



2016 Assessment of the Civilian Acquisition Workforce Personnel Demonstration Project

Executive Summary

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Key findings

- Salary levels, salary growth, and retention outcomes in the Department of Defense Civilian Acquisition Workforce Personnel Demonstration Project (AcqDemo) were similar to those in the General Schedule (GS) system, after controlling for an array of other factors.
- AcqDemo employees earned higher starting salaries but were promoted less frequently relative to equivalent employees in the GS system.
- Within AcqDemo, higher levels of contribution to the organizational mission were associated with higher salaries, more-rapid salary growth, more promotions, and a greater likelihood of retention.
- However, less than half of AcqDemo survey respondents perceived a link between contribution and compensation. Possible explanations include a perceived lack of transparency regarding how performance ratings are calculated and translated to pay; difficulty measuring employee performance objectively and inclusively, particularly for managers; and a narrowing spread in salaries resulting from pay caps and AcqDemo business practices.
- A majority of AcqDemo survey respondents expressed concerns about the transparency and fairness of various aspects of the appraisal and compensation system.

An evaluation of a demonstration project that put some 16,000 U.S. Department of Defense (DoD) civilian employees under a performance-based pay system found that employees who made greater work contributions experienced higher salaries and faster salary growth, were promoted more frequently, and were more likely to remain on the job relative to their lower-performing peers.

Unlike the General Schedule (GS) system, which applies to nearly 467,000 DoD civilian employees, the demonstration project explicitly links workers' contributions to the organizational mission with their pay raises and career progression. While the evaluation associated higher performance with greater rewards among those in the demonstration project, employees were skeptical. The margins by which rewards increased were small, and the link between pay and performance weakened over time.

This executive summary provides several highlights of the evaluation's results.

BACKGROUND

Many criticisms have been voiced about the GS system, including the view that poorly performing employees are tolerated for extended periods and that compensation is not directly linked to performance. To "stimulate constructive change in federal personnel management," Congress included provisions for a limited number of demonstration projects in the Civil Service Reform Act of 1978.¹ Demonstration projects are alternative personnel management systems, which temporarily exempt

agencies “from the coverage of particular laws and regulations in order to test new ideas.”² One such demonstration project, the DoD Civilian Acquisition Workforce Personnel Demonstration Project (AcqDemo), is the subject of this report.

AcqDemo has been in place since 1999. The project was originally regarded as an opportunity to transform civilian personnel management policies and procedures to better meet the needs of the Acquisition, Technology, and Logistics workforce and to better support DoD’s acquisition mission. Specifically, AcqDemo aims to provide a system that retains, recognizes, and rewards employees for their contributions, and supports their personal and professional development.

In fiscal year (FY) 2011, the National Defense Authorization Act instructed the Secretary of Defense to designate an independent organization to conduct two assessments of AcqDemo. This report is the second of these assessments.

STUDY APPROACH

This assessment was informed by multiple data sources:

- documents obtained from the AcqDemo Program Office and website
- archival data including site histories, AcqDemo Executive Council meeting minutes, training session feedback summaries, and grievance data
- interviews with 22 AcqDemo subject-matter experts (SMEs)
- 2012 and 2016 AcqDemo surveys conducted by CSRA Inc.
- administrative data from the Defense Manpower Data Center (DMDC) and the AcqDemo Program Office covering FYs 2011 through 2015.

Qualitative data collected from archival data sources, the 2016 AcqDemo survey, and interviews were systematically catalogued and analyzed to identify prominent themes. Quantitative data collected from the 2012 and 2016 AcqDemo surveys and administrative data sources were analyzed using established statistical methods. The survey data were weighted to account for demographic differences between the survey respondents and the AcqDemo workforce at large. Weights were applied to the administrative data to construct a comparison group of GS employees in AcqDemo-eligible organizations (ADEOs). Despite some limitations, the multiple data sources—when taken together—provided a solid foundation for RAND’s

assessment. More details on the methods are available in the full report.

ASSESSMENT OVERVIEW

This summary provides an overview of the salient findings related to AcqDemo’s performance; the complete findings are available in the full report.³ We briefly describe AcqDemo’s structure and flexibilities, compare the AcqDemo workforce with the population of GS employees, review aspects of AcqDemo that appear to be performing well, and discuss areas where its performance could be improved.

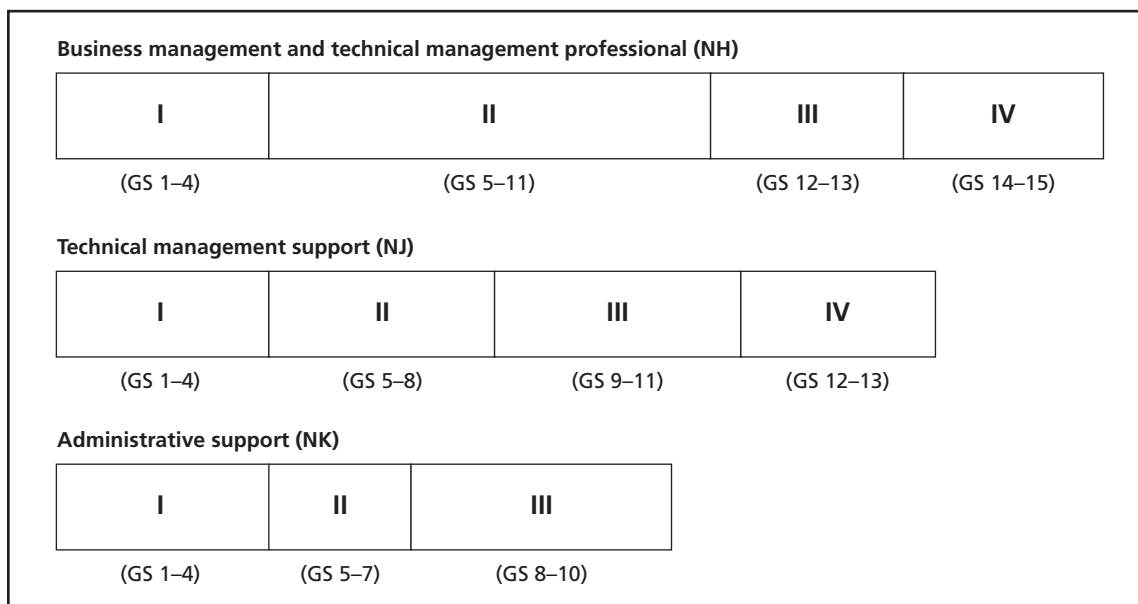
AcqDemo’s Structure and Flexibilities Distinguish It from the GS System

