Traffic Across the Continental United States*

<sup>1</sup> "The Economic Impact of Civil Aviation on the U.S. Economy," FAA, March 2011.

<sup>2</sup> "FAA's NextGen Implementation Plan", FAA, March 2011.

The FAA is working on a plan now to make the best use of new and existing technology, infrastructure, and employees to handle the doubling and tripling of air traffic expected in the coming decades. NextGen is an umbrella term for this ongoing transformation of the NAS. At its most basic level, NextGen represents an evolution from a ground-based system of air traffic control to a satellite-based system of air traffic management. This evolution is vital to meeting future demand, and to avoiding gridlock in the sky and at our nation's airports.<sup>3</sup>

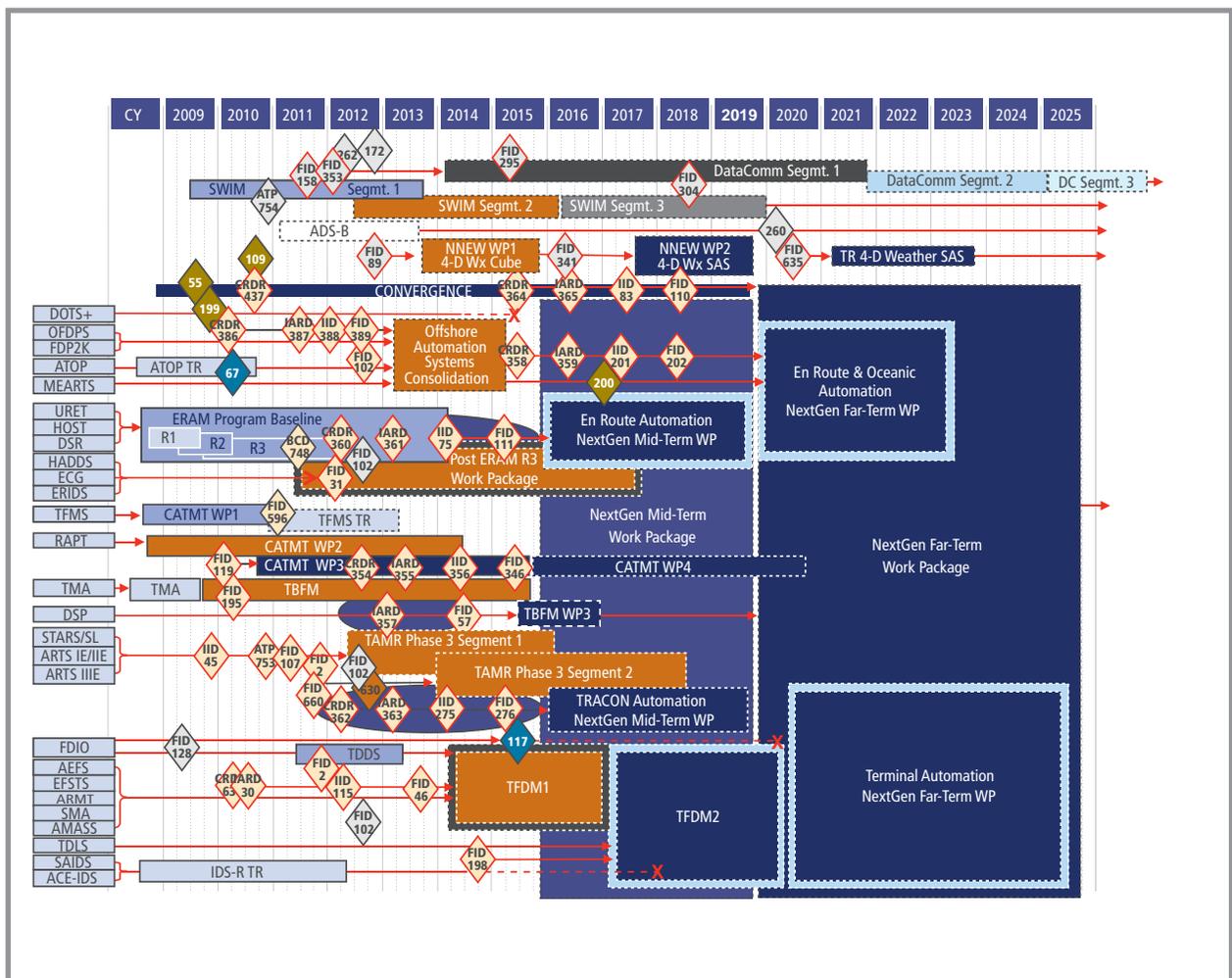
NextGen will open America's skies to continued growth and increased safety while reducing aviation's environmental impact. We will realize these goals through the development of aviation-specific applications for existing, widely-used technologies, such as the Global Positioning System (GPS) and technological innovation in areas such as weather forecasting, data networking, and digital communications. Hand-in-hand with state-of-the-art technology will be new airport infrastructure and new procedures, including the shift of certain decision-making responsibility from the ground to the cockpit.

NextGen will allow more aircraft to safely fly closer together on more direct routes, reducing delays, and providing unprecedented benefits for the environment and the economy through reductions in carbon emissions, fuel consumption, and noise.

This is where acquisition professionals come in. The acquisition of the mission-critical technologies required for NextGen is complex and resource-intensive. It requires a highly skilled, deeply experienced, and flexible workforce that can keep pace with technological innovation, rapidly changing customer and supplier market environments, and the stringent safety and reliability demands of the air traffic control environment. Talented, experienced acquisition professionals, like those at FAA, are in high demand across the federal government, and their numbers are limited.

Acquisition professionals conceptualize, plan, buy, and oversee the development and implementation of the systems and technologies that underpin the NAS. The sample automation roadmap in Figure 2.2 represents just one dimension of this modernization effort. As is evident from the roadmap, this is a highly complex undertaking with many components that must come together to enable safe, efficient flight.

<sup>3</sup> What is NextGen? Source: FAA NextGen website, [http://www.faa.gov/nextgen/why\\_nextgen\\_matters/what/](http://www.faa.gov/nextgen/why_nextgen_matters/what/)



**Figure 2.2**  
Sample NAS Automation Roadmap

## DEFINING THE ACQUISITION WORKFORCE

Acquisition professionals lead and support the development of these NAS systems and technologies through the more than 150 unique yet highly integrated acquisition programs identified in FAA's Capital Investment Plan (CIP). The core acquisition workforce consists of FAA employees with critical skills who directly and primarily support one or more of these CIP programs, from service analysis through in-service decision, including service life extension programs (SLEP). Also included are Contracting Officers/Specialists, Contracting Officer Technical Representatives (COTRs), and Acquisition Attorneys for all procurements, including non-CIP related procurements. In-Service programs are not currently included in this acquisition workforce plan.

Except for employees in the COTR, acquisition law, and contracting professions, for the purposes of this plan only those employees who perform acquisition work 50 percent or more of their time are counted as part of the acquisition workforce.

The acquisition workforce is comprised of federal employees working in specific professions, including:

- **Leadership.** Leadership professionals are the executives and senior managers providing overall direction and leadership for all acquisition programs and for acquisition governance.
- **Program/Project Managers.** These professionals oversee the entire development and implementation of NAS modernization efforts on CIP programs; ensuring that the capabilities are delivered on time, on budget, and on specification.
- **Researchers and Engineers/Systems Engineers.** These technical professionals manage engineering integration across individual systems and acquisition programs to achieve a consistent and consolidated NAS design. Program engineers oversee the technical development of acquisition programs.
- **Business/Financial Analysts.** These analysts develop cost projections, recommend steps to mitigate financial risks, and provide financial and investment analysis, including return on investment (ROI).
- **Contracting Officers/Specialists.** These contracting professionals manage all processes and procedures involved in establishing and maintaining contractual relationships between FAA and its external suppliers.
- **Contracting Officer Technical Representatives (COTRs).** COTRs help resolve technical issues, give technical direction to the Contractor, and interpret technical processes and procedures for the Contracting Officer. COTR responsibilities are often an additional duty.
- **Integrated Logistics Support Specialists.** Logisticians plan, establish, and maintain an integrated logistics system to ensure that NAS programs have access to parts and support services throughout their life cycle.
- **Test and Evaluation Specialists.** Test and Evaluation specialists verify and validate that products meet specifications, satisfy requirements, and are operationally suitable and effective.
- **Acquisition Attorneys.** Acquisition attorneys provide legal advice regarding all aspects of contract formation and administration, and review FAA acquisition actions for legal sufficiency.
- **Specialized Support.** Professionals in the specialized support category are typically NAS subject matter experts. They can include safety managers, information systems specialists, air traffic specialists, and training experts.

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## CURRENT SITUATION: BUSINESS DRIVERS AND CHALLENGES

### MODERNIZING AGING SYSTEMS

For over 50 years, the Federal Aviation Administration (FAA) has proudly delivered the world's leading aviation system, setting an unparalleled standard for safety and efficiency that is emulated globally. Since 2001, we have coordinated more than 93 million successful flights on U.S. commercial aircraft, transporting over 6.5 billion passengers safely to their destinations.<sup>4</sup>

Commercial aviation fatality rates are at historic lows, and other safety indicators, such as runway incursions, are also headed in the right direction. While safely moving these flights is FAA's number one priority, dealing with congestion and delays and improving efficiency and cost performance are also important considerations for managing the National Airspace System (NAS). Despite the economic downturn and the related decrease in air traffic, flight delays continue to impact passenger travel and future demand forecasts continue to remain high. Though staffed by a capable, dedicated workforce, the current air traffic control system is not scalable or flexible enough to keep up with the anticipated future demand. NextGen, with the support of the acquisition workforce, is FAA's response to this serious current and future challenge.

Today's radar-based system of air traffic control, which has served the United States so well for the last 60 years, has hit the ceiling of its growth capacity. Without continued implementation of systems modernization efforts, like FAA's NextGen, the nation faces air traffic gridlock that will not only adversely affect the flying experience but will also impact gross domestic product. FAA's acquisition professionals are focused on modernizing the NAS to increase flight capacity, meet future air traffic demands, and enable the nation to continue to benefit from safe, efficient air flight and a healthy aviation industry.

<sup>4</sup> FAA FY 2012 President's Budget Submission, page 1

## ORGANIZATIONAL CHANGES

The FAA plans to create within its Air Traffic Organization (ATO) a Vice President for Program Management. Currently, acquisition Program Managers for air traffic programs are embedded in several air traffic offices. Although FAA has standardized the training and experience requirements for all of its acquisition major systems Program Managers, moving the ATO's acquisition Program Managers into one organization will allow for better focus on program management. It will also allow that part of the organization responsible for air traffic operations to focus more directly on those operations.

Putting the responsibility for the program management of major ATO system acquisitions into a single organization will facilitate work with the NextGen organization on air traffic system acquisitions and their integration into air traffic operations. In addition, combining these Program Managers into one organization will create an even stronger acquisition community, improve consistency and sharing of best practices, combine certain activities for economies of scale, and provide a better defined career path for its Program Managers.

## BUDGET CONSTRAINTS AND HIRING CHALLENGES

While demand for acquisition professionals is expected to increase in FY 2012, budget constraints point to a limited ability throughout the foreseeable future to meet that demand through the hiring of additional staff. Even the ability to backfill employees lost to retirements or resignations is uncertain under budget scenarios currently under discussion. Instead, FAA must find cost-effective ways to improve efficiencies, reallocate resources, and maximize the capabilities of existing staff to accomplish our mission without impacting safety, cost, schedule or performance. Budget constraints have forced FAA to limit what hiring authority is available (including backfilling vacated positions) to the most critical positions. While acquisition positions are deemed critical, so too are air traffic controller and other mission-critical and safety-related positions; all contributing to competing demands for increasingly limited budget.

## LOOMING RETIREMENTS

Approximately 17 percent of FAA's acquisition workforce is eligible to retire this year, and almost 40 percent will be eligible within 5 years. The FAA's acquisition professionals are highly seasoned professionals with many years of experience. Collectively, their knowledge represents a valuable and critical asset to the agency in the highly complex, technical domain of the NAS. While technical and leadership skills can be developed over time through training and other developmental programs, acquisition professionals need experience with the NAS to fully understand how different technologies, systems, and hardware sub-systems intersect and integrate.

With a projected overall annual attrition rate of over 6 percent (based on historical averages), we must be working now to build our pipeline and bring new employees into the agency. This is necessary to allow sufficient time to fully develop them into qualified acquisition professionals. We need to do this before the more seasoned workforce retires and the robust NAS knowledge required to lead the nation's air traffic modernization efforts is lost.

## COMPETING DEMAND FOR TALENT

Hiring and development of acquisition professionals at FAA and across the federal government has not kept pace with the growth in the number and complexity of acquisitions. A combination of factors, including the increasing complexity of acquisition work and looming retirements, are creating competition for acquisition talent across government. The Federal Acquisition Institute (FAI) and the Government Accountability Office (GAO) have reported on the shrinking pool of certified and experienced acquisition professionals.

Because most federal agencies face these same issues, we anticipate stiff competition in the talent market as each agency struggles – and literally competes with one another – to maintain the skills and resources necessary to manage the taxpayers' investment. To address this, FAA continues to seek out qualified acquisition candidates and, increasingly important in today's budget constrained environment, maintains a concerted focus on retaining and developing its existing talent. We believe that the creation of a Vice President for Program Management in its Air Traffic Organization (ATO) reflects the importance FAA places on acquisition programs.

# 4.

## ACQUISITION WORKFORCE STRATEGIES

The FAA has established four foundational strategies and related initiatives for building a high-performing acquisition workforce capable of successfully supporting NextGen and the transformation of the National Airspace System (NAS). These strategies and the initiatives planned to support them are developed with consideration for the challenges described in the previous section. Accordingly, they recognize the need to improve FAA's hiring processes, but they emphasize the increasing importance of developing existing employees to meet future acquisition requirements.

Outlined in Exhibit 4.1 below, the strategies represent an aggressive plan for:

- Ensuring that our hiring processes both support our organizational needs and foster a positive initial impression on future employees.
- Positioning the agency as an "Employer of Choice" by developing an overall acquisition workforce recruiting approach and profession-specific recruiting strategies.
- Building our acquisition workforce capability through comprehensive development programs that provide formal opportunities for employees to build skills in professions that are both rewarding for them and important to FAA's future.
- Maintaining our commitment to this vital segment of the agency's workforce by institutionalizing acquisition workforce planning.

Acquisition Workforce Strategies	
1	Develop and execute effective acquisition recruiting and staffing strategies
2	Fill gaps based on workforce analyses
3	Create an integrated acquisition career development program
4	Institutionalize the acquisition workforce planning process

**Exhibit 4.1**  
*High-Level Strategies*

As we continue to evolve acquisition workforce planning, we will adhere to these overarching strategies; tailoring each to meet the needs of the individual professions. While the strategies remain the same, we recognize the need to shift emphasis and add new initiatives over time based on updated analyses and lessons learned during the initial years of our planning effort. For instance, with budget constraints limiting FAA's ability to grow the workforce through external hiring, our emphasis has shifted to retention and development of the existing workforce.

## STRATEGY OVERSIGHT AND IMPLEMENTATION

The Acquisition Workforce Council oversees the execution of this plan supported by the Acquisition Career Management group within the Office of Acquisitions, the Air Traffic Organization's Office of Administration and Talent Management, and FAA's Office of Human Resources Management. We continue to collaboratively develop and implement the acquisition workforce strategies and initiatives.

## COMPETENCIES: THE BACKBONE OF ACQUISITION WORKFORCE STRATEGIES

Our strategies rest upon a common foundation to ensure that FAA has the overall competence to fulfill FAA's business goals and, ultimately, to meet cost, schedule and performance targets for modernizing the NAS. Each acquisition workforce profession contributes uniquely to meeting FAA's business goals and each fulfills a different role and responsibility required for acquisition success.

As depicted in Exhibit 4.2 below, the competencies unique to each acquisition workforce profession guide every aspect of development for that profession, from recruiting and selecting acquisition professionals to join the FAA community, to training and developing those individuals, to certifying them in their respective professions. We also use competencies to guide the creation of tools and professional resources to help acquisition professionals be most effective in their roles and to aid them in establishing long-term careers that are rewarding to them and important to FAA.

We communicate these competencies to ensure that the entire acquisition community understands what is necessary and required, and that the community is moving in the same direction to fulfill its mission of modernizing the NAS. The profession profiles described later in Section 7 of this Plan provide a full list of the competencies required for each profession.



**Exhibit 4.2**

*Framework for Acquisition Workforce Development*

## STRATEGY 1.

### Develop and Execute Effective Acquisition Recruiting and Staffing Strategies

The FAA's ability to hire the most talented applicants depends upon its ability to attract those applicants in the first place. The needs and interests of prospective employees vary by profession and by the level of employee – entry, mid and senior – FAA is attempting to attract. Developing a recruiting strategy for each profession helps to ensure that we are leveraging scarce recruiting dollars through targeted recruiting efforts.

FAA's recruitment strategies must be supported by improvements to our hiring processes so that we are able to quickly on-board new talent. While budget reductions may impact the agency's ability to hire, we must be prepared to act quickly if opportunities to hire are presented. To ensure that we are prepared to take advantage of any hiring opportunities, the agency will continue to invest in improving its hiring process.

### **To support implementation of this strategy in FY 2011, FAA:**

- Developed recruiting strategies that address the methods and activities necessary to identify, recruit, and hire acquisition workforce professionals.
- Leveraged FAA's existing messaging campaign and communications tools to reach our target populations.
- Mapped FAA's hiring process and is currently working to streamline it to achieve OPM's 80-Day Hiring Standard. The FAA is currently operating within the Department of Transportation's FY 2011 goal of 130 days to hire.
- Expanded FAA's use of hiring flexibilities for temporary and permanent external hiring, hard to fill positions, special appointment authorities, and hiring incentives.
- Simplified the application process through the elimination of written essay-style questions at the initial front-end application stage for external hires.
- Improved notification to applicants about the status of their employment application.

The FAA will continue to refine recruiting strategies to address the need for entry, mid and senior level professionals. We will also continue to enhance and refine our hiring processes and methods to ensure that we are able to compete effectively in the external market wherever and whenever opportunities are presented.

