PARTNERSHIP FOR PUBLIC SERVICE

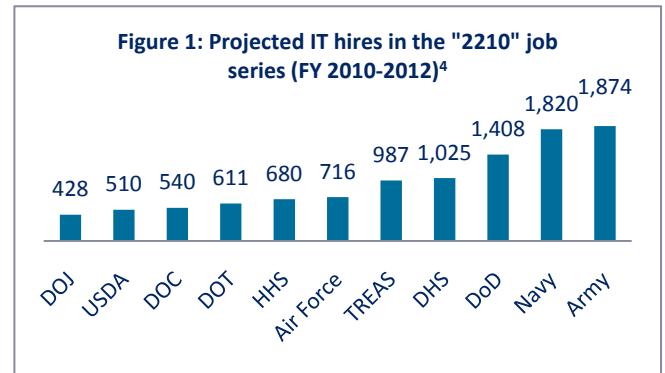## ISSUE BRIEF | BUILDING AN INFORMATION TECHNOLOGY WORKFORCE

The federal IT workforce is vital to the security, financial stability and well-being of the country. It supports 2.1 million civilian employees in thousands of offices, military bases and embassies, protects our nation's critical infrastructure, and ensures the delivery of crucial programs, such as social security and Medicare benefits. National security – and personal data – is at stake for millions of Americans. To function efficiently and effectively in IT, the government needs to maintain privacy, ensure transparency and manage costs.[1] However, these objectives are hindered by outdated personnel laws or regulations and antiquated HR systems and practices.

SYSTEM ERROR: RECRUITING AND RETAINING TOP TALENT

Growing Need for Talent

Since 2002, the federal IT workforce has increased 57 percent from approximately 46,000 to nearly 72,000 jobs.[2] Yet large hiring gaps still exist. The urgent need for federal IT workers has reached a new level of intensity due to greater dependence on technology to deliver the services demanded by citizens as well as normal attrition. More than 11,500 mission-critical IT jobs (16 percent of the total IT workforce) will need to be filled over the next three years.[3]

Figure 1: Projected IT hires in the "2210" job series (FY 2010-2012)[4]

DOJ	USDA	DOC	DOT	HHS	Air Force	TREAS	DHS	DoD	Navy	Army
428	510	540	611	680	716	987	1,025	1,408	1,820	1,874

Furthermore, assessing IT workforce capacity is challenging because employees who perform IT functions are classified within several functional areas.

Increasing Retirement Eligibility

Federal agencies will face even greater needs as baby boomers retire in unprecedented numbers. As of 2009, more than 9,800 professionals (14 percent) in mission-critical IT positions were eligible for retirement, with nearly 16,500 (23 percent) by 2012. More than 20 percent of IT managers government-wide are projected to retire by 2015. In addition to retirement, thousands of others will leave to pursue opportunities outside of government.

Figure 2: Retirement eligibility in the "2210" IT job series at selected agencies

Agency	IT employees as of 9/30/09	Retirement eligibility – FY 2009	Retirement eligibility – FY 2015[6]
HUD	215	22%	45%
USDA	3,418	15%	40%
SSA	3,682	21.5%	38%
NASA	318	13%	30%
DOT	1,781	13%	27%
DHS	1,989	10%	27%

Insufficient Talent Pipelines

Not only are experienced workers leaving, but there is also insufficient talent to fill new positions. Over the last four years, entry-level IT hires as a percentage of all new IT hires have decreased by nearly 10 percent.[5] Agencies are struggling to hire entry-level and mid-level talent in several IT

occupational areas, such as cybersecurity and IT management specialists. Some CIOs perceive federal hiring practices as inflexible, with a lengthy hiring cycle and ineffective recruiting methods.[6] In addition, many job seekers are unaware of the great diversity of federal IT jobs and student internships available. Fewer U.S. students are majoring in science, technology, engineering and mathematics disciplines, leading to a shrinking IT talent pool.[7] Furthermore, the complex hiring process, competition from the private sector and often rigid compensation packages frequently deter even the most determined federal job seekers.

SYSTEM REBOOT: RECOMMENDATIONS

Agency missions require a holistic approach to attract and retain top IT talent. Agencies should:

- **Understand future workforce needs**. Identify what skills and competencies are needed over the next three to five years. Then, classify positions in the appropriate job series.
- **Recruit aggressively**. Insufficient pipelines of entry-level talent suggest that agencies need to recruit harder and more strategically. Proactively recruit entry-level talent by highlighting key selling points, such as the ability to do work that makes a difference, total compensation packages, flexible work schedules, and training and development opportunities. Furthermore, write clear descriptions of duties so that actual job responsibilities match those advertised.
- **Use all hiring authorities and internship programs**. Internship programs are under-utilized or poorly maintained, representing missed opportunities to identify and retain top talent. Bolster the recruitment of entry-level talent via special hiring authorities and student programs, later converting those hires into permanent positions.
- **Make data-driven decisions**. Employ measurement tools to capture trends (e.g., attrition rates) and closely analyze those data to continuously improve your approach.
- **Collaborate across government**. Work together and share best practices to market federal jobs by profession, in a way that elevates the brand of the federal government and creates a smoother and more efficient recruitment and hiring process.
- **Retain the best and brightest.** Develop robust on-boarding programs for all new employees and identify financial and nonfinancial incentives to retain them. Provide ongoing training and development opportunities in addition to well-defined career ladders.

THE BOTTOM LINE

The ability of government agencies to fulfill their missions is in peril, requiring immediate and thoughtful attention to the recruitment, hiring and retention of talented IT professionals. Without the right people in the right jobs, our government's ability to accomplish its mission will be hindered by failing projects and high attrition rates. By investing in IT talent, government will ensure mission success and maintain a safe and prosperous nation.

This issue brief was made possible through the generous support of Accenture.

[1] Cyber Insecurity report, Partnership for Public Service, p. 3.
[2] FedScope 9/30/2002 - September 2009 (fulltime/permanent); accessed via http://www.opm.gov.
[3] Where the Jobs Are, 2009
[4] Where the Jobs Are, 2009
[5] FedScope 9/30/2002 - September 2009 (fulltime/permanent); accessed via http://www.opm.gov.
[6] TechAmerica, Grant Thornton, Feb. 2009.
[7] CRS Report for Congress, Science, Technology, Engineering, and Mathematics (STEM) Education; accessed via http://www.fas.org
[5] OPM Projections based on Central Personnel Data File, 2009.
[6] Central Personnel Data File, 2009.