AcqDemo differs from the GS system in many ways, but there are two features of the project that are particularly relevant to this assessment: its use of broadbands to classify employees (see Figure 1) and its performance appraisal system, which ties compensation to contribution to the organizational mission.

Broadbands. When employees enter AcqDemo, they are assigned to one of three career paths based on their occupations: business management and technical management professional (NH), technical management support (NJ), and administrative support (NK). The NH and NJ career paths each have four pay bands, and the NK career path has three pay bands. Because each pay band corresponds to two or more GS grades, the pay bands are referred to as broadbands. When personnel enter AcqDemo, their supervisors have the ability to set the new employee’s initial compensation at different points within the broadband. Employees can typically be reassigned within the same broadband without changes in pay or job description. However, changes to an employee’s broadband or career path require that the employee apply for a competitive position.

Performance appraisal system. AcqDemo’s Contribution-Based Compensation and Appraisal System (CCAS) is designed to provide an equitable and flexible method for evaluating and compensating the workforce. It differs fundamentally from the GS system in that it explicitly ties an employee’s compensation to his or her contribution to the organizational mission. By rewarding high contributors and withholding remuneration from low contributors, CCAS is intended to attract and retain a highly qualified workforce of employees who are motivated to maximize their contributions.

Figure 1. AcqDemo Career Paths and Broadbands



SOURCE: AcqDemo Program Office, "Conversion to DoD Civilian Acquisition Workforce Personnel Demonstration Project (AcqDemo): 2016 Employee Orientation Briefing," 2016.

CCAS is an annual process with six distinct phases: contribution planning, midpoint review, employee self-assessment, supervisor annual appraisal, pay pool process, and communication of results. This process is distinct from the GS appraisal system in its focus on employee contribution to the organizational mission as a determinant of compensation actions, its provision of designated intervals for communication and feedback, and its use of pay pools to finalize ratings and compensations actions.

AcqDemo employees' contributions are documented and rated based on six factors: problem solving, teamwork and cooperation, customer relations, leadership and supervision, communication, and resource management. These factors serve as an organizing framework when employees complete their self-assessments. Supervisors subsequently use this input and their own observations to generate an annual appraisal for each employee, which includes preliminary factor scores.

Supervisor appraisals are reviewed during the pay pool process. A pay pool is a group of employees who are evaluated collectively. These employees typically work in the same part of an organization and represent a variety of functional areas. Every pay pool convenes a panel of supervisors to review the complete set of annual appraisals. A senior leader and supporting staff facilitate the meeting. During the meeting, the pay pool panel reviews the preliminary factor scores reported in the annual appraisals and adjusts them as needed to ensure equity and consistency across employees. The final factor scores are

averaged, and the resulting overall contribution score (OCS) becomes the employee's rating of record.

An algorithm is used to translate the OCS into a recommended compensation action. Employees who perform at or above their expected OCSs can receive basic pay increases or one-time awards. The algorithm is designed to provide greater rewards to employees who make greater contributions to the organizational mission.

AcqDemo Employees Are Demographically Different from GS Employees

Using administrative data provided by DMDC, we examined the characteristics of the AcqDemo workforce on September 30, 2015, the most recent date for which data were available. On that date, AcqDemo had 16,258 participants, of which 16,000 were permanent, full-time employees. The population was heavily male, highly educated, relatively senior, and unionized at a low rate. The Army employed nearly half of AcqDemo participants, while the Navy employed fewer than 5 percent. Approximately three-fourths of AcqDemo participants were members of the acquisition workforce (AW).

We compared the characteristics of the AcqDemo workforce with those of two distinct populations of GS employees: the full set of DoD civilian personnel in the GS system and the subset of those GS employees who were in organizations that were eligible for, but not participating in, AcqDemo (see Table 1). When com-

pared with the full set of GS employees, the AcqDemo workforce was markedly less unionized. Only 9 percent of AcqDemo participants were members of a bargaining unit, while more than half of the GS group was unionized. The AcqDemo workforce was also more highly educated, more concentrated in technical fields, and more likely to hold senior-level positions. Not surprisingly, AcqDemo participants were more highly compensated than GS employees were. After excluding employees on retained pay,⁴ the average AcqDemo participant earned \$89,921 per year in basic pay, while the average GS employee earned \$62,919 per year.

Restricting the comparison group to GS employees in ADEOs (without applying any weights) mitigated some of the disparities between the AcqDemo and GS populations but did not close the gaps entirely. For example, AW employees constituted only 20 percent of the full set of GS employees but 37 percent of GS employees in ADEOs, which still fell short of the 74-percent representation in AcqDemo. The most notable remaining disparity was in compensation: Restricting the comparison group raised average annualized basic pay, but only to \$66,933. In the next section, we assess the extent to which the pay disparity can be attributed to factors other than AcqDemo.