### **As we move forward, we plan to:**

- Establish an approach and process for conducting annual recruiting planning meetings with hiring managers.
- Review and update existing profession-based recruiting strategies.
- Continue to refine the overall recruiting message; developing messages tailored not only to professions but also to entry, mid, and senior level candidates.
- Continue to enhance and refine our hiring processes and tactics.

## STRATEGY 2.

### Fill Gaps Based on Workforce Analyses

Filling the most critical staffing and skill gaps is a high priority for FAA to successfully design, develop, deploy, and sustain NAS technologies and infrastructure. This strategy is particularly important given the current constrained and uncertain budget environment. The FAA will use the acquisition workforce data and associated analyses to identify priority needs, and make staffing and position allocation decisions accordingly.

#### To support implementation of this strategy in FY 2011, FAA:

- Refined its acquisition workforce data collection processes.
- Developed a data repository that informs data analysis and decision-making.
- Advanced the staffing model tool to include data from approximately 150 Capital Investment Plan programs.
- Provided monthly reporting of on-board staffing gains and losses to the Acquisition Workforce Council.
- Provided various reports and analyses of acquisition workforce data to the Acquisition Workforce Council.

#### As we move forward, we plan to:

- Develop new report formats to provide decision makers with data that is useful in highlighting staffing priorities.
- Improve the linkage of acquisition workforce resource requirements to the budgeting and planning process.

## STRATEGY 3.

### Create an Integrated Acquisition Career Development Program

To fully contribute to FAA's mission, acquisition professionals require in-depth knowledge of FAA's business, as well as strong technical and leadership skills. Toward a goal of more highly skilled workers, FAA continues to strengthen the capabilities of its existing and future workforce through its on-going commitment to professional development and certification for acquisition employees.

#### To support implementation of this strategy in FY 2011, FAA:

- Developed or refined competency models for Contracting Officers, Contracting Officers Technical Representatives, Systems Engineering, and Test and Evaluation professionals. Each competency model provides competency definitions and is being enhanced to include clear indicators of expected performance at distinct proficiency levels. The competency models serve as the basis for workforce development including training requirements, experiential requirements, and career paths.
- Created Career Planning, Development, and Resource Guides. The guides focus on how professionals can enhance their own capabilities through development of technical and leadership competencies.
- Created Career Planning, Development, and Resource Guide for Managers. These guides provide information to managers to assist them in developing their employees, including applicable competency and certification requirements, training, and ideas for developmental activities. The guides also provide information for managers related to recruitment and hiring.
- Developed Individual Development Plan (IDP) templates, tailored to profession-specific competency and certification requirements.
- Initiated development of acquisition workforce community portals that create a forum for sharing best practices, provide guidance and tools to support career development, and link to certification requirements and applications.
- Streamlined the certification application process through the development of an automated application for Contracting Officers/Specialists, and initiated development of an automated application for Program/Project Managers.

- Continued to offer extensive curriculum in all professions, adding to and enhancing existing courses, including over 4,000 seats in more than 200 classes for FAA acquisition professionals.
- Continued to support graduate level certificate programs and industry certifications for acquisition professions.

Section 7 of this plan, *FAA Acquisition Profession Profiles*, includes additional activities performed and planned for specific professions. The FAA is improving support to acquisition workforce training and development on a profession-by-profession basis. This will allow FAA to target the needs of individual professions and be better positioned to increase the number and variety of developmental opportunities available to the entire acquisition workforce community.

To increase the overall capability of the workforce, we will continue to address the need to capture and disseminate knowledge so that it is preserved as employees transition across roles and programs, or leave the agency. To do this we will continue to refine our acquisition management practices toolkits. These toolkits capture knowledge that can be shared repeatedly and consistently across professions and programs to strengthen the overall capability of the workforce. We also plan to introduce communities of practice to provide ongoing opportunities for the entire community to engage in skill building, knowledge sharing, and general support of their professional colleagues.

**As we move forward, we plan to:**

- Continue developing training and tools, including community portals, to support the professions.
- Develop and implement approaches to strengthening the overall capability of the acquisition workforce, including acquisition management practices.
- Transition to a new organization structure that moves ATO's acquisition Program Managers into one organization, further supporting the integration of the acquisition workforce and of its career development programs.
- Develop and implement a communication and outreach campaign to all members of the acquisition workforce.

## STRATEGY 4.

### Institutionalize an Acquisition Workforce Planning Process

The workforce planning process provides important information to decision makers on the composition, characteristics, and distribution of acquisition professionals across FAA.

#### To support implementation of this strategy in FY 2011, FAA:

- Refined its acquisition workforce data collection and reporting processes.
- Advanced the staffing model to include data from approximately 150 Capital Investment Plan programs currently covered by the Acquisition Workforce Plan.
- Improved the definition of, and tracking process for, workforce planning metrics. Metrics are reported monthly to the Acquisition Workforce Council.
- Developed a data repository that informs data analysis and decision-making.
- Created a planning process that links acquisition program work requirements with staffing demand projections to better forecast future staffing mix and hiring and development needs.
- Supported NextGen planning efforts to better align NextGen and acquisition workforce planning efforts.
- Developed communication plans, core messaging, and materials to support workforce planning.
- Continued executive engagement in the acquisition workforce planning process through monthly and ad hoc Acquisition Workforce Council meetings.

The FAA will continue to improve its planning processes to include additional communication within the workforce. This will help acquisition professionals better understand certification requirements, training curriculum, and other developmental opportunities. Also, additional communication of the importance of the acquisition workforce to achieving FAA's goals will help to raise its visibility and secure, or maintain, its resources and capabilities.

#### As we move forward, we plan to:

- Continue to refine acquisition workforce data collection and reporting processes.
- Integrate acquisition workforce planning with budget development and execution plans.

Section 7 of this Plan, *FAA Acquisition Profession Profiles*, includes additional activities performed and planned for specific professions.

# METRICS

The FAA has established the metrics listed in Exhibit 4.3 to help measure the success of the Acquisition Workforce Plan. These metrics will be used to track and report progress over time.

**Exhibit 4.3** *Acquisition Workforce Metrics*

Metric/Measure	FY 2011 Performance (as of June 2011 Reporting)	
<b>Actual On Board*</b> Number of acquisition positions encumbered.	1,533	
<b>Staffing Against Forecasted Need*</b> Percentage of positions filled against forecasted need (by profession). Calculated as [On-Board - Current] / [Forecasted Need for the Current Fiscal Year]	<b>Profession</b>	<b>% On-Board Against Forecasted Need (2010 Plan)</b>
	Program/Project Management	99%
	Research & Engineering	96%
	Test & Evaluation	94%
	Business/Financial Management	94%
	Contracting	98%
	COTR	62%
	Acquisition Law	80%
	Logistics	86%
Specialized Support **	58%	
<b>Time to Fill</b> Length of time to fill positions (end-to-end). Calculated by the Office of Human Resources for hiring for all positions.	112 days	
<b>Certified Staff by Profession</b> Percentage of individuals certified against total of those whose position requires certification (by profession). Calculated as [Certifications] / [Number Requiring Certifications].	<b>Position</b>	<b>% Certified</b>
	Contracting Officers/Specialists	90%
	Program Managers***	96%
	<b>Note:</b> Additional certification programs are currently under development.	
<b>Attrition Rate</b> Percentage of acquisition workforce leaving the agency, annualized (by attrition type). Calculated as [Left FAA – annualized] / [On-Board – Current]	Retired	2.7%
	Left FAA	<u>4.3%</u>
	Total	7.0% (annualized)

\* June reporting is based on April Federal Personnel Payroll System (FPPS) reporting. The delay is necessary to ensure all personnel changes have been identified through FPPS, the official FAA personal system.

\*\* A mid-year validation of the acquisition workforce resulted in the movement of professionals from the Specialized Support category to other professions.

\*\*\* Program Managers on the largest Acquisition Category (ACAT) programs (ACATs 1 and 2) only.

# 5.

## PROFILE OF THE CURRENT ACQUISITION WORKFORCE

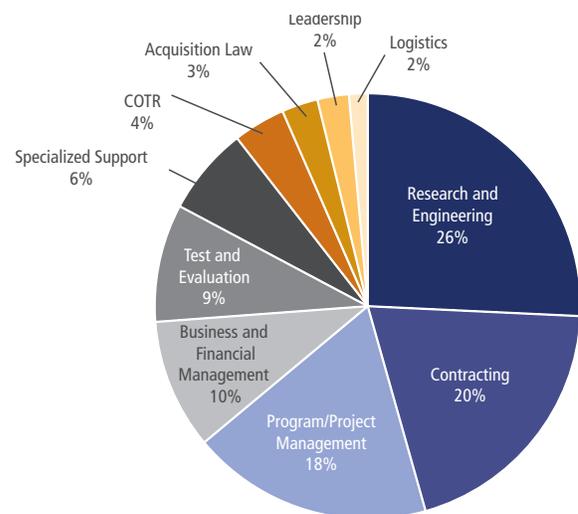
### OVERVIEW OF THE CURRENT WORKFORCE

The core acquisition workforce consists of approximately 1,530 federal employees. As explained in Section 3, the workforce provides acquisition support activities for over 150 FAA Capital Investment Plan (CIP) programs through 10 distinct professions:

- Leadership
- Program/Project Management
- Research and Engineering/Systems Engineering
- Test and Evaluation
- Business/Financial Management
- Contracting
- Contracting Officer Technical Representative
- Acquisition Law
- Integrated Logistics Support
- Specialized Support

**Exhibit 5.1**

*Acquisition Workforce by Profession*



While distinct in the roles that they play, these professions must work closely together to improve the technologies, processes, hardware, and software that comprise the overall National Airspace System (NAS).

Exhibit 5.1 provides a breakout of the acquisition workforce in each of the 10 professions. The data in the following exhibits was provided in the June reporting period (validated as of April 2011 FPPS).

At 26 percent, the Research and Engineering profession represents the largest percentage of federal employees in the acquisition workforce. Research and Engineering, Contracting, and Program/Project Management combined make up 64 percent of the acquisition workforce, providing critical skills and capabilities required to procure, implement, and manage the resources and technologies essential to FAA's acquisition programs.

The Leadership profession was added as a separate category to the acquisition workforce in 2011. Comprised largely of individuals who were formerly in the Program/Project Management profession, Leadership professionals are responsible for oversight of multiple programs and overall acquisition governance.

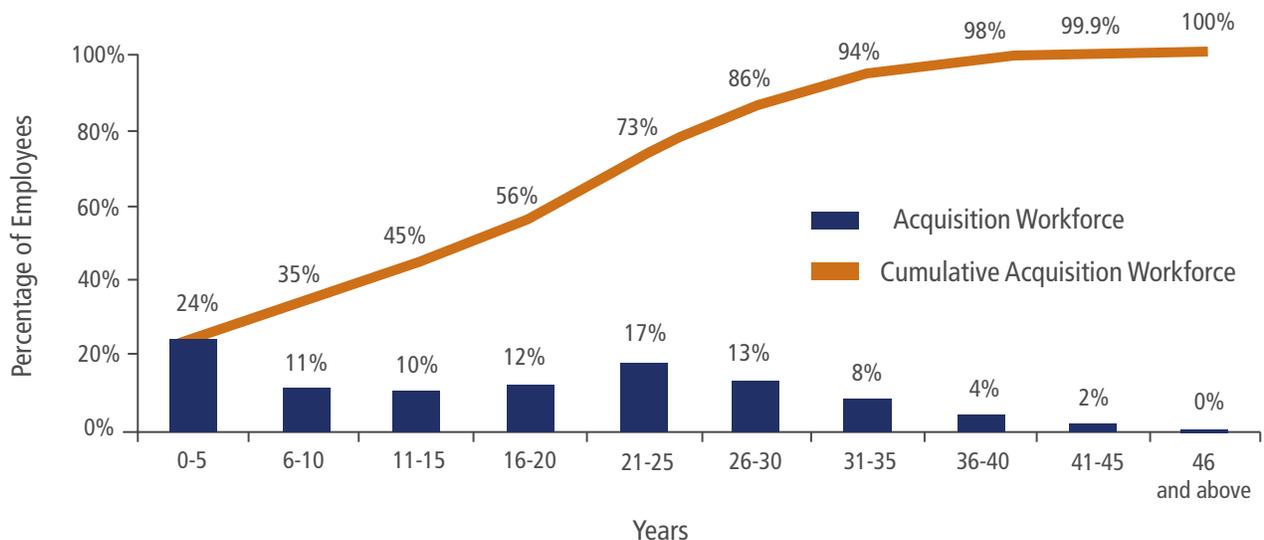
It is important to note that the engineers, Program/Project Managers, and COTRs represented in the exhibit are only those that support FAA’s CIP programs. As noted previously, workforce requirements to support in-service programs are not addressed through the Acquisition Workforce Plan. There are also other COTRs in the agency that support other non-CIP acquisition procurements, such as services contracts. The FAA tracks and ensures training is completed for the full COTR community. Similarly, the Logistics population includes only those Integrated Logistics Support Specialists who support CIP programs during acquisition; there are many logistics specialists who provide in-service logistics support and who are therefore not included in this Plan.

## YEARS OF EXPERIENCE

Exhibit 5.2 shows a distribution of years of federal service for all professionals in the acquisition workforce. The average FAA acquisition professional has approximately 17 years of federal service.

### Exhibit 5.2

*Acquisition Workforce Federal Service*



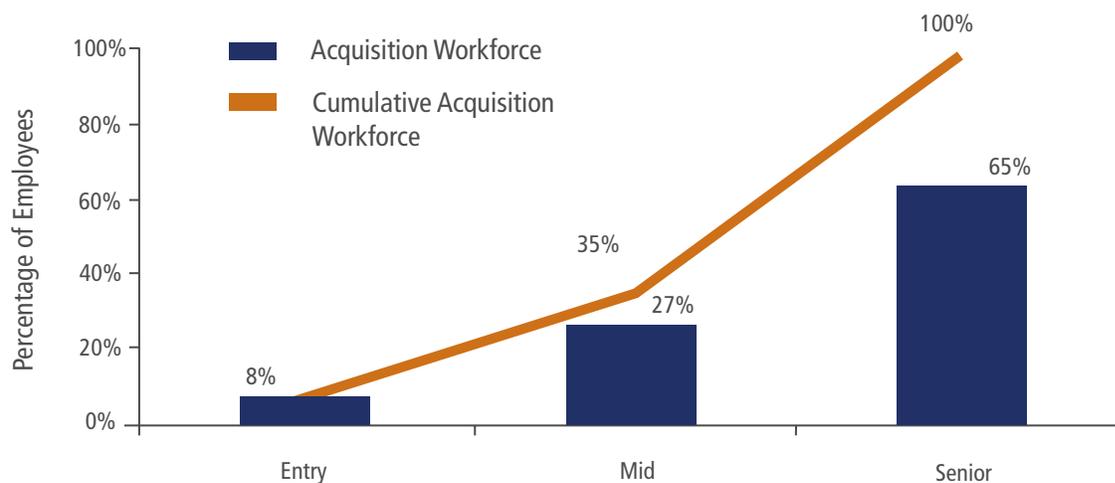
Almost 45 percent of the acquisition workforce has at least 20 years of experience. Hiring initiatives over the past 5 years have brought new civil servants into FAA, resulting in 24 percent of the workforce having 5 or fewer years of federal service. These recently hired employees are a direct result of the improvements and increased focus on FAA's hiring processes and requirements.

## ACQUISITION CAREER LEVELS <sup>5</sup>

The chart below shows FAA's strategy to hire at all levels to maintain a pipeline of talent for succession planning. Consistent with an experienced workforce, the exhibit shows that 65 percent of acquisition professionals are in the senior career level. It is also important to note that with 35 percent of the workforce below the senior level, there is some room for employees to develop and grow into increasingly complex and demanding acquisition management positions. As noted previously, with the anticipated budget constraints FAA will be looking to develop from within to meet growing workload requirements more than it will be able to continue to rely on hiring new staff.

### Exhibit 5.3

*Acquisition Workforce Career Levels*



<sup>5</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

## RETIREMENT ELIGIBILITY

As seen in Exhibit 5.4 below, 17 percent of the acquisition workforce is eligible for retirement this calendar year, and almost 40 percent will be eligible within the next 5 years. These retirement eligible professionals are spread across the acquisition professions.

Five percent of the overall acquisition workforce, or almost 80 professionals, have been eligible to retire for 5 or more years. These professionals are spread across all of the professions, with the largest numbers in the Research and Engineering (19 individuals), Contracting (16 individuals), and Program/Project Management (15 individuals) professions.

