STATEMENT OF STEVEN COOPER

"Reviewing Federal I.T. Workforce Challenges and Possible Solutions"

Subcommittee on Information Technology of the Committee on Oversight and Government Reform

Tuesday, April 4, 2017

Chairman Hurd, Ranking Member Kelly, Members of the Subcommittee:

Thank you for inviting me to appear before you today. I am honored to have this opportunity to provide input to the ongoing dialogue addressing challenges which adversely impact the recruitment, development, and retention of the Federal IT Workforce and offer a few ideas about potential solutions. I would like to state at the outset that the opinions and ideas I will share are my own, and are not offered on behalf of any government agency or industry organization.

I have had the privilege of serving as a Federal CIO in three different departments over the last 15 years – as the first CIO of the Department of Homeland Security; as the CIO of the FAA's Air Traffic Organization, and then as the Deputy and Acting CIO of the FAA; and most recently, as the CIO of the Department of Commerce. I am honored to have served as an appointee in both a Republican and a Democratic Administration, as well as in a career role, all at the Senior Executive Level. I share this background because first and foremost, I strongly believe that improving the skills, capability, effectiveness, and *esprit de corps* of the federal IT workforce is of bipartisan interest. Second, because I have directly addressed many of the challenges we will likely discuss today. And last, and perhaps most important, because I have experienced success in overcoming many, but not all, of these challenges, and can share my experience with the subcommittee.

I want to highlight three persistent challenges which get in the way of recruiting and retaining talent in the federal workforce which may not be as visible or well known to members of the Subcommittee, industry, and the GAO.

1. Position Descriptions

A position description, or PD, is required before any recruiting action can occur. Human Resources reviews and approves all PDs. Very few IT personnel are trained and skilled at writing or developing PDs. The current library of IT PDs held available within an agency, or from OPM do not always reflect the skills needed by today's workforce. Simply put, too many are obsolete, and even more concerning, *do not exist* for key roles related to cybersecurity, digital forensics and risk management, data science, artificial intelligence, predictive analytics, the Internet of Things, drone technology, autonomous vehicles, and emerging technologies. In my experience, not having an up-to-date, HR approved PD caused delays of up to six months in the recruiting process.

An idea to fix this across government: Task OPM as the lead agency, with support from OMB, the federal CIO council and the federal CHCO council, to develop a PD library of HR approved current and emerging IT roles available for use by any federal agency.

2. Promotions, Career Growth, and Retention

When an individual is first hired into the federal workforce, the position they fill carries a grade level for pay and promotion purposes. In many cases, the person cannot be promoted to a higher grade without competing for that position. To make my point, consider this: if a person is hired into government at a GS-9 position out of college, and then must compete for each grade level promotion, that person must successfully emerge as the highest rated candidate six separate times in their career to achieve a GS-15 grade level. And this is true only if there are open positions at each grade level for which an employee can compete. Using cybersecurity as a real example, I had some of my most qualified employees leave my office either for industry or for another department because there were either no open positions at their next grade level, or they were not selected.

Contrast this with my experience in the private sector. At one of the Fortune 200 companies for which I worked, hiring of entry level and mid-level positions,

including IT, were done via a formal process run by the operational managers as a team across each operating unit. Each manager participating was trained in the selection process, which required a three-day course including mock interviews and graded evaluations. This company hired the best candidates with the intention of retaining these employees for a career, not just to fill a vacant position. Once hired, the company ensured each employee had a coach to develop a career path. Once each employee reached two years of employment with the company, they went through an evaluation process to identify high potential and high performing employees. These employees were then put on a fast track which identified in advance positions which would enable these employees to grow and gain key skills as well as enable them to be promoted as they were deemed ready to take on more responsibility.   The promotions were done without competition in most cases. This approach ensured and proved very successful in retaining and rewarding the most valued employees. This approach is not possible in the federal government.

An idea to fix this across government: Task OPM as the lead agency, with

support from OMB, the federal CIO council and the federal CHCO council, to standardize career ladders to allow in line promotions for qualified employees when they are ready for promotion.

3. <u>Filling Cybersecurity Positions</u>

When I left Commerce, there were 10 unfilled cyber positions. With the CR and the hiring freeze in place, those positions remain empty as I speak. How do we address this shortage?

 Chairman Hurd has spoken previously about the concept of a Cyber National Guard. I have spoken previously about a 'loaned employee' program, similar in concept to the IPA program with academia.   One concept to directly address the lack of skilled cybersecurity professionals in the federal workforce is to have trained, skilled personnel 'at the ready' who can be put into service with very short notice like the FEMA disaster corps. Another model could reflect a formal

agreement or contract, like the military reserves. This cyber reserve corps could drill each month in federal agencies alongside their government counterparts, and could be activated for longer periods of time to assist agencies in response to a breach, or particularly harmful new malware.

In closing, I know I have not addressed all the challenges facing the federal IT workforce regarding recruiting, development, and retention. However, I am confident that with the guidance of the committee and GAO, solutions to the problems that exist can be found in a collaborative partnership between government and industry.

Thank you for allowing me to participate in this hearing. I look forward to answering any questions you may have.

Appendix A - I offer my simplified table of problems and solutions.

Problem	Cause	Solution
Recruiting – can't hire top candidate(s)	- Salary too low - No position at needed grade level - No hiring bonus - No relocation funding	Authority for special pay or incentives related to key skills like cybersecurity
Recruiting – takes too long	- Approved PDs not easily available or don't exist - Veteran's Preference does not always produce best qualified candidates	- Create library of approved PDs for use by all agencies - Direct hiring authority for key skills like cybersecurity (exists currently for cyber)
Recruiting – can't attract top candidates	Don't want to work in government	- Provide scholarships in return for agreed term of federal service - Provide student loan forgiveness in exchange for agreed term of federal service
Retention	- Employees leave for promotion or higher pay - Employees do not feel recognized or rewarded for their work	- Pay a retention bonus - Give a competitive cash award for employees/teams providing significant operational solutions

Career Development	• Certifications lacking • Skills lacking	• Pay a bonus for obtaining selected certifications • Reimburse employees for education directly related to obtaining selected skills on a sliding scale (100% for an A, 75% for a B, 50% for a C, 25% for a D, 0% for an F)
Insufficient skilled candidates	• Returning Vets and unemployed workers may not have needed skills •	• Training programs with community colleges and universities for cyber skills, needed IT skills