As noted earlier, the figures in Table 1 are from September 30, 2015. AcqDemo grew considerably during the assessment time frame, and the project has plans to expand further. Its population is expected to grow from about 20,000 employees in early 2016 to approximately 50,000 by the end of FY 2018. Twenty-one new organizations are scheduled to join AcqDemo, primarily from the Air Force.

Aspects of AcqDemo That Are Performing Well

The salary disparity was largely explained by demographic differences. The \$23,000 premium observed when comparing the salaries of AcqDemo participants with the salaries of GS employees in ADEOs (see Table 1) was explained, in large part, by differences between the two populations: Only \$1,500 to \$1,800 could be attributed to AcqDemo itself. In addition, salary growth and retention outcomes in AcqDemo were similar to those in the GS system. From FY 2011 to FY 2015, salaries in AcqDemo rose at an average annualized rate of 1.2 percent, and 78 percent of permanent, full-time employees who were in AcqDemo on September 30, 2011, remained in the DoD civilian workforce over the ensuing four years. There were no statistically significant differences between these figures and

the corresponding figures for GS employees in ADEOs once we controlled for other factors.

Unionized employees in AcqDemo fared well in terms of their career outcomes. In comparing unionized employees in AcqDemo to unionized employees in the GS system, we found that starting salaries in AcqDemo were about \$12,000 higher, even after controlling for other factors. Overall, AcqDemo also paid higher annual salaries by a margin of about \$700 to \$1,400. In comparing unionized and nonunionized employees within AcqDemo, we found no discernible differences in starting salaries or overall salaries, but salaries increased more rapidly for unionized employees. Promotions were more likely among unionized employees than among nonunionized employees, while the reverse was true within the GS comparison group. Retention was measurably better for unionized AcqDemo employees than for their nonunionized counterparts, but the same pattern was present within the GS comparison group.

Within AcqDemo, higher levels of contribution were associated with greater rewards. One of AcqDemo's central tenets is that employees should be appropriately rewarded for their contributions to the organizational mission. Our analysis of administrative data indicated that within AcqDemo, higher levels of contribution were associated with higher salaries (see Table 2), more-rapid salary growth, more promotions, and a greater likelihood of retention. The overwhelming majority of AcqDemo participants can reasonably expect additional efforts or contributions to augment their salaries by \$900 to \$1,800 annually and to raise the annualized rate of salary growth by 0.4 to 1.1 percentage points. In addition, employees with higher OCSs were more likely to be promoted and retained than were employees with lower OCSs, although the margins were small for both career outcomes.

Most AcqDemo employees held favorable views of their communication with their supervisors. AcqDemo survey respondents expressed positive sentiments regarding their communication with their supervisors. More than 60 percent agreed that their supervisors set clear contribution goals, effectively communicate expectations for positions, and provide adequate feedback on contributions (see Figure 2). They also tended to agree that meaningful performance appraisal sessions can take place. In addition, the majority of AcqDemo survey respondents agreed that high levels of trust exist or can be developed between supervisors and subordinates and that their respective supervisors have earned their trust and confidence.

Table 1. Characteristics of AcqDemo Participants, DoD Employees in the GS System, and GS Employees in ADEOs, September 30, 2015

Demographic Category	Characteristic	AcqDemo Participants	DoD Employees in GS System	GS Employees in ADEOs
Gender (%)	Male	65.1	60.5	58.0
	Female	34.9	39.5	42.0
Race (%)	White	76.1	70.4	71.0
	Black	13.8	16.9	17.1
	Asian	4.3	5.2	4.9
	Other	5.8	7.6	7.0
Hispanic (%)	Yes	5.1	6.4	5.9
	No	94.9	93.6	94.1
Education level (%)	No college	12.9	29.0	21.8
	Some college	9.3	20.0	18.1
	Bachelor's degree	34.6	28.4	32.5
	Graduate degree	43.2	22.7	27.7
Veteran (%)	Yes	39.6	46.9	42.6
	No	60.4	53.1	57.4
Component (%)	Army	48.2	37.0	59.9
	Air Force	19.0	23.0	13.4
	DoD agencies	17.0	15.9	24.1
	Marine Corps	11.6	2.6	0.0
	Navy	4.2	21.5	2.6
Occupational group (%)	Engineers	22.4	8.8	12.0
	Logistics management	20.7	14.2	22.9
	Central management	18.1	16.0	15.2
	General office operations	11.2	1.8	0.6
	Data systems management	5.5	6.5	4.4
	Mathematicians	3.8	0.6	0.7
	Financial management	2.8	6.2	4.4
	Financial clerks	2.3	1.2	0.3
	Logistics technicians	1.9	5.2	6.6
	Secretarial	1.0	1.2	0.9
	Other	10.2	40.0	31.7
Career level (%)	Entry level	10.8	23.7	17.1
	Midlevel	50.1	68.2	73.0
	Senior level	39.3	8.1	9.9
Retirement eligibility (%)	Eligible	39.8	33.5	35.8
	Not eligible	60.1	66.2	63.9
	Unknown	0.1	0.3	0.3

Demographic Category	Characteristic	AcqDemo Participants	DoD Employees in GS System	GS Employees in ADEOs
Acquisition workforce (%)	Yes	74.4	19.7	37.4
	No	25.6	80.3	62.6
Supervisor (%)	Yes	23.4	14.7	12.6
	No	76.6	85.3	87.4
Bargaining unit (%)	Yes	9.5	55.7	62.0
	No	90.5	44.3	38.0
Retained pay (%)	Yes	6.0	3.8	3.8
	No	94.0	96.0	96.2
Average age		48.9	47.6	47.9
Average years of federal service		16.5	15.1	15.7
Average annualized basic pay		\$89,921	\$62,919	\$66,933
Total personnel		16,000	466,878	124,166

SOURCES: DMDC civilian personnel inventory files; DAWIA personnel files.