### Exhibit 5.4

*Acquisition Workforce Retirement Eligibility*

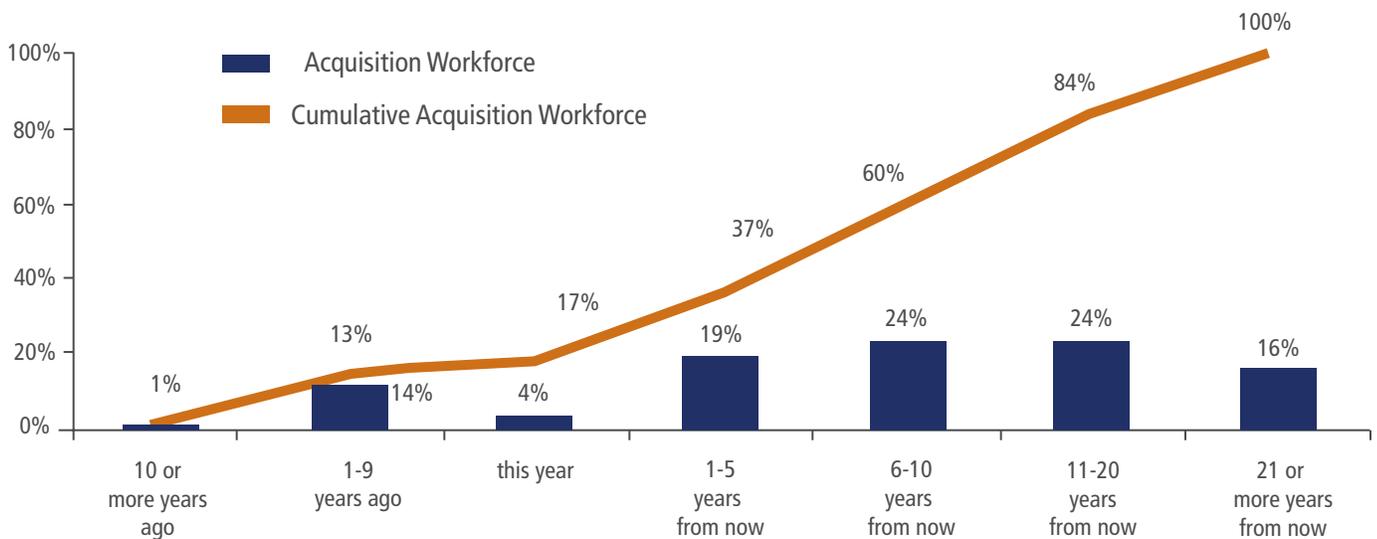
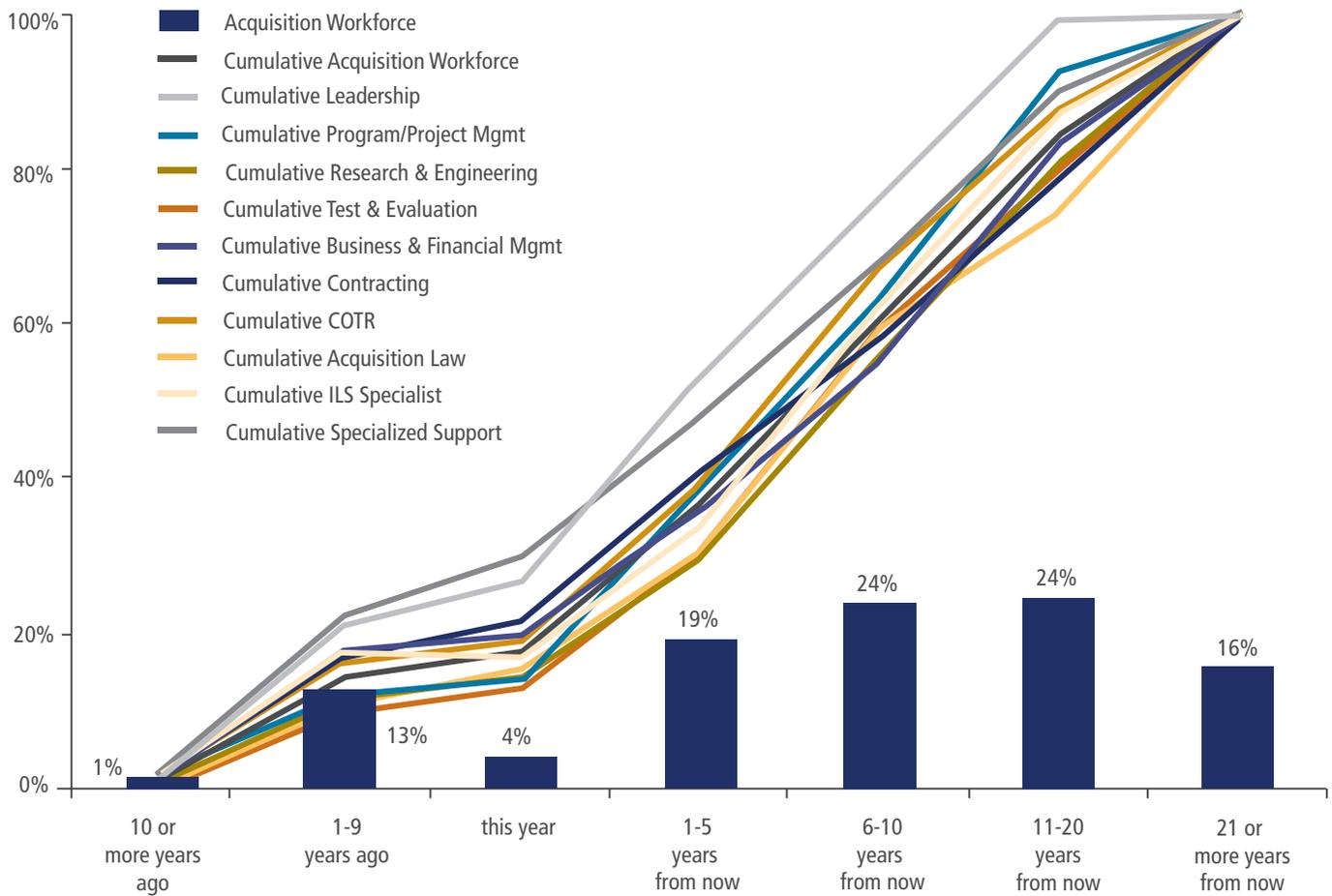


Exhibit 5.5 shows the retirement eligibility profile for each acquisition profession. As seen in the exhibit, the profile is similar for most professions. Profiles by individual profession are provided in Section 7, *FAA Acquisition Profession Profiles*.

### Exhibit 5.5

*Acquisition Workforce Retirement Eligibility by Profession*



6

## FUTURE WORKFORCE REQUIREMENTS

The FAA projects future workforce requirements to understand the staffing, resource allocation, and development needs of the acquisition community. Workforce requirements through FY 2015 were projected by FAA's acquisition managers and executives given their best understanding of program requirements. Budget figures for FY 2012 and beyond remained uncertain at the time that the projections were made, making it particularly challenging to estimate future workforce requirements.

These projections are FAA's best estimate of the future workforce requirements based on FAA's understanding today of anticipated acquisition program requirements (including program starts and stops), resource availability (including budgets and technology), and integrated program schedules. The FAA does not expect the future over the next five years to perfectly match the projections. What FAA does expect is that through a comparison of projected future requirements against available staff resources the agency can develop and implement plans to prepare and position the acquisition workforce for a reasonably expected future state.

FAA's projections of future workforce requirements are expected workforce level requirements, not hiring targets. They are workload projections over the next five years that will be used to guide the resource decisions and resulting actions necessary to meet future workload requirements. These actions could include:

- Transferring qualified employees from other areas of FAA into the acquisition workforce.
- Developing existing acquisition workforce members to take on new or more complex responsibilities in the same or other professions.
- Reorganizing or restructuring the work to meet priority workload requirements with the minimum number of resources.
- Reducing workload requirements through program changes, program cancellations, or some other means.
- Hiring new employees from outside of FAA into the acquisition workforce.

As defined in this plan, the acquisition workforce includes approximately 1,530 individuals across ten professions. Exhibit 6.1 shows that in FY 2011 FAA's acquisition managers and executives estimate that acquisition programs are approximately 8 percent (136 federal civilian employees) under-staffed. It also shows that the workforce requirement for acquisition personnel across all professions is projected to grow by 10 percent from the current FY 2011 headcount to projected FY 2012 levels (this is inclusive of the 8 percent projected FY 2011 deficit). Workforce requirements are projected to largely stabilize after FY 2012, with only slight (1% or less) year-to-year changes.

### Exhibit 6.1

*Estimated Acquisition Workforce Requirements*

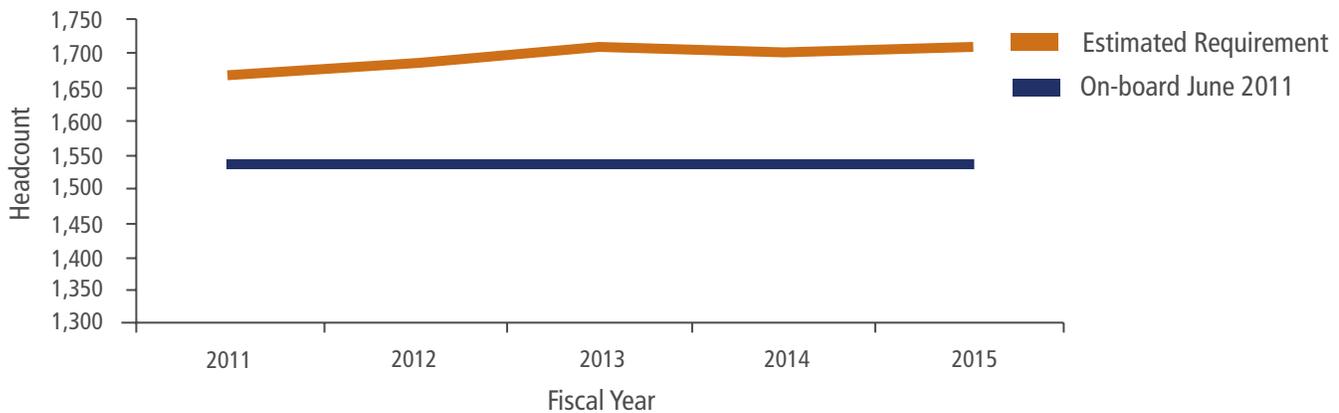
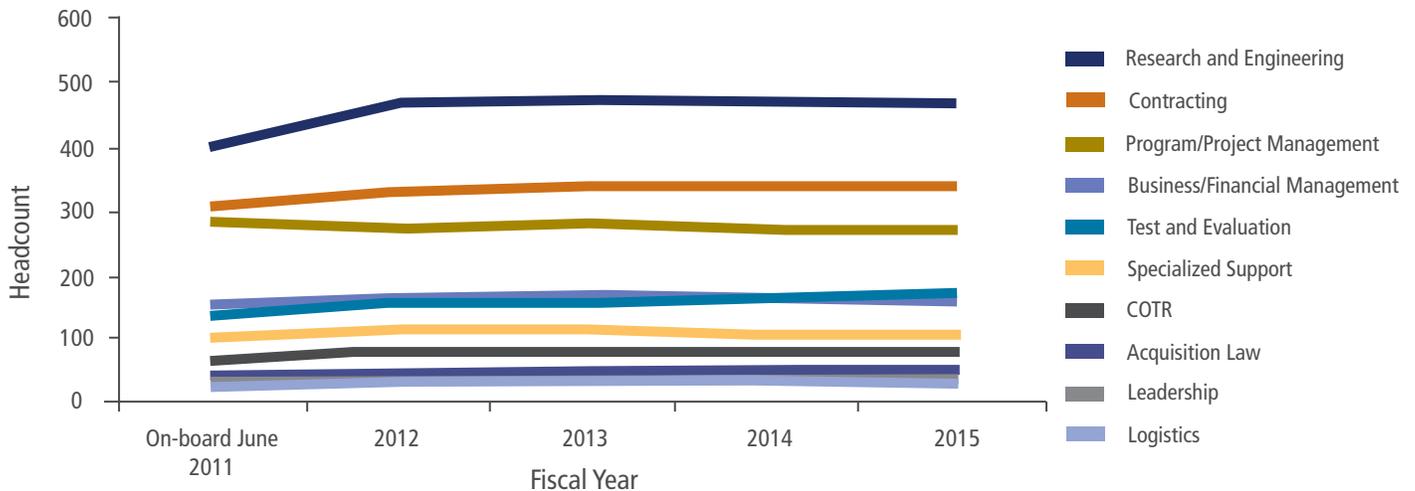


Exhibit 6.2 shows the estimated workforce requirements broken out for each profession through FY 2015. Consistent with the overall workforce, FAA projects an increase in requirements for most professions in FY 2012, with requirements stabilizing after FY 2012 through FY 2015.

### Exhibit 6.2

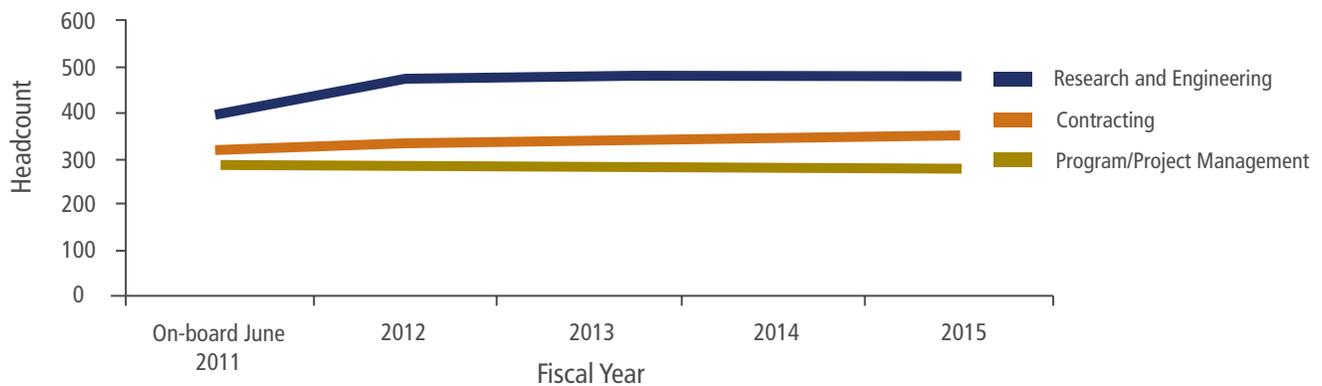
*Estimated Acquisition Workforce Requirements by Profession*



The three professions of greatest concern based on the size of the workforce associated with the profession, the predicted growth in requirements, and/or the difficulty in finding qualified candidates are Research and Engineering, Contracting, and Program/Project Management. Exhibit 6.3 shows the projected requirements for these professions through FY 2015. The requirement for Research and Engineering professionals is projected to increase by 18 percent in FY 2012, and then stabilize through FY 2015. The FAA projects that the requirement for Contracting Officers/Specialists will increase by 7 percent in FY 2012 and 3 percent in FY 2013, and then stabilize through FY 2015. The requirement for Program/Project Management professionals is projected to be relatively flat from current FY 2011 on-board levels through FY 2015. These projected workforce requirements are based on current workload projections as impacted by projected program budgets and implementation schedules.

### Exhibit 6.3

*Estimated Acquisition Workforce Requirements for the Three Largest Professions*



FAA's Acquisition Workforce Strategies, described earlier in Section 4 of this plan, are intended to provide the agency with the ability to meet the projected workforce requirements. The following section describes each of the acquisition workforce professions in greater detail, including actions planned for FY 2012.

7

## FAA ACQUISITION PROFESSION PROFILES

### THE ACQUISITION WORKFORCE IS COMPRISED OF 10 DISTINCT CORE PROFESSIONS:

- 7.1 Leadership
- 7.2 Program/Project Management
- 7.3 Research and Engineering/Systems Engineering
- 7.4 Test and Evaluation
- 7.5 Business/Financial Management
- 7.6 Contracting
- 7.7 Contracting Officer Technical Representative
- 7.8 Acquisition Law
- 7.9 Integrated Logistics Support Specialists
- 7.10 Specialized Support

Each profession is individually profiled in this section to provide a more complete overview and understanding of the specific profession. The profiles also provide, where appropriate, the unique challenges facing the individual profession, the actions taken in 2011 to develop the profession, and FY 2012 planned actions for ongoing development.

## 7.1 LEADERSHIP PROFILE

### Definition

The Leadership profession includes executives and senior managers providing leadership for acquisition programs and acquisition governance. These executives typically have organizational responsibility for a group of programs.

### Membership

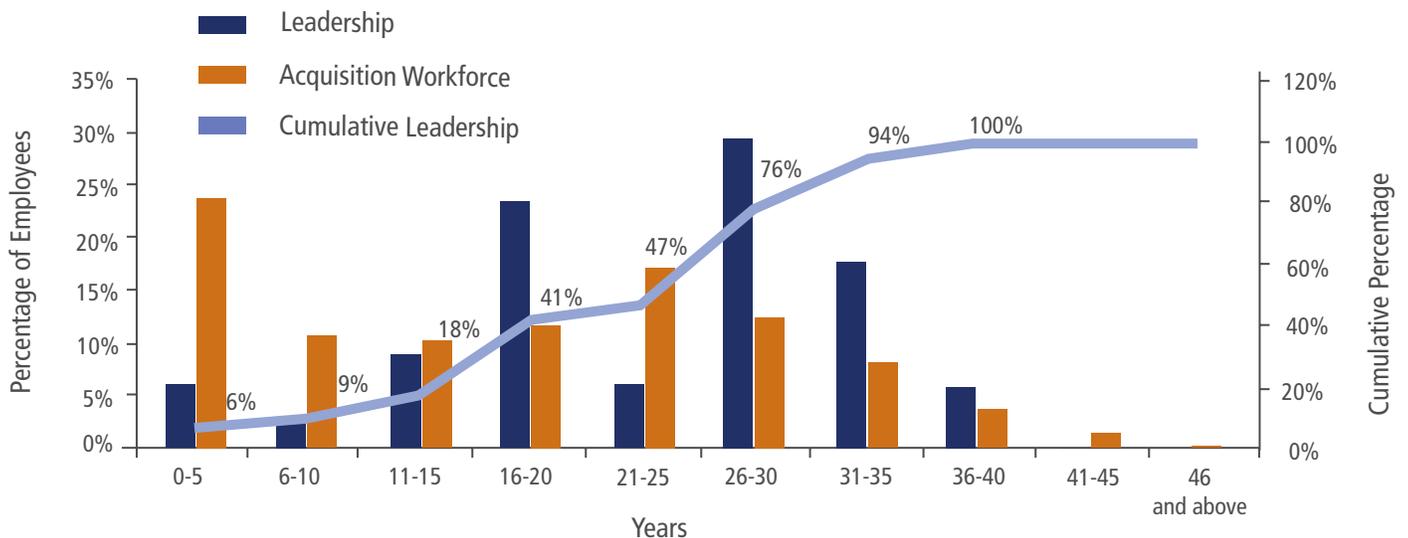
In 2011 there are approximately 35 acquisition employees in FAA's acquisition Leadership profession, or approximately 2 percent of the overall acquisition workforce. They are primarily located at FAA Headquarters in Washington, DC.

### Years of Experience

Leadership professionals are highly experienced and have on average 23 years of federal service, 6 years more than the average FAA acquisition employee. As shown in Exhibit 7.1.1, almost 50 percent of Leadership professionals have been in federal service for 26 or more years. This reflects the seniority of the members in this profession.