NOTES: Percentages may not add up to 100 due to rounding. The data presented include only permanent, full-time employees whose compensation was at least \$15,080, the salary equivalent of working a full year at federal minimum wage. The average annualized basic pay figures exclude employees on retained pay and are expressed in 2015 dollars. Neither the population of DoD employees in the GS system nor the population of GS employees in AcqDemo-eligible organizations is weighted.

Aspects of AcqDemo That Leave Room for Improvement

Flexibility in setting starting salaries may not have been used appropriately. One of the more heralded flexibilities that AcqDemo offers is the ability to set starting salaries at different points within the broadband. This pay-setting flexibility was designed to position AcqDemo to compete more effectively for highly skilled and motivated personnel. Our analysis of administrative data provides strong evidence that supervisors and managers are applying this flexibility. Starting salaries for employees who entered the DoD civilian workforce as AcqDemo participants were about \$13,000 higher than starting salaries for comparable employees who entered the DoD civilian workforce as GS employees in ADEOs. In addition, starting salaries at the top of the pay band were two to three times more prevalent in AcqDemo than in ADEOs in the GS system (see Table 3). However, it is not clear whether the pay-setting flex-

ibility has been used appropriately. ADEOs in the GS system appear to have hired comparable employees at lower starting salaries, although the comparison suffers from our inability to control for performance.

Many supervisors do not perceive that they have much authority to set starting salaries. Only 26 percent of supervisors agreed with the survey item “AcqDemo has had a positive impact on my authority to influence employees’ pay at hiring.” Qualitative responses from the survey help to explain this low level of agreement. Supervisors felt that organization business rules, human resources organizations, or upper management reduced their ability to use this type of flexibility. For instance, one supervisor reported: “I have found that I have no influence over an employee’s pay at hiring—pay is negotiated and set through HR; I have never been consulted.”

Promotions were less prevalent among AcqDemo employees than among comparable GS employees. Our analysis of administrative data also showed that promotions were less prevalent in AcqDemo than in the equivalent GS population, even after normalizing promotions within the GS system and controlling for other factors.⁵ AcqDemo participants experienced 23 percent fewer promotions than did comparable GS employees. This means that for the average employee, AcqDemo participation reduced the probability of promotion from about 19 percent to about 14 percent over the four years that elapsed from September 30, 2011, to September 20, 2015. Only 25 percent to 30 percent of AcqDemo survey respondents felt satisfied with their opportunities for promotion, and even fewer reported positive sentiments regarding the project’s influence on their promotion opportunities.

In some cases, we observed disparities in career outcomes across gender and race or ethnicity groups. When compared with the GS system, AcqDemo raised starting

salaries and overall salaries for every gender and race or ethnicity group we examined, but the rising tide did not lift all boats equally. For example, the AcqDemo starting salary premium was about \$13,000 for the population at large, but the premium was only about \$11,000 for black employees. Female and nonwhite employees in AcqDemo experienced fewer promotions and less-rapid salary growth than their counterparts in the GS system. For instance, AcqDemo participation reduced the likelihood of promotion for the average nonwhite employee from about 19 percent to about 13 percent. Within AcqDemo, female employees were retained at a lower rate than male employees, but that pattern was also present within the equivalent GS population. However, black and Asian employees were retained at higher rates than their white counterparts.

Most AcqDemo employees did not perceive a link between contribution and compensation. As noted earlier, higher levels of contribution were associated with higher salaries. However, only about 40 percent of survey respondents perceived a link between contribution and compensation (see Figure 3). This percentage is lower than comparable survey statistics from other demonstration projects.

We offer three possible explanations for the misalignment between employee perceptions and the empirical reality. First, the misalignment may be due to a perceived lack of transparency regarding how ratings are calculated and translated to pay, how the pay pool process works, and how pay pool results are shared. These perceptions emerged from our analysis of written comments from the AcqDemo survey and, in some cases, were corroborated by evidence from the SME interviews. For instance, one SME explained that

[i]n AcqDemo, there’s no way to compute what the pay-outs are going to be because there’s a big algorithm that does it. Over time, I learned based on consistency year

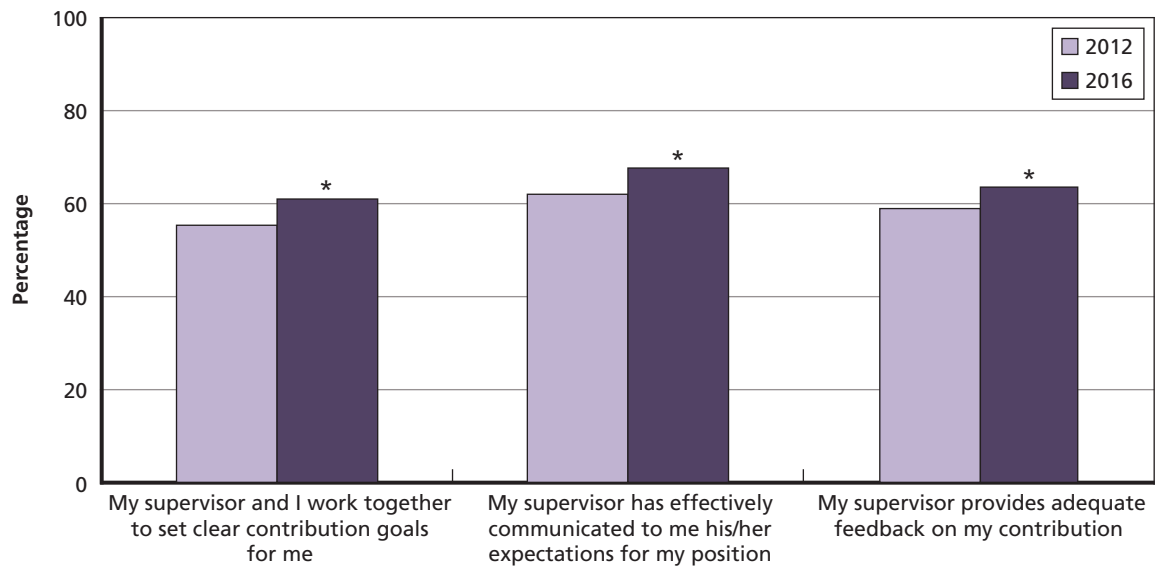
Table 2. Effect of a 1-Point Increase in Δ OCS on Annualized Basic Pay in the Following Fiscal Year

FY	Increase in Annualized Basic Pay in the Following FY		
	All AcqDemo Participants	AcqDemo Participants with Δ OCS \geq 0	AcqDemo Participants with Δ OCS $<$ 0
2012	\$375	\$429	\$104
2013	\$360	\$401	\$240
2014	\$197	\$238	\$33

SOURCES: DMDC civilian personnel inventory files; DAWIA personnel files; administrative data provided by the AcqDemo Program Office.

NOTES: The data presented include only permanent, full-time employees in AcqDemo whose compensation was at least \$15,080, the salary equivalent of working a full year at federal minimum wage. The dollar figures listed are in 2015 dollars. The estimates are statistically significant at the 1-percent level. Δ OCS is the difference between an employee’s actual OCS and expected OCS. About 90 percent of AcqDemo participants earned a Δ OCS between 0 and +4.

Figure 2. AcqDemo Employee Perceptions of Communication with Supervisors



SOURCE: 2012 and 2016 AcqDemo surveys.

NOTES: Bars indicate the percentage of employees who agreed or strongly agreed with the statement. The remainder of employees expressed a neutral view, disagreed, or strongly disagreed.

* = A statistically significant difference between the two years at the 5-percent level.

Table 3. Prevalence of Starting Salaries at the Top of the Pay Band, Newly Hired Employees between December 31, 2010, and September 30, 2015

Career Path and Broadband	Top GS Grade in Broadband	Total Number of New Hires in Broadband		Share of New Hires at the Top of the Broadband or at Step 10 of the Top GS Grade	
		AcqDemo Participants	GS Employees in AcqDemo-Eligible Organizations	AcqDemo Participants	GS Employees in AcqDemo-Eligible Organizations
NH-2	GS-11	473	12,202	3.8%	2.0%
NH-3	GS-13	805	7,869	9.4%	3.7%
NH-4	GS-15	394	1,261	9.4%	4.0%
Full sample		1,873	31,822	7.2%	2.5%

SOURCES: DMDC civilian personnel inventory files; administrative data provided by the AcqDemo Program Office.

NOTES: The data presented include only permanent, full-time employees in AcqDemo whose compensation was at least \$15,080, the salary equivalent of working a full year at federal minimum wage. The population of GS employees in AcqDemo-eligible organizations is not weighted.

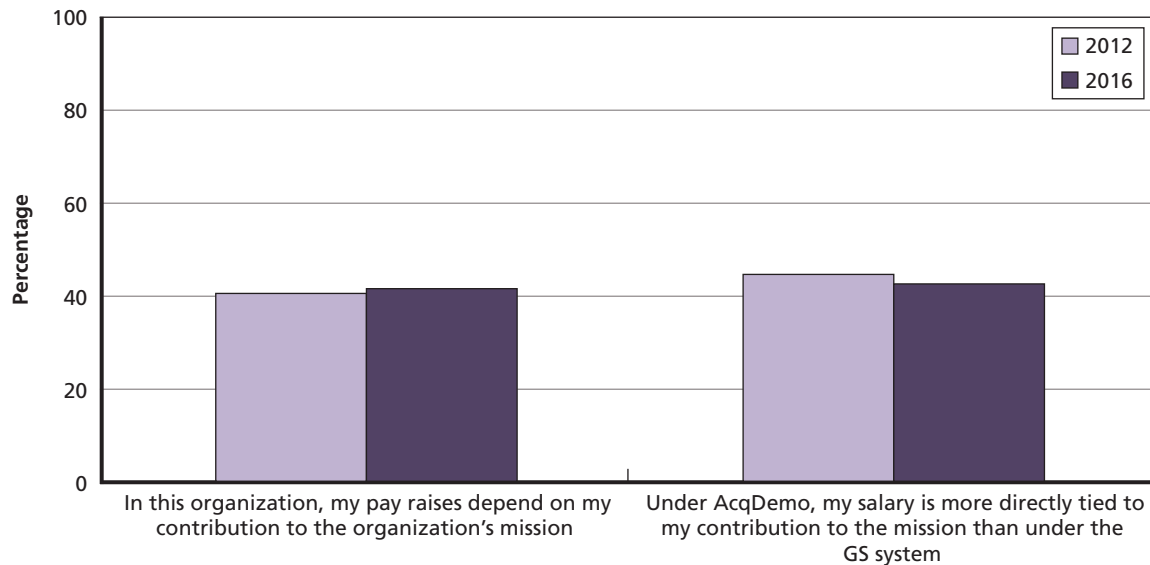
after year what a plus 1 looks like for someone in the 90 range, 80 range . . . but in terms of employees, they don't know until they get their first paycheck after evaluation what the payout will be. It's an opaque process in terms of payout.