#### Exhibit 7.1.1

*Leadership Federal Service*

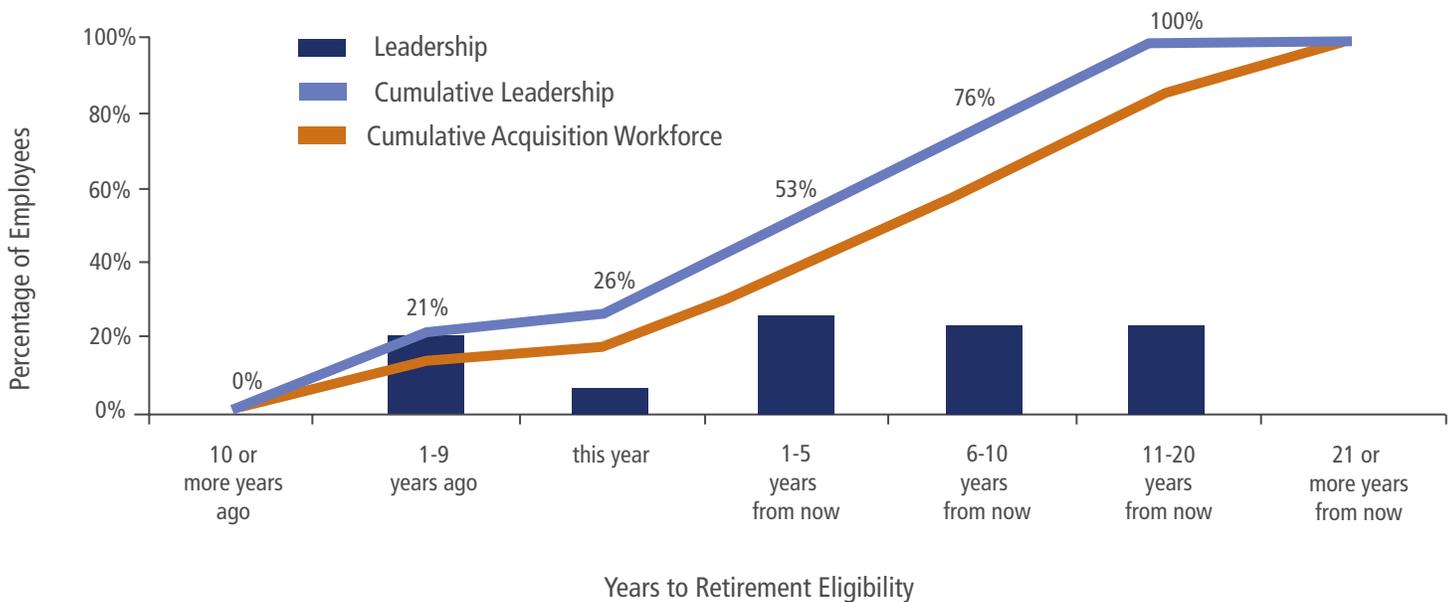


## Retirement Eligibility

Exhibit 7.1.2 shows the retirement eligibility profile for the acquisition employees in the Leadership profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Consistent with longer federal service, employees in the Leadership profession could potentially retire earlier than the average acquisition workforce employee.

### Exhibit 7.1.2

*Leadership Retirement Eligibility*



## Typical Job Roles

- Senior Executives
- Directors
- Group Managers

## Critical Competencies

The Leadership competencies are also integrated into the competency models of other professions as appropriate.

General Leadership Competencies	
Managing Organizational Performance	Communications
Accountability and Measurement	Building Alliances
Problem Solving	Interpersonal Relations and Influence
Business Acumen	Integrity and Honesty
Customer Focus	Vision
Building Teamwork and Collaboration	Strategy Formulation
Building a Model EEO Program	Agility
Developing Talent	Innovation

## 7.2 PROGRAM/PROJECT MANAGEMENT PROFILE

### Definition

The Program/Project Management profession includes employees who have primary responsibility for the management and oversight of FAA acquisition programs and projects. This occupation supports the following phases in the acquisition life cycle: Research and Systems Analysis, Mission Analysis, Investment Analysis, and Solution Implementation. It involves establishing, tracking, managing, and reporting all aspects of program/project planning and execution, including budgeting, technical requirements, personnel, and user needs. The profession does not include program support personnel.

### Membership

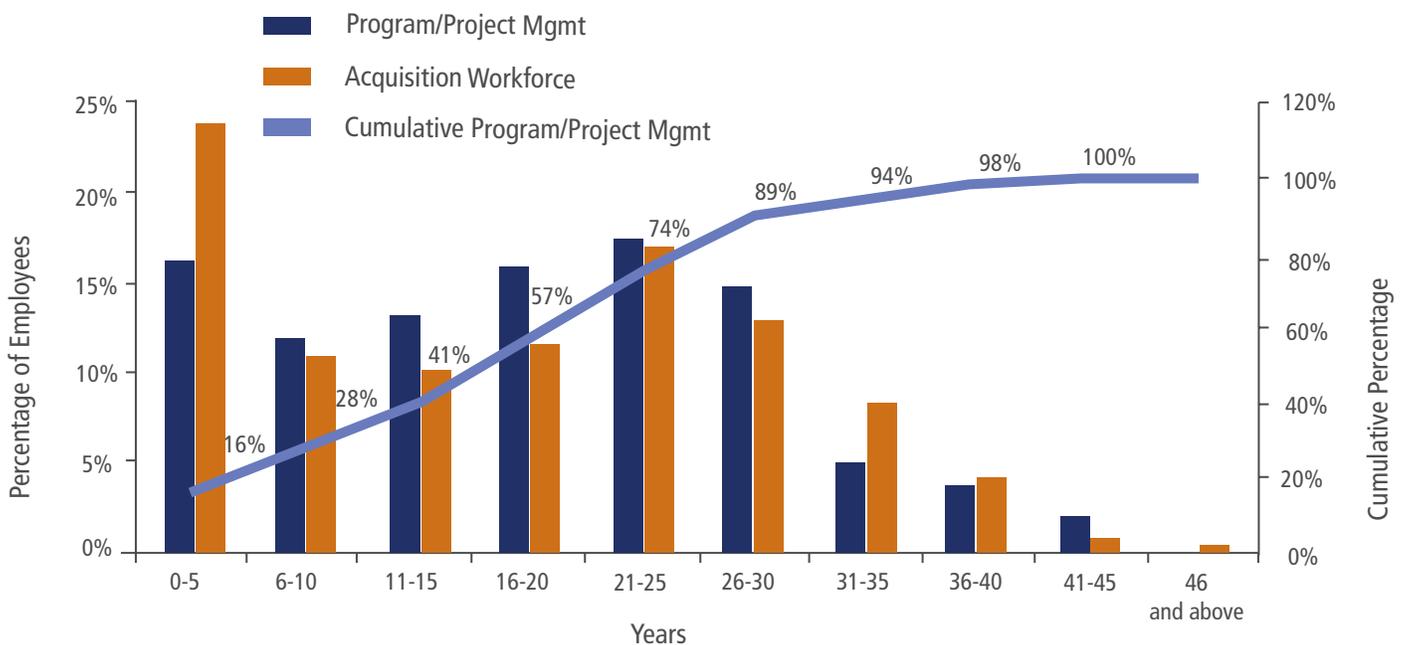
In 2011 there are approximately 280 acquisition employees performing Program/Project Management duties, or approximately 18 percent of the overall acquisition workforce.

### Years of Experience

The average federal service tenure of Program/Project Management professionals is almost 18 years. Exhibit 7.2.1 shows the distribution of years of federal service for these professionals. Almost 60 percent of Program/Project Management professionals have been in federal service for 16 or more years.

#### Exhibit 7.2.1

*Program/Project Management Federal Service*

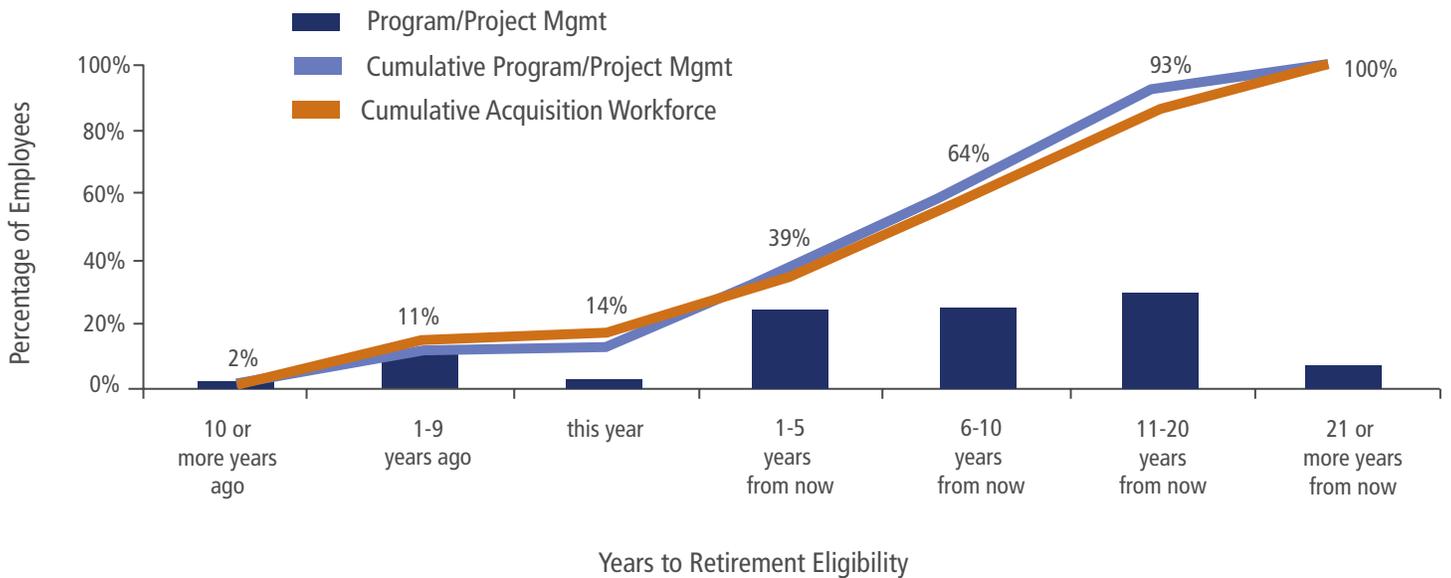


## Retirement Eligibility

Exhibit 7.2.2 shows the retirement eligibility profile for the acquisition employees in the Program/Project Management profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Current employees in the Program/Project Management profession are eligible for retirement consistent with the average acquisition workforce employee.

### Exhibit 7.2.2

*Program/Project Management Retirement Eligibility*



### Typical job roles for acquisition employees in this profession include:

- Program Manager
- Project Manager
- Acquisition Manager
- Project Lead
- Portfolio Manager

### Typical job series in this profession include:

- 340 – Program Management
- 800 series – Engineering Group
- 2186 – Aviation Technical Systems Specialist

## Critical Competencies

The table below lists competencies required of FAA Program/Project Managers.

Program/Project Management	
Benefit-Cost Analysis	Performance-Based Logistics
Budget Execution	Procurement Planning
Contract Administration	Program/Project Management Processes
Contractor Performance Management	Program/Project Planning Processes
Cost Estimating	Requirements Management
Development of Supportability Requirements	Risk Management
Earned Value Management (EVM)	Source Identification and Selection
Financial Planning	Stakeholder Management
Formulation of Financial Programs and Budget	Strategic Alignment
Life Cycle Logistics Strategy Development	Systems Safety
Market Analysis	Systems Thinking and Integration
Organizational Awareness	Test and Evaluation Management
	Technical Expertise

## Certification

The Program/Project Management certification program supports certification of professionals at three distinct levels: Entry; Mid/Journeyman; and Senior/Expert. These levels reflect the increasing responsibility and capability required of the Program Manager as programs become larger, more complex, and more highly integrated with other programs. FAA's policy requires Program Managers to become certified within specific timeframes from the date of program assignment.

Certification requirements are met through a combination of factors, which can include experience in the profession, training (both internal and external to FAA), external certification requirements, and external certification equivalencies. All acquisition certifications are competency-based. Applicants must provide evidence of fulfillment of the competencies at the level for which they are applying.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The Program/Project Management certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.

## Challenges

- The ability to manage a portfolio of investments to achieve mission effectiveness is critical. To meet evolving NextGen program requirements, there will be a significant increase in the need for technical and program integration across service units, domains and agencies, and the ability to identify and manage interdependent program risk.
- Entry-level hiring is not effective because of the complexity of Program Management. Program Managers require years of experience and often are promoted from other career professions (e.g., Research and Engineering).
- Developing new Program Managers takes time. New in-house Program Managers are often promoted from other career professions, typically later in their careers. Identifying and developing these new candidates will require additional focus as experienced Program Managers retire and as budget constraints limit FAA's ability to hire externally.

## Activities in 2011

- On target to certify 96 percent of targeted Program Managers by the end of FY 2011, which will meet the FY 2011 goal of 95 percent.
- Improved the definition of the Program/Project Management profession to more clearly understand the membership and development requirements of the profession.
- Created a Career Planning, Development, and Resource Guide for Program/Project Managers. The guide provides information on how to enhance capabilities through development of technical and leadership competencies, the roles and responsibilities of managers and employees in the development process, and information on developmental activities.
- Created a Career Planning, Development, and Resource Guide for Managers of Program/Project Managers. The guide provides information to managers on how they can support the development of the acquisition Program/Project Managers.
- Offered training, industry certification, and graduate level programs for Program/Project Management professionals.
- Initiated the development of a community of practice web portal for Program/Project Management that creates a forum for sharing best practices, provides guidance and tools to support career development, and links to certification requirements and applications.
- Initiated an effort to automate the Program/Project Management certification application process.
- Developed tailored Individual Development Plan (IDP) templates for Program/Project Managers.

## Planned Initiatives for FY 2012

Initiative	Deliverable	Planned Completion
Streamline and automate the certification application process.	Automated Certification Application	2 <sup>nd</sup> Quarter
Enhance the Program/Project Management competency model to provide examples of performance expectations at various levels.	Competency Dictionary	3 <sup>rd</sup> Quarter
Continue to support the joint OMB/OPM IT project management initiative, 25 Point Implementation Plan To Reform Federal Information Technology Management. This initiative, designed to improve the acquisition of federal IT solutions, is aligned well with FAA's Program/Project Management development and certification program.	Status reports to the Acquisition Workforce Council, as needed	Ongoing
Certify acquisition Program Managers assigned to programs with an identified Acquisition Category (ACAT).	Monthly status reports to the Acquisition Workforce Council	Ongoing

## 7.3 RESEARCH AND ENGINEERING/SYSTEMS ENGINEERING PROFILE

### Definition

Research is the process of investigating and examining an issue or need from different perspectives that may lead to the development of a practical solution or approach. Engineering is the profession of applying scientific knowledge and using natural laws and physical resources to design and implement materials, structures, machines, devices, systems and processes that realize a desired objective and meet specified criteria. This profession focuses on Applied Research conducted to solve problems or answer specific questions in response to a stakeholder requirement.

As a combined community, Research and Engineering contains many professional sub-professions and roles. Systems Engineering and Human Factors Engineering are highlighted here.

**Systems Engineering.** The field of Systems Engineering concentrates on the design and application of the whole system as distinct from its parts. At a NAS level, Systems Engineering cuts across individual systems and acquisition programs to achieve an integrated, consistent, and consolidated NAS design. Systems Engineering has two main purposes in FAA acquisitions. The first is to ensure that acquisitions are conducted from initial requirements to deployment and life cycle support in a consistent, repeatable, well-formulated manner. The second is to ensure that these acquisitions form an integrated whole. High quality individual pieces only make an improved NAS if their integration is specifically considered during acquisition. While policy, politics, benefits, and cost will ultimately determine what will be acquired, these all must be addressed in a context of cross-NAS implication and integration provided by NAS-level Systems Engineering.

**Human Factors Engineering.** Human Factors Engineering is an integral part of Systems Engineering and ensures that human-in-the-loop system performance objectives are met. The application of Human Factors Engineering during all phases of an acquisition program addresses the role of the human component in system design. One objective of Human Factors Engineering is to reduce the number and consequences of human errors that may result in incidents/accidents by aviation equipment users and maintainers. The application of Human Factors Engineering can also increase productivity and improve overall NAS performance.

## Membership

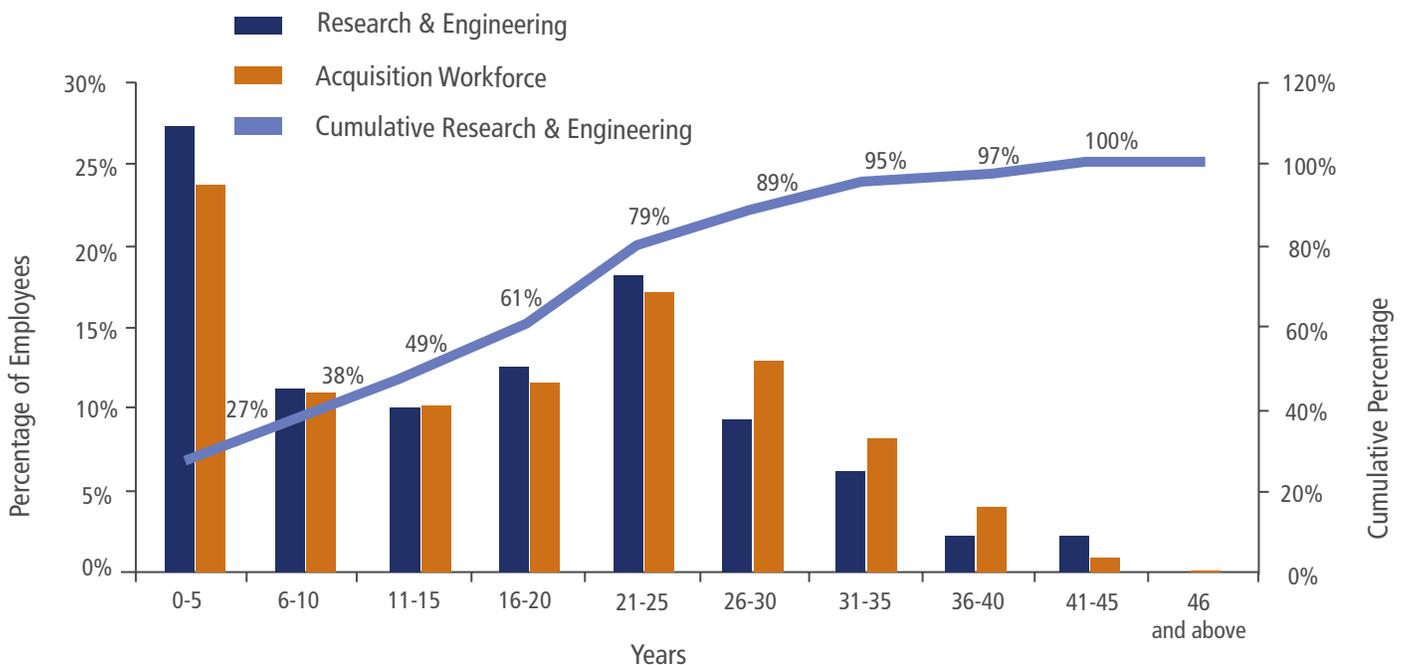
Research and Engineering is the largest profession in FAA's acquisition workforce. In 2011 there are approximately 395 acquisition employees in FAA's acquisition Research and Engineering profession, or approximately 26 percent of the overall acquisition workforce. There are many more individuals who support FAA in research and engineering roles who are not part of the core acquisition workforce due to the nature of their work and the programs they support. These individuals represent the broader workforce from which talent may be developed or acquired to meet future acquisition workload needs.

## Years of Experience

The average years of federal service for Research and Engineering professionals is almost 16 years. As seen in Exhibit 7.3.1, the lower average years of service is primarily due to the higher proportion of employees with 5 or fewer years of federal experience. This is consistent with the nature of the work and with FAA's strategy of hiring and developing employees to serve as Research and Engineering professionals.

### Exhibit 7.3.1

*Research and Engineering Federal Service*

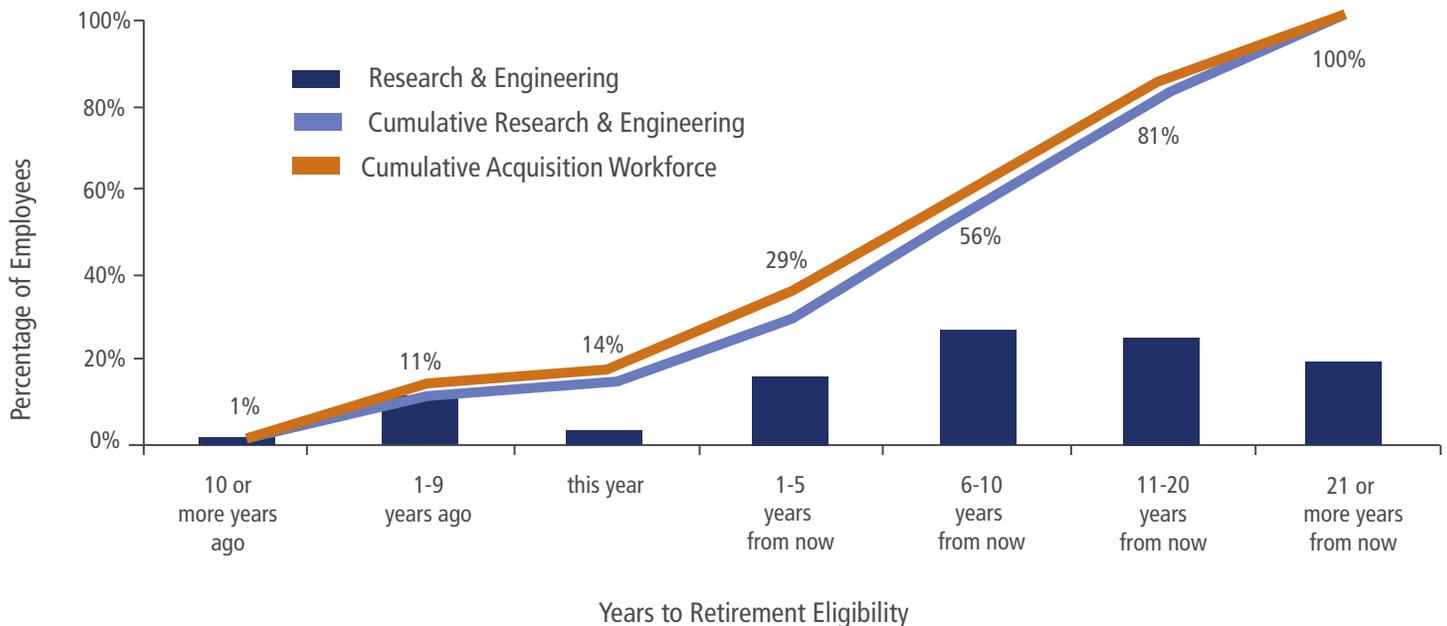


## Retirement Eligibility

Exhibit 7.3.2 shows the retirement eligibility profile for the acquisition employees in the Research and Engineering profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce.

### Exhibit 7.3.2

#### Research and Engineering Retirement Eligibility



#### Typical job roles for acquisition employees in this profession include:

- Chief Systems Engineer
- Systems Engineer
- Software Engineer
- Human Factors Engineer/Specialist
- Systems Architect

#### Typical job series in this profession include:

- 800 series – Engineering Group
- 1300 series – Physical Science Group
- 1500 series – Mathematics and Statistics Group, including Computer Scientists

## Critical Competencies

The following competencies were developed in collaboration with the Systems Engineering community and the Acquisition Workforce Council.

Systems Engineering Competencies	
<b>Technical:</b> Acquisition, Lifecycle Management and Contracts Configuration Management Data Collection and Analysis FAA Operations and Strategic Alignment Interface Management Requirements Development and Management Risk Management Systems Integration Systems Thinking and Application	Technical Assessment and Analysis of Alternatives Validation Verification  <b>Non-Technical:</b> Communication and Technical Writing Decision Making and Judgment Influence and Negotiation Project Management

## Challenges

- Recruiting and hiring to meet the increased demand for all levels of Systems Engineers, and various engineering roles, is extremely competitive. Hiring will be increasingly difficult with anticipated budget constraints.
- Ensuring there are sufficient tools and environments to effectively execute Systems Engineering will continue to be difficult given anticipated budget constraints.
- Human Factors Engineers must develop and maintain a systems view of their projects and studies to ensure that interdependencies are effectively managed. They must coordinate across workstation and domain boundaries and with other Research communities.
- Both the Research and the Engineering communities must ensure that they maintain up-to-date technical and scientific knowledge in their specialty area.

## Activities in 2011

- Refined FAA Systems Engineering competency model. This model, which includes behavioral indicators at various proficiency levels, serves as the foundation for identifying development requirements.
- Provided or offered training, industry certification, and graduate level programs for Systems Engineering professionals.

- Participating in the Body of Knowledge to Advance Systems Engineering (BKCASE) Project. The BKCASE project is led by a university partnership between the Stevens Institute of Technology and the Naval Postgraduate School with sponsorship from the U.S. Department of Defense and support from International Council on Systems Engineering (INCOSE), the Institute of Electrical and Electronics Engineers (IEEE) Computer Society, Institute of Electrical and Electronics Engineers (IEEE) Systems Council, and National Defense Industrial Association (NDIA). The project scope is to define a Systems Engineering Body of Knowledge (SEBoK) and use the SEBoK to develop an advanced Graduate Reference Curriculum for Systems Engineering (GRCSE).
- Made the Human Factors Awareness course available both on eLMS and at myFAA.gov at Human Factors Portal.
- Revised and updated Human Factors training module in Fundamentals of Acquisition Management System course.
- Continued to provide support for continuing Human Factors education and training efforts including Master's and Ph.D. programs.

### Planned Initiatives for FY 2012

Initiative	Deliverable	Planned Completion
Explore the application of a Systems Engineering certification program to the acquisition workforce.	Defined target population(s) for certification	3 <sup>rd</sup> Quarter
	Implementation plan	3 <sup>rd</sup> Quarter
Define a Software Engineering competency model.	Documented competency model	4 <sup>th</sup> Quarter
Continue participation in the Body of Knowledge to Advance Systems Engineering (BKCASE) Project.	Updates to the Acquisition Workforce Council as needed	On-going

## 7.4 TEST AND EVALUATION PROFILE

### Definition

Test and Evaluation (T&E) is the process associated with testing, analyzing, and evaluating in order to verify and validate that products meet specifications, satisfy requirements, and are operationally suitable and effective. T&E personnel require the knowledge of efficient and cost effective methods for planning, monitoring, conducting and evaluating tests of equipment and material. T&E personnel also need a thorough strategy to verify system or service performance through measurable methods and validate that the system or service will fulfill its intended purpose when placed in its intended environment. Developmental testing verifies that all specified technical and performance requirements have been met and that the system is fully integrated and stable, and that it has no adverse effect on the rest of the NAS. Operational testing validates that a new or modified system or service is operationally effective and suitable for use in the NAS and the NAS infrastructure is ready to accept the system.

Systematic and comprehensive T&E promotes the development of quality products by systematically checking for defects and deviations. T&E plays a critical role in all acquisition phases. T&E Planning and Support activities support the development of concepts, requirements, acquisition strategies, contract items, design, and development. Quality T&E practices and reporting provides effective risk management and decision support for acquisition planning and milestones. The T&E Developmental Test and Operational Test phases are active during component/system development, component integration, system integration, operational validation, and system/service implementation.

### Membership

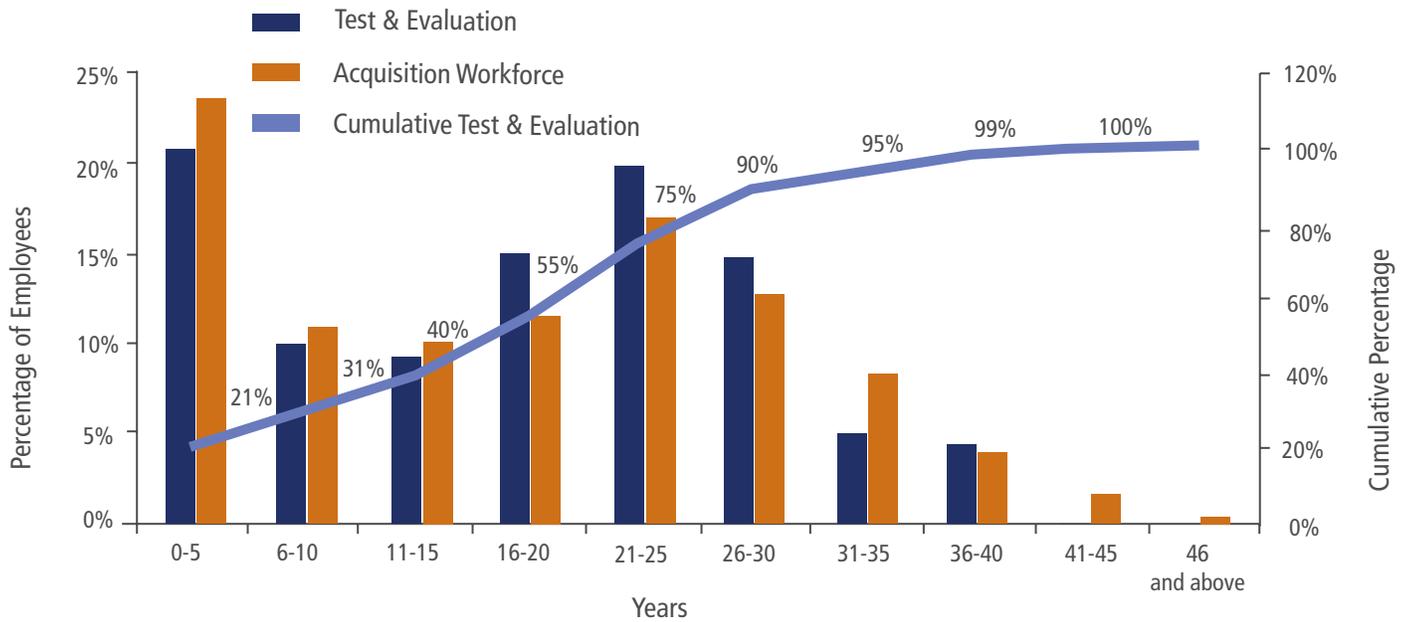
Individuals who work in the T&E career field are technical professionals who plan, perform, and manage T&E tasks and team activities in support of acquisition programs. In 2011 there are approximately 140 acquisition employees in FAA who have primary responsibility for T&E, or approximately 9 percent of the overall acquisition workforce. The majority of these employees work at FAA's William J. Hughes Technical Center in Atlantic City. T&E is the Technical Center's primary mission; the Center is committed to providing a world-class laboratory dedicated to the T&E of critical NextGen systems to maximize the quality of T&E products and services, promote effective T&E planning, reduce program risks, decrease program costs, and reduce latent defects.

## Years of Experience

The average length of time that T&E professionals have been in federal service is almost 17 years, consistent with the average acquisition employee. The distribution of tenure is shown below in Exhibit 7.4.1.

### Exhibit 7.4.1

*Test and Evaluation Federal Service*

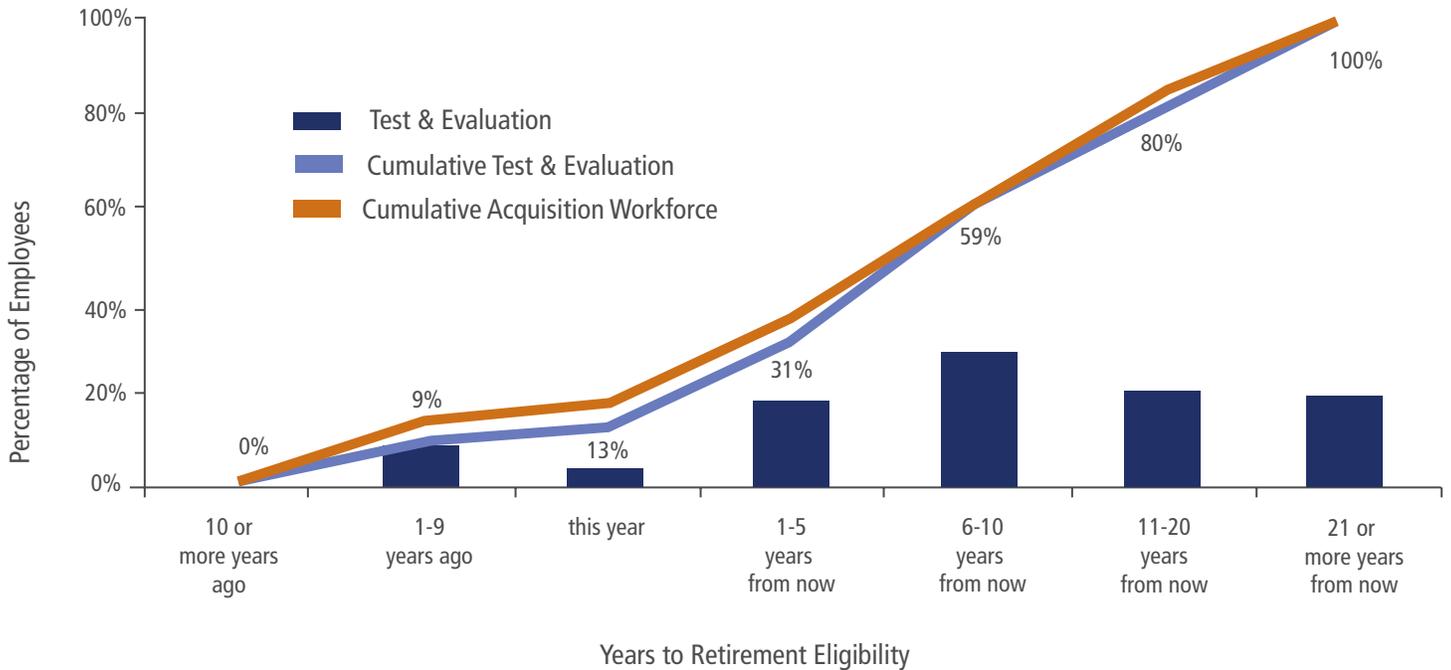


## Retirement Eligibility

Exhibit 7.4.2 shows the retirement eligibility profile for the acquisition employees in the T&E profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Consistent with the overall acquisition workforce, cumulatively 60 percent of current T&E employees will be eligible for retirement in 10 years.

## Exhibit 7.4.2

### Test and Evaluation Retirement Eligibility



### Typical job roles for acquisition employees in this profession include:

- Test Team Manager
- Test Director
- Test Lead
- Test Engineer
- Operations Researcher
- Statistical Analyst
- Experimental Designer
- Flight Test Engineer

### Typical job series in this profession include:

- 334 - Computer Specialist
- 800 series – Engineering and Architecture Group
- 1500 series – Mathematics and Statistics Group, including Computer Scientists

## Critical Competencies

The T&E competencies were validated in 2011. They consist of:

Test and Evaluation Competencies	
<b>Technical:</b> <ul style="list-style-type: none"><li>Acquisition and Contracts</li><li>Data Collection, Analysis, and Reporting</li><li>NAS Operations</li><li>Quality Control, Quality Assurance, and Configuration Management</li><li>Requirements Management</li><li>Risk Management</li><li>Safety Management</li><li>Systems Thinking and Application</li><li>Technical Writing</li></ul>	<ul style="list-style-type: none"><li>Test and Evaluation Standards Application</li><li>Test Management</li><li>Test Theory and Methods</li></ul> <b>Non-Technical:</b> <ul style="list-style-type: none"><li>Agility</li><li>Communications</li><li>Customer Focus</li><li>Interpersonal Relations and Influence</li><li>Decision Making and Judgment</li><li>Teamwork and Collaboration</li></ul>

## Challenges

- Future systems will require more integrated testing.
- Maintaining an adequate workforce with the right expertise and skill mix.

## Activities in 2011

- Completed FAA T&E competency model. This model, which includes performance indicators at various proficiency levels, serves as the foundation for identifying development opportunities and creating the T&E certification program.
- Designed a T&E training curriculum to support achievement of the required T&E competencies.
- Developed a draft T&E certification program to be completed and implemented in FY 2012.
- Presented the T&E Competency Model Development Process to the International Test and Evaluation Association (ITEA) at the ITEA National Conference.

## Planned Initiatives for FY 2012

Initiative	Deliverable	Planned Completion
Pilot the T&E training and certification program.	Communicate Pilot to Managers and Employees	2 <sup>nd</sup> Quarter
	Administer Pilot Program	3 <sup>rd</sup> Quarter
Initiate T&E Community of Practice intranet portal.	Content for Acquisition Workforce Portal	4 <sup>th</sup> Quarter

## 7.5 BUSINESS/FINANCIAL MANAGEMENT PROFILE

### Definition

Employees in this profession use their knowledge of financial systems and business processes to develop, coordinate and integrate performance-based budgets; write informative justifications for budget requests; develop metrics; plan, manage, track, reconcile, and report financial transactions; develop cost projections; develop recommendations to mitigate financial risks; and provide financial and investment analysis, including return on investment (ROI).