Second, employees may feel that OCSs do not adequately capture their contributions. Survey and interview evidence indicate perceived subjectivity in the performance review

process and mixed views regarding whether performance can be objectively and inclusively measured. Senior-level employees and supervisors are heavily represented in AcqDemo, and academic research suggests that objective measures of managers' performance may be difficult to specify in advance, given the nonroutine nature of their work.

Finally, the misalignment between employee perceptions and the empirical reality may be explained by employees feeling that compensation does not vary enough with contribution.

Figure 3. AcqDemo Employee Perceptions of the Relationship between Contribution and Pay



SOURCE: 2012 and 2016 AcqDemo surveys.

NOTES: Bars indicate the percentage of employees that agreed or strongly agreed with the statement. The remainder of employees expressed a neutral view, disagreed, or strongly disagreed. Differences between the two years were not statistically significant.

As mentioned earlier, the overwhelming majority of AcqDemo participants can reasonably expect additional efforts or contributions to augment their annual salaries by \$900 to \$1,800—approximately 1 percent to 2 percent of an average annualized basic pay rate.

Pay caps present a greater challenge to AcqDemo than to the GS system. Pay caps frequently constrain the salary increases awarded in AcqDemo. In FY 2015, nearly 40 percent of AcqDemo employees were subject to pay caps associated with being at the top of their pay bands or nearing a control point within their pay bands. Pay caps associated with being at the top of a pay band are artifacts of the GS system. As shown in Figure 1, each AcqDemo broadband corresponds to two or more GS grades. Accordingly, the pay cap that applies to AcqDemo employees at the top of the NH-2 broadband is a byproduct of the pay cap that applies to GS-11 employees who are at step 10. The establishment of control points, on the other hand, is at the discretion of the organization. AcqDemo organizations may set compensation limits within a pay band to ensure equity and consistency within the organization. In some cases, control points have been used to align pay bands with the GS system. For instance, one SME reported that his organization had established a control point within the NH-4 broadband to distinguish between employees at the GS-14 level and employees at the GS-15 level.

While pay caps are not unique to AcqDemo and are intended to promote cost discipline, they present a greater challenge to AcqDemo than to the GS system for two reasons. First, pay caps are more prevalent among AcqDemo participants: In FY 2015, only 14 percent of GS employees in ADEOs were at step 10 of their respective grades. Second, pay caps run counter to one of AcqDemo's central tenets, which is that employees should be appropriately rewarded for their contributions to the organizational mission. As in the GS system, the pool of funds available for salary increases in AcqDemo is limited. However, maintaining the integrity of AcqDemo's foundation as a performance-based pay system requires the distribution of this limited pool of funds to be determined by, or at least strongly associated with, differences in employee contribution. Pay caps erode this association, and, with nearly 40 percent of the workforce subject to a pay cap, the degree of that erosion could be significant.

AcqDemo also offers one-time bonuses in the form of contribution rating increase (CRI) carryover awards and contribution awards (CAs). CRI carryover awards are intended to compensate employees who forfeit salary increases as a result of pay caps; CAs are intended to reward contributions to the mission, independent of whether the employee is subject to a pay cap. Our analysis of administrative data indicated that CRI carryover awards do not fully compensate for the salary increases denied because of pay caps. CAs boost employee com-

compensation by about \$1,000 on average but do not vary widely across employees. In the FY 2015 appraisal cycle, 92 percent of AcqDemo participants received a CA, and the overwhelming majority of those received an award totaling less than \$2,000. Like other federal agencies, AcqDemo is subject to limits on the size of its award budget because of policies issued by the Office of Personnel Management, the Office of Management and Budget and the DoD. However, in practice, AcqDemo organizations have opted to use their policy-constrained award budgets to give smaller awards to the majority of employees, rather than to provide larger awards to a smaller percentage of employees.

The link between contribution and compensation appears to have weakened over time. When the variance in salary increases and awards is constrained, be it by pay caps or business practices, the link between contribution and compensation is diminished. Of particular concern is that the link appears to have weakened over time. Our estimates of the effect of OCS increases on salary levels show that the effect declined over the four years that elapsed between September 30, 2011, and September 30, 2015 (see Table 2). Moreover, the variance, or spread, in AcqDemo salaries contracted over the same period (see Table 4). Because employees with a high OCS in one year tend to also have a high OCS in subsequent years, one would expect the variance in salaries to increase as rewards are granted to the same high-contributing employees year after year, but this is not what we observed. Potential causes of the narrowing spread in salaries include the aforementioned pay caps, the tendency to assign OCS within a narrow range, and the operation of the pay pool process, in which supervisors aim to reach

a consensus on pay actions. Whatever the cause, it is important for AcqDemo to strengthen the link between compensation and contribution, both perceived and actual. This relationship is the foundational principle of the system, and, as such, any further deterioration in the pay-contribution link might threaten the viability of AcqDemo.

A majority of AcqDemo employees expressed concerns about a lack of transparency and fairness. As mentioned earlier, qualitative evidence from the AcqDemo surveys revealed a perceived lack of transparency around business rules, especially control points; the process by which ratings are calculated and translated to pay; pay pool processes; and pay pool results, including how employees compare with their peers. In some cases, evidence from the SME interviews corroborated these perceptions. In other cases, SMEs acknowledged that these concerns exist but expressed more positive views; this was particularly true with respect to the transparency of pay pool results.