### Membership

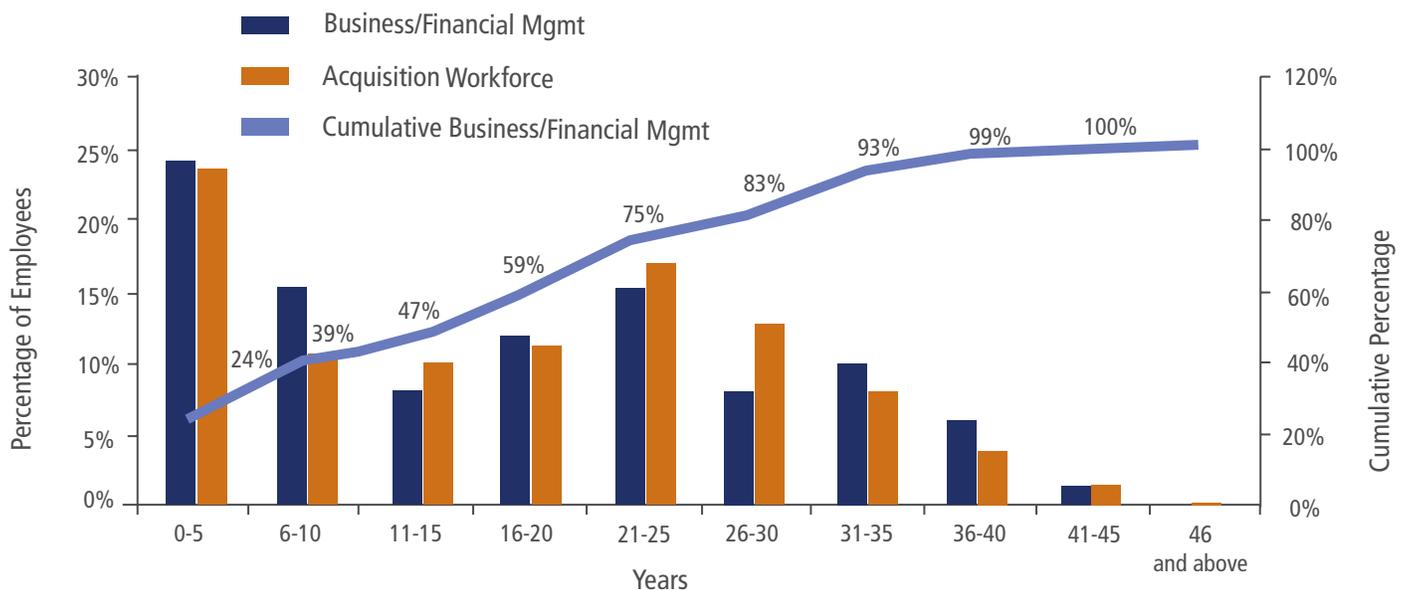
In 2011 there are approximately 150 acquisition employees in FAA acquisition Business/Financial Management profession, or 10 percent of the overall acquisition workforce. Employees in this profession include personnel in program offices as well as personnel in the Finance organization.

### Years of Experience

The average tenure of Business/Financial Management professionals in federal service is approximately 17 years. 24 percent of Business/Financial Management professionals have been in federal service for 5 or fewer years. The distribution of tenure is shown below in Exhibit 7.5.1.

#### Exhibit 7.5.1

*Business/Financial Management Federal Service*

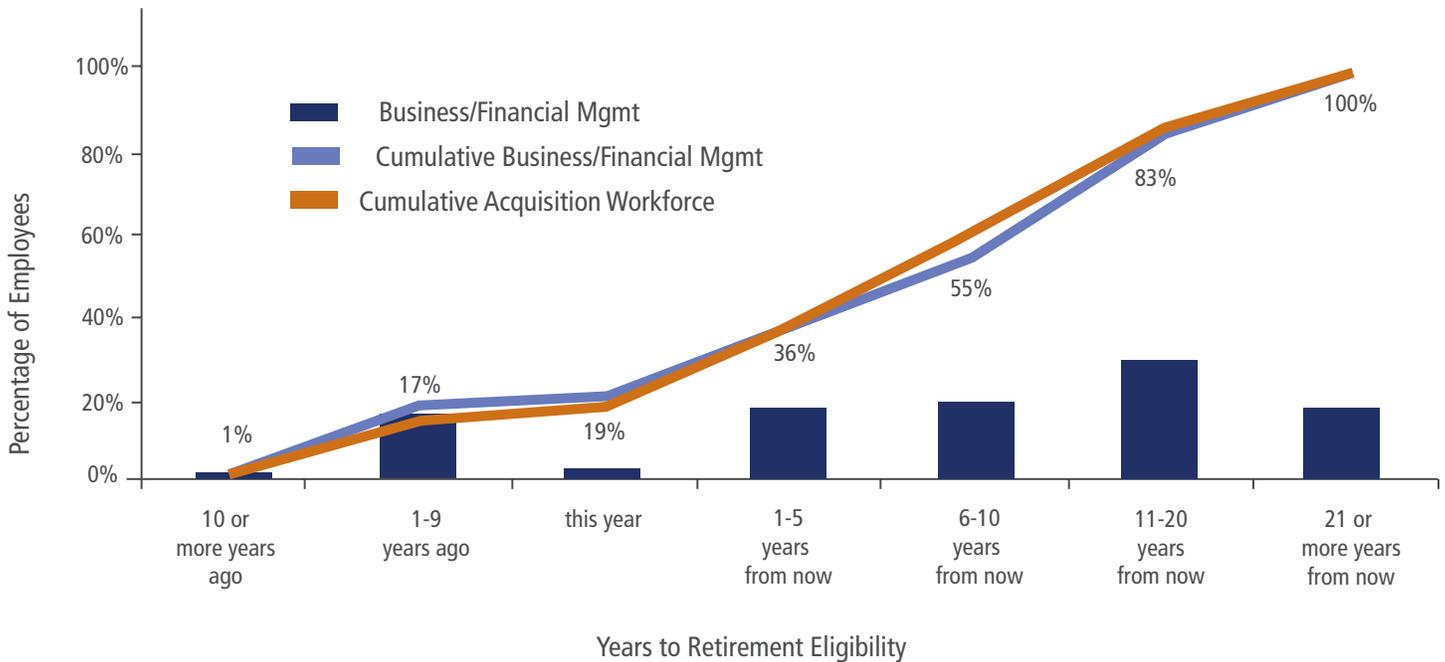


## Retirement Eligibility

Exhibit 7.5.2 shows the retirement eligibility profile for the acquisition employees in the Business/Financial Management profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Approximately 19 percent of employees in this profession will be eligible for retirement by the end of this calendar year (slightly above the overall acquisition workforce average). Conversely, 55 percent of current employees will be eligible for retirement in 10 years, which is approximately 5 percent lower than the overall acquisition workforce average.

### Exhibit 7.5.2

*Business/Financial Management Retirement Eligibility*



### Typical job roles for acquisition employees in this profession include:

- Cost Analyst/Estimator
- Business Manager
- Financial Analyst
- Benefits Analyst
- Operations Research Analyst

**Typical job series in this profession include:**

- 300 series – General Administrative, Clerical, & Office Services Group
- 500 series – Accounting and Budget Group
- 1500 series – Mathematics and Statistics Group

**Critical Competencies**

The table below lists requisite competencies for the Business/Financial Management profession.

Business/Financial Management Competencies	
Basic Budgeting and Accounting	Strategic Planning
Financial Budget and Data Analysis	Organizational Forecasting
Financial Management	Risk Analysis and Internal Management Control
Project Management	Concepts and Principles
Performance Management/Cost Accounting	Program Evaluation
Accounting	Reconciliation and Financial Reporting
Cost Estimating	Productivity Improvement Systems and Business
Federal Budgeting	Reengineering Process
	Agency Budgeting

Because of its importance to the profession, a competency model was developed specifically for Cost Estimating.

Cost Estimating Competencies	
Data Collection and Analysis	FAA Organizational Policies and Procedures
Financial Analysis	Financial Management
Program and Portfolio Investment Analysis	Investment Analysis Project Management
Acquisition and Contracts	Systems Evaluation

## Challenges

- The complexity of acquisition programs requires additional experience and enhanced skill levels.
- Cost estimation at the portfolio level.
- Current and estimated budget constraints impact both resources and scheduling, and FAA's ability to plan funding cash flows including contingencies.

## Activities in 2011

- Provided or offered training, industry certification, and graduate level programs for Business Financial Management professionals.
- Implemented a new Investment Planning and Analysis website that provides guidance and tools to the acquisition professionals to support the investment decision process.
- Initiated an update to the training curriculum to support obtainment of Cost Estimating competencies.

## Planned Initiatives for FY 2012

Initiative	Deliverable	Planned Completion
Refine the Business/Financial Management competency model for targeted population(s).	Validated competencies	3 <sup>rd</sup> Quarter
Expand the Business/Financial Management training curriculum to support achievement of the competencies for targeted population(s).	Expanded training curriculum	3 <sup>rd</sup> Quarter

## 7.6 CONTRACTING PROFILE

### Definition

Contracting Officers/Specialists are responsible for all processes and procedures involved in establishing and maintaining contractual relationships. This includes understanding the technical requirements, assisting with the development of the acquisition strategy, developing a procurement strategy plan, reviewing statements of work, evaluating cost estimates, determining contractor responsibility, performing administration by determining contractor compliance, negotiating cost or price or technical changes, monitoring contractor performance, and approving payments. The Contracting Officer/Specialist has the specific authority to bind the government by executing awards, exercising options, or terminating contracts.

### Membership

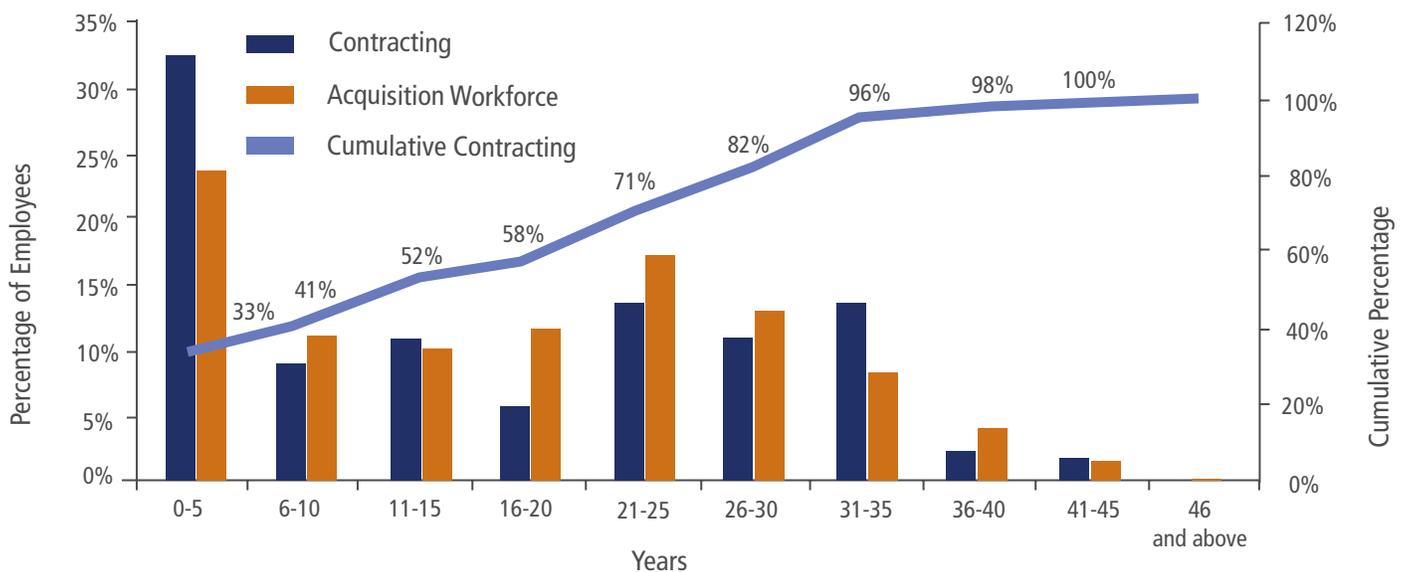
In 2011 there are approximately 305 acquisition employees performing Contracting duties. Contracting professionals make up approximately 20 percent of the acquisition workforce. This profession includes employees who are primarily responsible for awarding and administering contracts.

### Years of Experience

The average tenure of Contracting professionals in federal service is approximately 16 years. The distribution of years of federal service is shown below in Exhibit 7.6.1. As shown in the exhibit, Contracting professionals have higher representation than the overall acquisition workforce at both the lower federal experience (0 - 5 years) range, and at the more experienced (31 - 35 years) range. This reflects FAA's recent hiring of contracting professionals from outside the federal government.

#### Exhibit 7.6.1

*Contracting Federal Service*

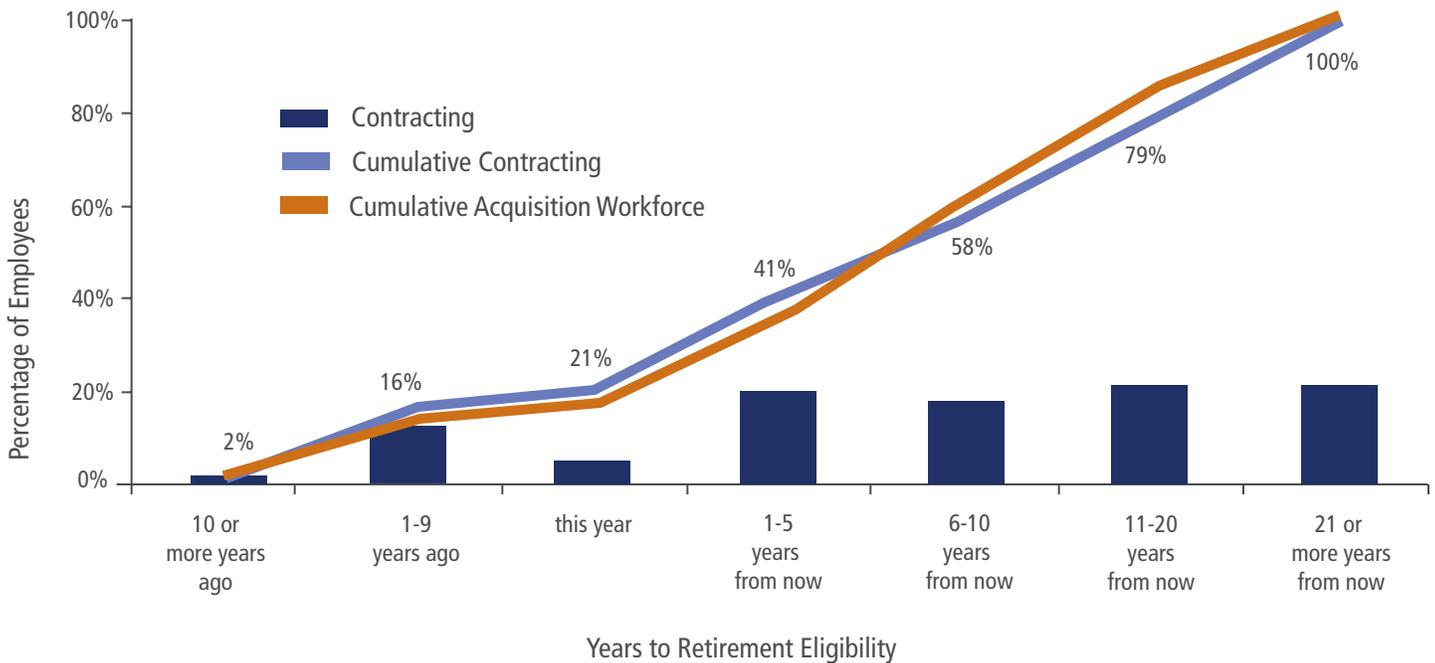


## Retirement Eligibility

Exhibit 7.6.2 shows the retirement eligibility profile for the acquisition employees in the contracting profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Consistent with its higher than average proportion of employees with 30 or more years of federal service, 21 percent of contracting professionals will be eligible to retire by the end of this calendar year, 4 percent more than the overall acquisition workforce.

### Exhibit 7.6.2

*Contracting Retirement Eligibility*



### Typical job roles for acquisition employees in this profession include:

- Contracting Officer
- Contracting Specialist
- Cost Price Analyst

### Typical job series in this profession include:

- 1102 – Contracting Officer/Specialist

## Critical Competencies

The following competencies were developed in collaboration with the Contracting community and the Acquisition Workforce Council.

Contracting Competencies	
<p><b>Technical:</b></p> <ul style="list-style-type: none"> <li>Acquisition Strategy Development</li> <li>Procurement Planning</li> <li>Market Research</li> <li>Managing Competition</li> <li>Small Business and Preference Program Participation</li> <li>Defining Government Requirements in Commercial/Non-Commercial Terms</li> <li>Defining Requirements</li> <li>Performance Based Acquisition</li> <li>Defining Contractual/Business Relations</li> <li>Solicitation of Offers</li> <li>Detailed Proposal Evaluation Skills</li> <li>Proposal Analysis and Evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Negotiation</li> <li>Contract Award</li> <li>Requirements/Contract Management</li> <li>Performance Management</li> <li>Financial Management</li> <li>Dispute Resolution, Termination and Closeout</li> </ul> <p><b>Non-Technical:</b></p> <ul style="list-style-type: none"> <li>Problem Solving</li> <li>Business Acumen</li> <li>Customer Focus</li> <li>Communication</li> <li>Integrity and Honesty</li> </ul>

## Certification

The contracting certification program supports certification of professionals at three distinct levels: Entry; Mid/Journeyman; and Senior/Expert. These levels reflect the increasing responsibility and capability required of the Contracting Officer/Specialist as acquisitions become larger and more complex.

Certification requirements are met through a combination of factors, which include experience in the profession, training (both internal and external to the FAA), and demonstrated proficiency in the contracting competencies.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The Contracting Officer/Specialist certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.

## Challenges

- Staffing and retention of contracting positions is difficult due to high demand across all of federal government.
- The complexity of acquisitions requires results oriented, highly skilled contracting professionals.

## Activities in 2011

- Met FY 2011 goal of certifying Contracting Officer/Specialists within 15 months of hire. Over 50 Contracting Officers/Specialists were certified in 2011.
- Refined the competency model for Contracting Officer/Specialists. The competencies were validated and performance indicators were created for each competency at three proficiency levels. These proficiencies were then tied to the certification program levels.
- Created a Career Planning, Development, and Resource Guide for Contracting Officers/Specialists. The guide provides information on how to enhance capabilities through development of technical and leadership competencies, the roles and responsibilities of managers and employees in the development process, and information on developmental activities.
- Created a Career Planning, Development, and Resource Guide for Managers of Contracting Officers/Specialists. The guide focuses on how managers can support the development of Contracting Officers/Specialists.
- Automated the Contracting certification application process.
- Initiated the development of a community of practice web portal for Contracting that creates a forum for sharing best practices, provides guidance and tools to support career development, and links to certification requirements and applications.
- Developed tailored Individual Development Plan (IDP) templates for Contracting Officers/Specialists.
- Provided or offered training, industry certification, and graduate level programs for Contracting professionals.
- Created a database to track training, certification and warrants for Series 1102 professionals. The database will allow for easier reporting and tracking of information.
- Issued a new training policy to provide guidance to employees.

## Planned Initiatives for FY 2012

Initiative	Deliverable	Planned Completion
Initiate Contracting Community of Practice intranet portal.	Content for Acquisition Workforce Portal	1 <sup>st</sup> Quarter
Monitor Government-wide initiatives that could impact the certification requirements for Contracting Officers/ Specialists (1102 series). Impacts will be reviewed to determine if changes to FAA's contracting certification program are required.	Status reports to the Acquisition Workforce Council, as needed	Ongoing
Increase involvement with Acquisition Career Management staff in the department and other agencies to identify contracting workforce development best practices.	Best practices recommendations to Acquisition Workforce Council, as developed	Ongoing

## 7.7 CONTRACTING OFFICER TECHNICAL REPRESENTATIVE (COTR) PROFILE

### Definition

COTRs help resolve technical issues, give technical direction to the contractor, and interpret technical processes and procedures for the Contracting Officer/Specialist. The functions include interpreting technical requirements, assisting with the acquisition strategy, assisting in the development of the statement of work, generating government cost estimates, assisting in the negotiation of costs or price of technical requirements, monitoring contractor performance, reviewing and accepting services, supplies and equipment, invoice reconciliation, and recommending payments.

### Membership

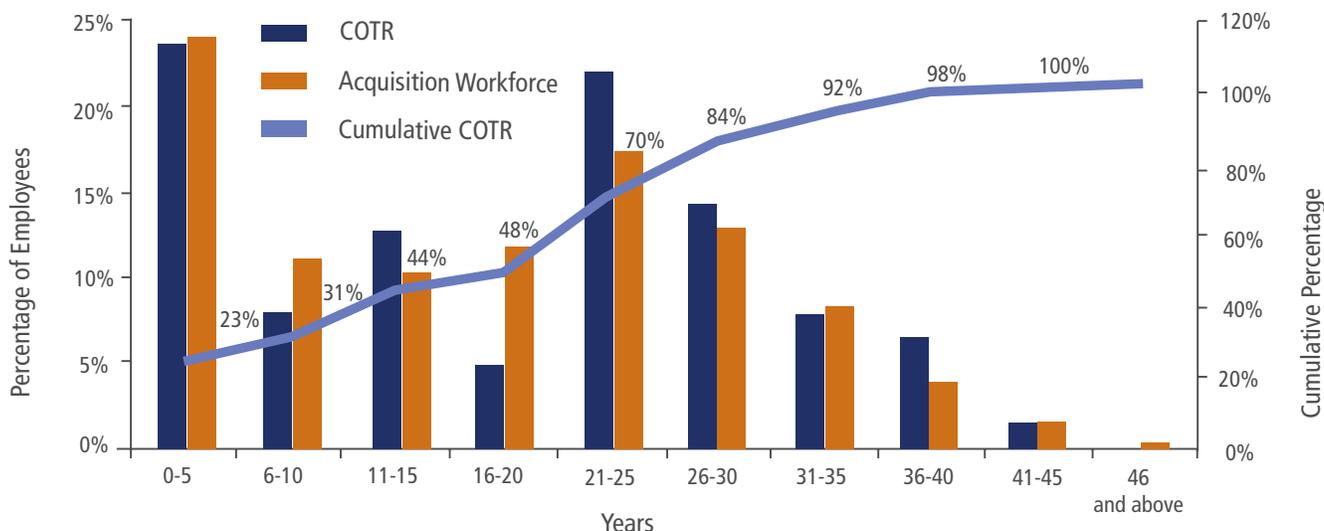
In 2011 there are approximately 65 FAA employees performing COTR duties as their primary responsibility on acquisition programs. These full time COTRs make up approximately 4% of the acquisition workforce membership. In addition, 143 employees in other acquisition professions also perform collateral COTR duties. Over a thousand other FAA employees perform COTR responsibilities for other types of procurements outside of the acquisition CIP programs. The number of employees performing COTR duties changes constantly as contracts begin and end. COTRs perform critical acquisition and technical functions, and Contracting Officers/Specialists rely on them to ensure that contracts are managed properly to meet mission needs. COTRs are designated and authorized in writing by the Contracting Officer/Specialist to perform prescribed administrative and/or technical functions on a contract.

### Years of Experience

The average tenure of COTR professionals in federal service is approximately 18 years. The distribution of tenure is shown below in Exhibit 7.7.1.

#### Exhibit 7.7.1

*COTR Federal Service*

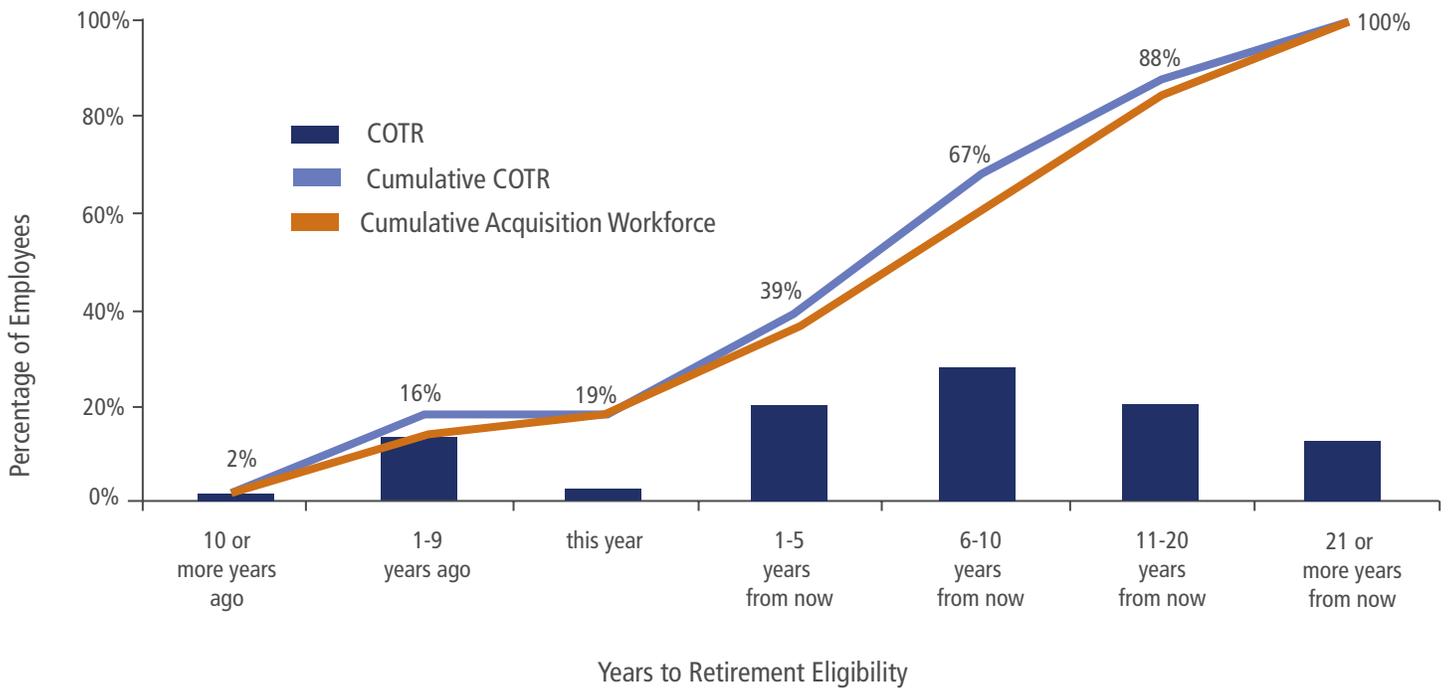


## Retirement Eligibility

Exhibit 7.7.2 shows the retirement eligibility profile for the acquisition employees in the COTR profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Cumulatively, 19 percent of COTR professionals are eligible to retire by the end of this calendar year.

### Exhibit 7.7.2

*COTR Retirement Eligibility*



## Critical Competencies

The table below lists the requisite competencies for COTRs.

Contracting Officer Technical Representative	
Acquisition Planning	Market Research (Understanding the Marketplace)
Defining Government Requirements in Commercial/Non-Commercial Terms	Negotiation
Effective Contract Management	Performance Management
Effective Pre-Award Communication	Technical Analysis of Proposals

## Certification

COTR certification requirements are met through a combination of factors, which include experience in the profession and training.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The COTR certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.

## Challenges

- The complexity of acquisitions on large, integrated programs requires skilled, experienced COTRs.
- COTRs need a better understanding of contracting to ensure successful administration of contracts (including bounds of authority and accountability).
- Because COTR is a collateral role, identifying COTRs and tracking compliance with training requirements can be challenging. COTR lists must be revalidated on a continual basis for accuracy.

## Activities in 2011

- Developed a database of validated FAA COTRs.
- Clarified FAA policy on COTR certification requirements and designation of COTRS by Contracting Officer/Specialists.
- Added COTR training requirements to individual COTR learning plans in eLMS.

## Planned Initiatives for FY 2012

Initiative	Deliverable	Planned Completion
Streamline and automate the COTR certification application process.	Automated Certification Application	3 <sup>rd</sup> Quarter
Initiate a COTR Community of Practice intranet portal.	COTR Content on Acquisition Workforce Portal	3 <sup>rd</sup> Quarter
Participate on OMB/FAI Functional Advisory Board (FAB) for COTR workforce.	Updates to Acquisition Workforce Council, as needed	Ongoing

## 7.8 ACQUISITION LAW PROFILE

### Definition

Acquisition Attorneys provide legal advice regarding all aspects of contract formation and administration, including intellectual property, antitrust, bankruptcy, debarment, conflict of interest, real estate, mergers, security, export control, procurement integrity, property disposal, and fiscal and socio-economic laws affecting acquisitions. Acquisition Attorneys represent agency acquisition teams in the agency's internal dispute resolution process and also represent FAA with the Department of Justice in federal court litigation.

### Membership

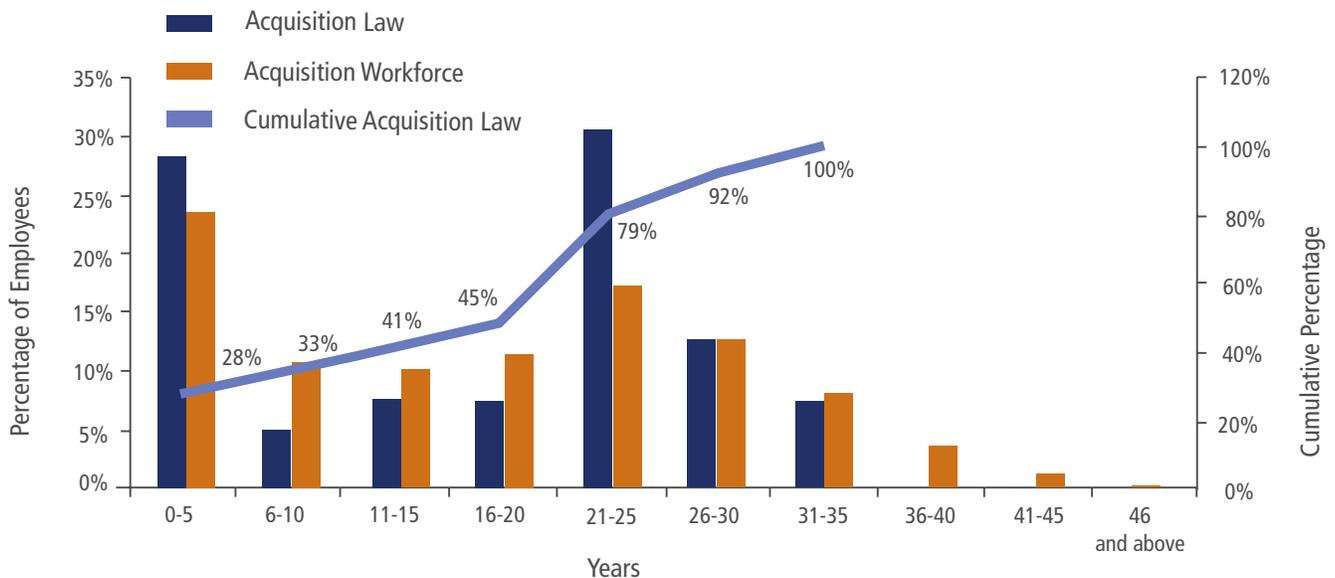
In 2011 there are approximately 40 Acquisition Attorneys in this acquisition profession. At FAA headquarters, the work is dedicated. In the Service Centers and most regions, at least one person is recognized as an Acquisition Attorney, although he or she may perform additional duties. The Technical Center and the Aeronautical Center also have dedicated Acquisition Attorneys. Acquisition Attorneys are distributed proportionately across the nine regions and Technical and Aeronautical Centers; one-third of them are located at headquarters.

### Years of Experience

The average tenure of Acquisition Law professionals in federal service is approximately 16 years. The distribution of years of federal service is shown below in Exhibit 7.8.1. While almost 30 percent of Acquisition Law professionals have 5 or fewer years of federal service, over 50 percent have 21 or more years. Acquisition Attorneys tend to stay with programs and work a portfolio, which may change somewhat over time. On FAA acquisition programs, the relationship with the program office is very important.

#### Exhibit 7.8.1

*Acquisition Law Federal Service*

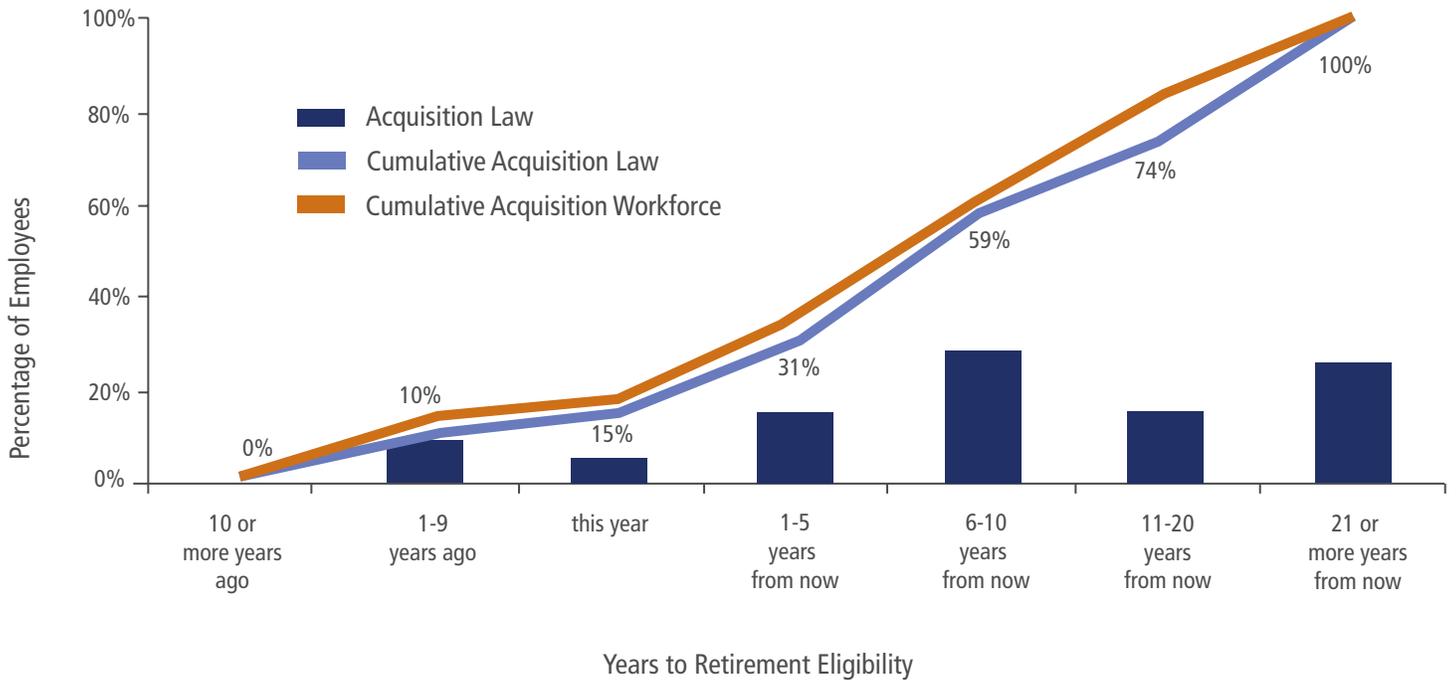


## Retirement Eligibility

Exhibit 7.8.2 shows the retirement eligibility profile for the acquisition employees in the Acquisition Law profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Cumulatively, 15 percent of Acquisition Law professionals are eligible for retirement by the end of this calendar year, 2 percent less than the overall acquisition workforce.

### Exhibit 7.8.2

*Acquisition Law Retirement Eligibility*



### Typical job roles for acquisition employees in this profession include:

- Acquisition Attorney

### Typical job series in this profession include:

- 0905 – General Attorney

## Critical Competencies

A competency model has not been developed for Acquisition Attorneys. FAA conducted a benchmarking study in 2010 and did not find any organization using a formal competency model for Acquisition Attorneys.