Concerns about transparency were often closely intertwined with concerns about fairness. Quantitative results from the survey indicated that fewer than 40 percent of AcqDemo employees agreed that their organizations administer pay fairly (see Figure 4). Nearly 50 percent of survey respondents agreed that supervisors are fair in recognizing individual contributions, but female employees were significantly less likely to agree with the statement than male employees (see Figure 5). Qualitative evidence from the survey included both positive and negative comments regarding AcqDemo's fairness, but the theme was primarily negative in tone. For instance, one supervisor opined: "Even though the pay pool is supposed to be a fair and equi-

Table 4. Distribution of Annualized Basic Pay within AcqDemo

	Annualized Basic Pay on September 30 of				
	2011	2012	2013	2014	2015
Minimum	23,616	23,138	22,804	23,295	24,000
Bottom 25 percent	74,004	72,214	71,229	70,975	73,115
Median	94,365	92,688	91,723	91,391	92,437
Top 25 percent	115,540	113,397	112,023	111,338	112,461
Maximum	172,042	168,554	168,672	166,719	167,270
Mean	96,256	94,021	92,706	91,950	93,172
Standard deviation	31,380	30,437	29,471	28,272	27,794

SOURCE: DMDC civilian personnel inventory files.

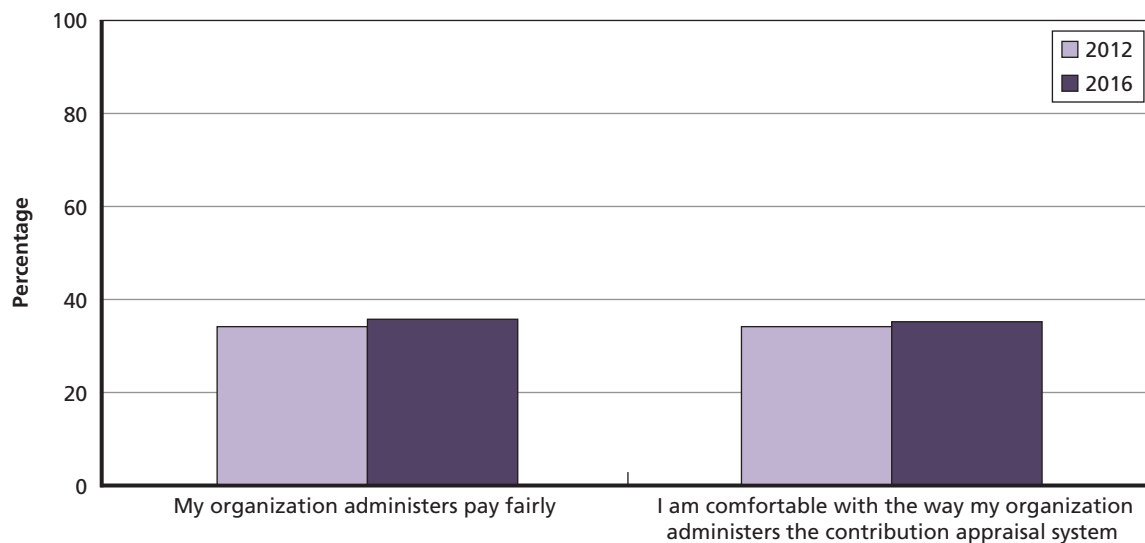
NOTES: The data presented include only permanent, full-time employees in AcqDemo whose compensation was at least \$15,080, the salary equivalent of working a full year at federal minimum wage. The dollar figures listed are in 2015 dollars.

table way of rewarding people, I believe that favoritism is still predominate [sic] within the pay pool.”

Taken together, skepticism about the pay-contribution link and concerns about transparency and fairness suggest that employees lack confidence in AcqDemo. This lack of confidence may adversely affect the use of the project’s flexibilities by diminishing employees’ motivation to participate fully in the CCAS process. For example, employees may not believe it is worth the time and effort to write thorough self-assessments or to engage their supervisors in a meaningful dialogue about how they can improve their contribution to the mission. Moreover, the lack of confidence in AcqDemo may lead to negative job attitudes and behaviors, such as low commitment and reduced productivity, which, in turn, may compromise organizations’ abilities to achieve their missions. It is important to note that the lack of confidence is fueled, in part, by the misperception that there is no link between contribution and compensation; this suggests that AcqDemo leadership may be able to mitigate the issue through communication strategies.

The time, effort, and administrative burden associated with AcqDemo may be problematic. The business literature suggests that performance-based pay systems are often regarded as requiring a problematic amount of time, and AcqDemo appears to be no exception. Qualitative evidence from both the SME interviews and survey write-in responses suggests that appraisal writing, feedback sessions, and pay pool administration, in particular, were perceived to be time-consuming. Interviewees and survey respondents recognized the value of these AcqDemo features but felt that they were inefficient. Survey respondents indicated that the time and effort required to implement these processes might discourage employees from fully engaging in them. Interviewees and survey respondents also expressed concerns about shortcuts that supervisors might take when pressed for time to write numerous performance appraisals. Plans to cut the number of appraisal factors from six to three could help AcqDemo achieve a better balance between providing valuable feedback and minimizing the resources invested in that function.⁶