Acquisition Attorneys in the agency do not attend a formal, lockstep training program. However there are courses that have been identified as valuable for new Acquisition Attorneys that include a mix of in-agency and out-of-agency training. Additional employee development may occur through internships, mentoring, and conference attendance. Some Acquisition Attorneys accept formal details on an acquisition program to gain additional experience from an agency perspective. Through the course of their careers, Acquisition Attorneys will be asked to teach classes to peers in their areas of expertise.

## Challenges

- The complexity of acquisitions requires highly skilled Acquisition Attorneys.
- FAA's uniquely flexible Acquisition Management System requires a learning curve for seasoned attorneys recruited from other agencies.

## 7.9 INTEGRATED LOGISTICS SUPPORT PROFILE

### Definition

Integrated Logistics Support (ILS) is the critical functional profession that plans, establishes, and maintains an ILS system for the life cycle of FAA products and services. ILS works by planning for and managing the interdependencies among the nine Logistics elements: Maintenance Planning; Supply Support; Training, Training Support, and Personnel Skills; Computer Resources Support; Maintenance Support Facilities; Packaging, Handling, Storage, and Transportation; Technical Data; Direct Work Maintenance Staffing; and Support Equipment.

### Membership

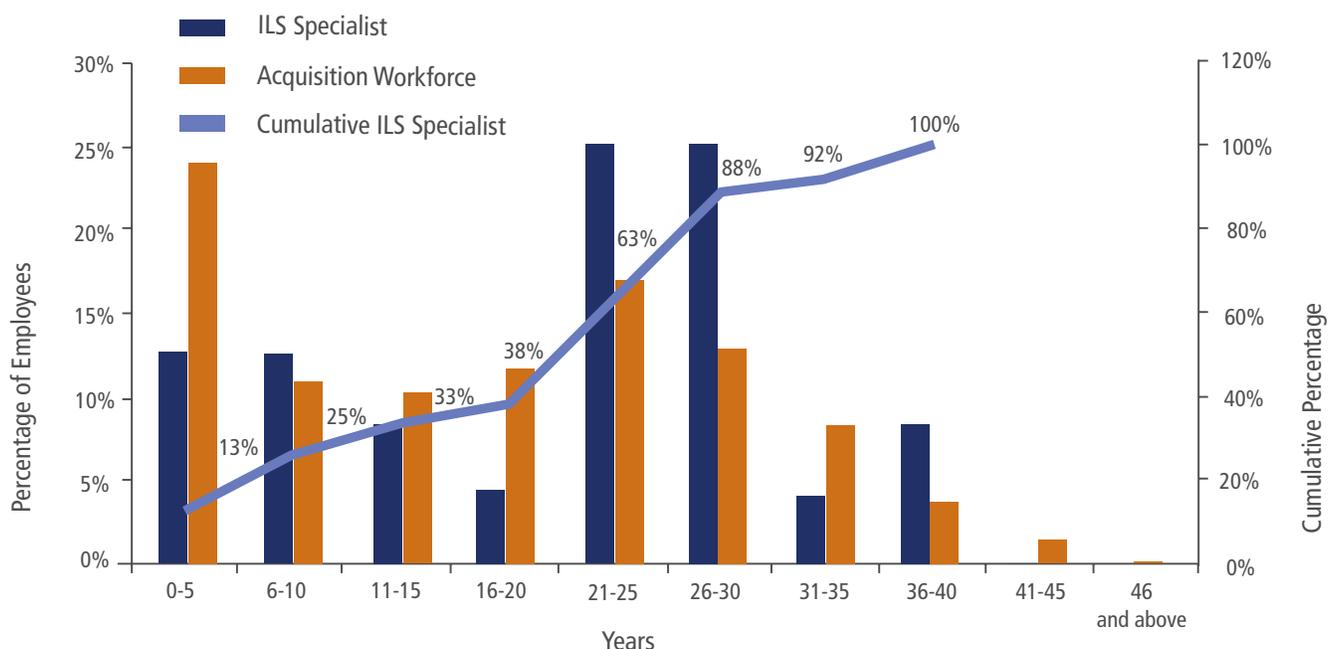
In 2011 approximately 25 employees in FAA have primary responsibility for Integrated Logistics Support on acquisition programs. Logistics Specialists are responsible for supporting and advising Acquisition Program Managers or Service Team Leaders to ensure the successful integration of all logistics support elements throughout the Acquisition Management System (AMS) life cycle. Some of these individuals may have a Delegation of Procurement Authority, which carries additional training requirements set forth in FAA's AMS. These individuals are also responsible for working with requiring offices to develop contract specifications for projects to improve, expand, and extend the service life of existing programs.

### Years of Experience

The average tenure of Logistics professionals in federal service is almost 20 years. Over 60 percent of Logisticians have 21 or more years of federal service. The distribution of years of federal service is shown below in Exhibit 7.9.1.

#### Exhibit 7.9.1

*ILS Specialist Federal Service*

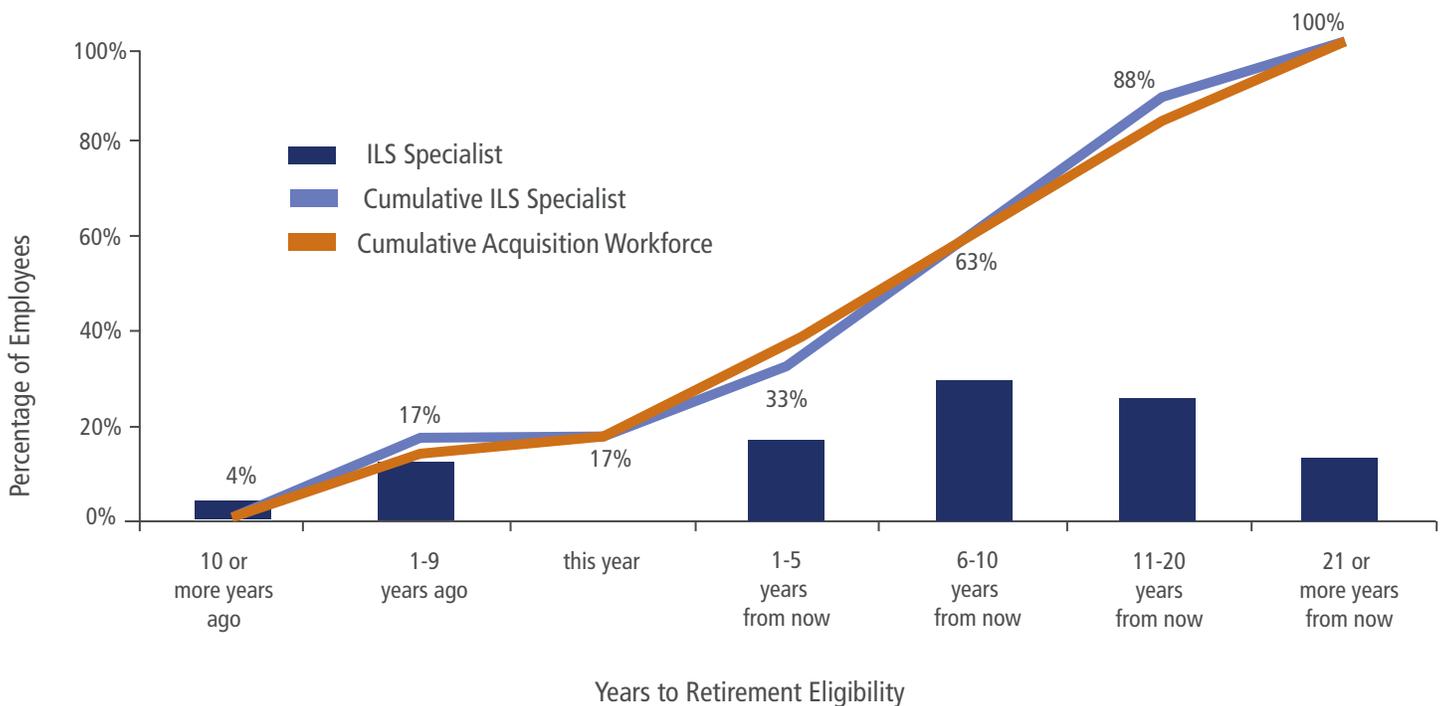


## Retirement Eligibility

Exhibit 7.9.2 shows the retirement eligibility profile for the acquisition employees in the Logistics profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Despite their average higher years of federal service, retirement eligibility for Logistics professionals is consistent with that of the overall acquisition workforce.

### Exhibit 7.9.2

*ILS Specialist Retirement Eligibility*



### Typical job roles for acquisition employees in this profession include:

- Logistics Element Specialist/Manager
- Integrated Logistics Support Specialist/Manager
- Logistics Management Specialist

### Typical job series in this profession include:

- 346 – Logistics Management Specialist

## Critical Competencies

Integrated Logistics Support Specialist (ILS)	
ILS Planning Product Support and Sustainment Design for Supportability	Contracting and Acquisition Project Management

## Certification

The Integrated Logistics Support certification program supports certification of professionals at three distinct levels: Entry; Mid/Journeyman; and Senior/Expert. These levels reflect the increasing responsibility and capability required of the Logistics Specialist as programs become larger, more complex, and more highly integrated with other programs.

Certification requirements are met through a combination of factors, which includes experience in the profession, training (both internal and external to the FAA), and external certification equivalencies. All acquisition certifications are competency-based.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The Integrated Logistics Support certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.

## Challenges

- Expanding program/project focus on ILS during the initial phases of the AMS life cycle to reduce the total cost of ownership.
- Expanding focus on cost savings measures for sustaining existing FAA facilities.
- Managing costs and risks associated with obsolescence (planned and unplanned).

### Activities in 2011

- Refined the ILS certification requirements to better align training curriculum across the three levels of certification.
- Updated FAA policy to include ILS certification requirements.
- Began certifying ILS professionals, resulting in 15 certifications (4 of which at Level III).

### Planned Initiatives for FY 2012

Initiative	Deliverable	Planned Completion
Initiate ILS Community of Practice	ILS Content on Acquisition Workforce Portal	4 <sup>th</sup> Quarter

## 7.10 SPECIALIZED SUPPORT PROFILE

### Definition

Professionals in the specialized support profession are typically NAS subject matter experts. They can include safety managers, information system specialists, air traffic specialists, and training experts.

### Membership

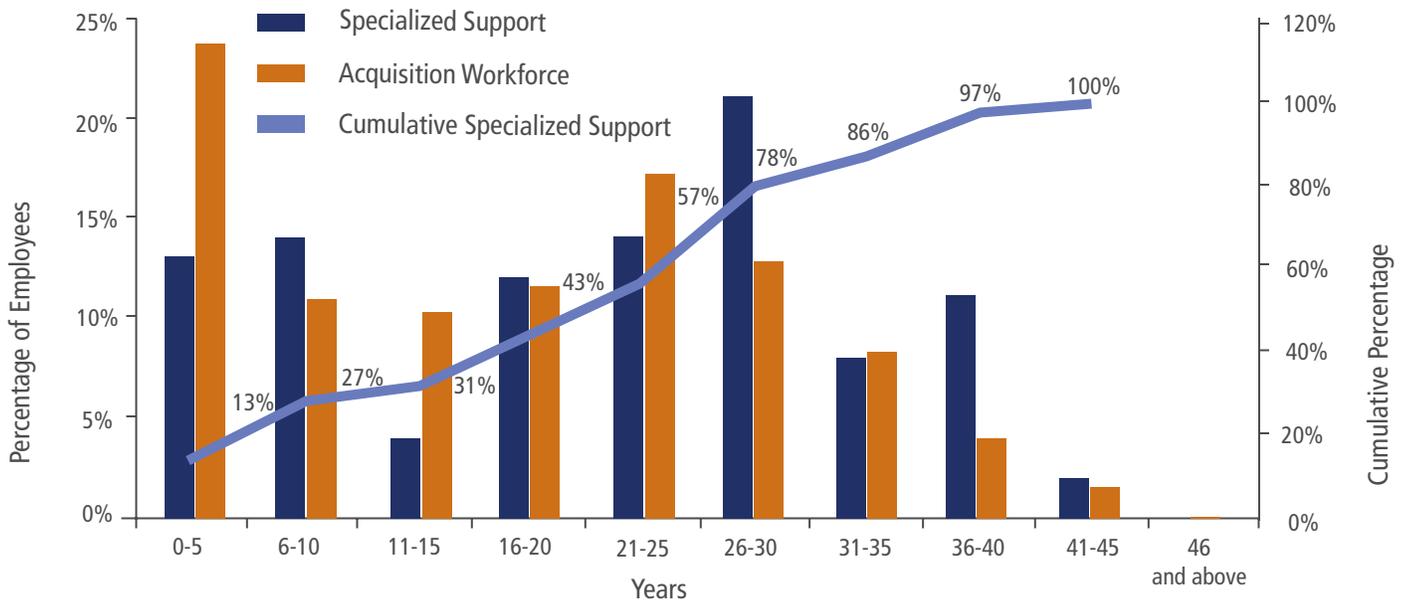
In 2011 there are approximately 100 employees in the Specialized Support category of professionals supporting acquisition programs, or 7 percent of the acquisition workforce.

### Years of Experience

The average tenure of Specialized Support professionals in federal service is almost 21 years, 4 years greater than the average acquisition employee. Over 55 percent of Specialized Support professionals have 21 or more years of federal service. The distribution of years of federal service is shown below in Exhibit 7.10.1.

#### Exhibit 7.10.1

*Specialized Support Federal Service*

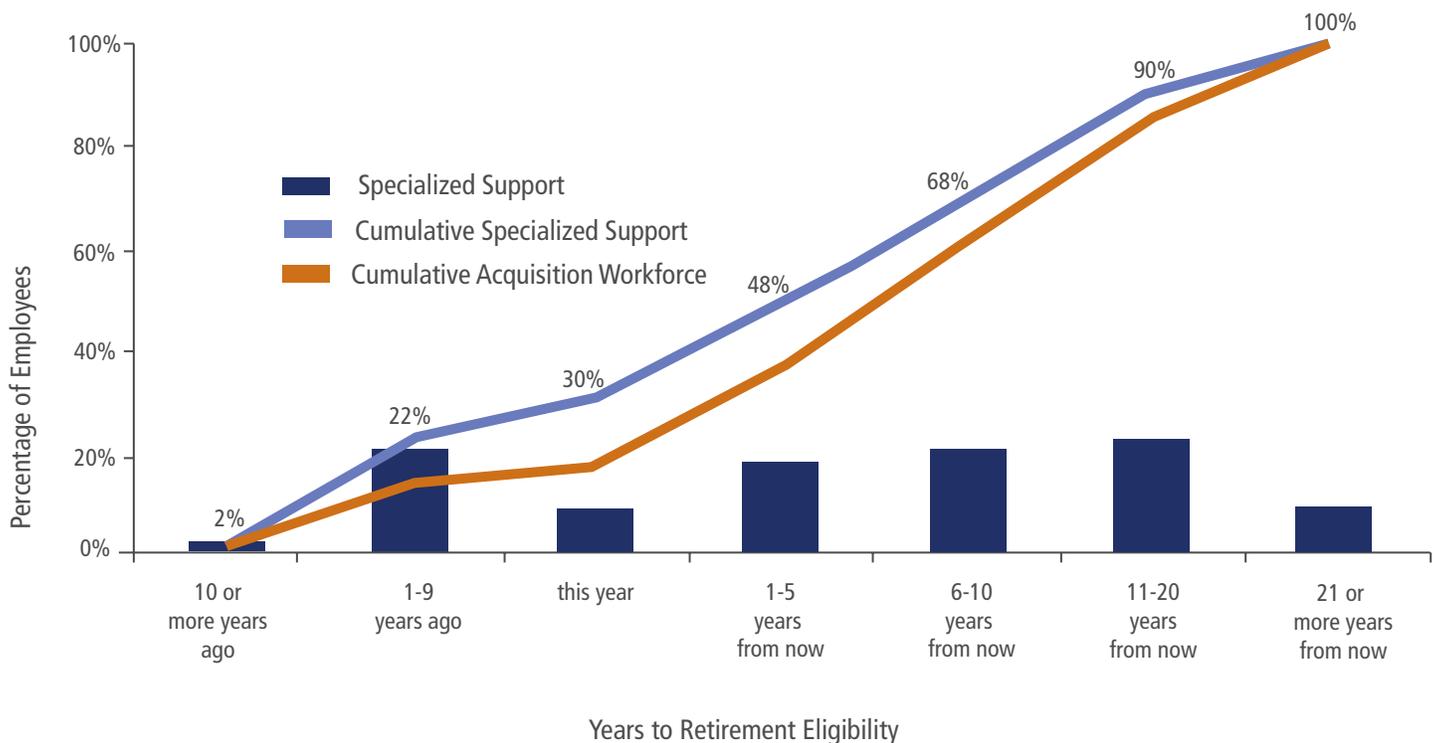


## Retirement Eligibility

Exhibit 7.10.2 shows the retirement eligibility profile for the acquisition employees in the Specialized Support profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Cumulatively, 30 percent of Specialized Support professionals are eligible to retire by the end of this calendar year, versus 17 percent in the overall acquisition workforce. Almost 50 percent of current employees will be eligible to retire within 5 years.

### Exhibit 7.10.2

*Specialized Support Retirement Eligibility*



## Critical Competencies

Specialized Support is not a candidate for a competency model due to the varied nature of the work performed by individuals in this category.

## Challenges

- Managing the potentially high attrition from this specialized, highly skilled NAS workforce.

## Planned Initiatives for FY 2012

Initiative	Deliverable	Planned Completion
Assess the developmental needs of Specialized Support professionals.	Report of findings and recommendations to Acquisition Workforce Council	3 <sup>rd</sup> Quarter

For additional information about FAA's Acquisition Workforce Plan, programs, and initiatives,  
please contact:

Acquisition Career Management Group  
Office of Acquisition and Business Services

Web:

[https://employees.faa.gov/org/linebusiness/ato/acquisition\\_business/acquisition\\_policy/career\\_mgmt/](https://employees.faa.gov/org/linebusiness/ato/acquisition_business/acquisition_policy/career_mgmt/)

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