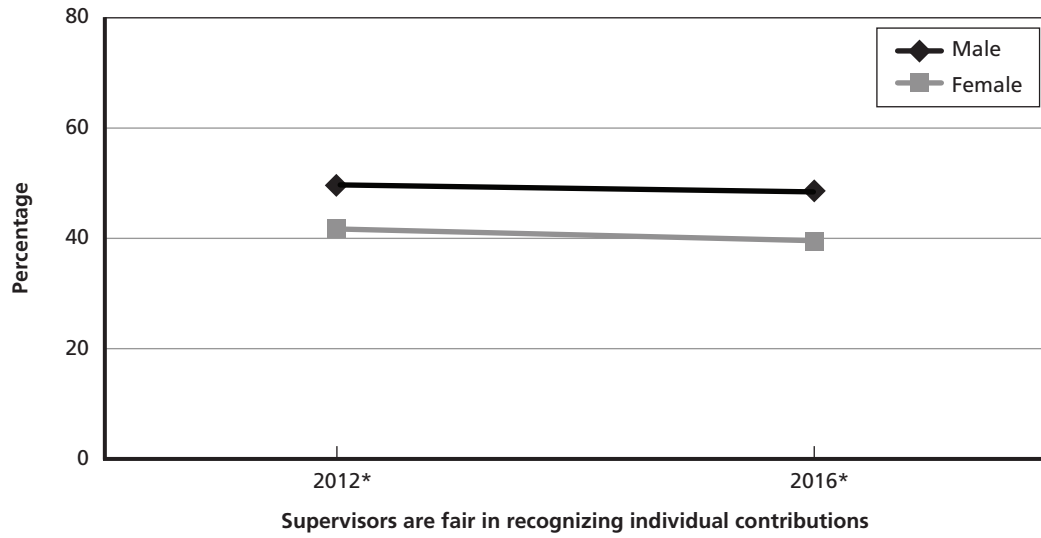
Figure 4. Employee Perceptions of AcqDemo’s Administration



SOURCE: 2012 and 2016 AcqDemo surveys.

NOTES: Bars indicate the percentage of employees who agreed or strongly agreed with the statement. The remainder of respondents expressed a neutral view, disagreed, or strongly disagreed. Differences between the two years were not statistically significant.

Figure 5. AcqDemo Employee Perceptions of Supervisor Fairness, by Gender



SOURCE: 2012 and 2016 AcqDemo surveys.

NOTES: Each of the data points indicates the percentage of respondents who agreed or strongly agreed with the statement. The remainder of respondents expressed a neutral view, disagreed, or strongly disagreed.

* = A statistically significant difference between the two groups at the 5-percent level.

NOTES

¹ U.S. Merit Systems Protection Board, Federal Personnel Research Programs and Demonstration Projects: Catalysts for Change, Washington, D.C., December 1992.

² U.S. Merit Systems Protection Board, Federal Personnel Research Programs and Demonstration Projects: Catalysts for Change, Washington, D.C., December 1992.

³ Jennifer Lamping Lewis, Laura Werber, Cameron Wright, Irina Danescu, Jessica Hwang, and Lindsay Daugherty, 2016 Assessment of the Civilian Acquisition Workforce Personnel Demonstration Project, Santa Monica, Calif.: RAND Corporation, RR-1783-OSD, 2017. As of February 10, 2017:
http://www.rand.org/pubs/research_reports/RR1783.html

⁴ Employees on retained pay were omitted from the average because the annualized basic pay data include locality pay for employees on retained pay but exclude locality pay for employees not on retained pay. Consequently, basic pay data are not directly comparable across the two groups. A DoD civilian employee may be put on retained pay status if his or her grade or pay would otherwise be reduced as a result of an involuntary personnel action or other personnel action determined to be in the best interest of the government, such as a reduction in force or a position reclassification. For more information, see U.S. Department of Defense Instruction 1400.25, Vol. 536, “DoD Civilian Personnel Management System: Grade and Pay Retention,” June 28, 2006.

⁵ Because each of AcqDemo’s broadbands corresponds to two or more GS grades (see Figure 1), promotions occurred at least twice as often in GS. For instance, a program manager ascending from the GS-14 to GS-15 level would earn a promotion in the GS system but not in AcqDemo because the NH-4 broadband encompasses both grades. We corrected for this problem by assigning an AcqDemo career path and broadband to each GS employee in an ADEO and crediting promotions within the GS system only when the employee moved to a higher career path within a broadband or a higher broadband within a career path. In this way, we brought the definition of promotion within the GS comparison group in line with the definition of promotion within AcqDemo.

⁶ These plans were detailed in the Draft Republication Federal Register Notice 040116, provided to us by the AcqDemo Program Office in April 2016.

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About This Report

In August 2015, René Thomas-Rizzo, director, Human Capital Initiatives, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, asked the RAND Corporation to undertake a study to accomplish the fiscal year (FY) 2016 assessment of the Civilian Acquisition Workforce Personnel Demonstration Project (AcqDemo) mandated in the National Defense Authorization Act (NDAA) of FY 2011. The assessment used multiple data sources—both quantitative and qualitative, both objective- and perception-based—to evaluate AcqDemo using the original 12 criteria enumerated in the NDAA, as well as five new criteria specified by the AcqDemo Program Office. These criteria call for a look at the following:

- AcqDemo’s key features pertaining to hiring, appointments, and performance appraisal
- the adequacy of its guidance, protections for diversity, efforts to ensure fairness and transparency, and means used to involve employees in improving AcqDemo
- AcqDemo’s impact on career outcomes, such as compensation, promotion, and retention, particularly with respect to similar outcomes for the General Schedule workforce
- AcqDemo’s ability to support the acquisition mission.

This executive summary presents the key findings of this research. A more detailed account of the research methods and findings can be found in *2016 Assessment of the Civilian Acquisition Workforce Personnel Demonstration Project*, by Jennifer Lamping Lewis, Laura Werber, Cameron Wright, Irina Danescu, Jessica Hwang, and Lindsay Daugherty, RR-1783-OSD, 2017 (available at www.rand.org/t/RR1783).

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