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HUMAN CAPITAL

Implementing Pay for Performance at Selected Personnel Demonstration Projects



G A O

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Highlights of [GAO-04-83](#), a report to congressional requesters

Why GAO Did This Study

There is a growing understanding that the federal government needs to fundamentally rethink its current approach to pay and to better link pay to individual and organizational performance. Federal agencies have been experimenting with pay for performance through the Office of Personnel Management's (OPM) personnel demonstration projects.

GAO identified the approaches that selected personnel demonstration projects have taken to implement their pay for performance systems. These projects include: the Navy Demonstration Project at China Lake (China Lake), the National Institute of Standards and Technology (NIST), the Department of Commerce (DOC), the Naval Research Laboratory (NRL), the Naval Sea Systems Command Warfare Centers (NAVSEA) at Dahlgren and Newport, and the Civilian Acquisition Workforce Personnel Demonstration Project (AcqDemo). We selected these demonstration projects based on factors such as status of the project and makeup of employee groups covered.

We provided drafts of this report to officials in the Department of Defense (DOD) and DOC for their review and comment. DOD provided written comments concurring with our report. DOC provided minor technical clarifications and updated information. We provided a draft of the report to the Director of OPM for her information.

www.gao.gov/cgi-bin/getrpt?GAO-04-83.

To view the full product, including the scope and methodology, click on the link above. For more information, contact J. Christopher Mihm at (202) 512-6806 or mihmj@gao.gov.

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Implementing Pay for Performance at Selected Personnel Demonstration Projects

What GAO Found

The demonstration projects took a variety of approaches to designing and implementing their pay for performance systems to meet the unique needs of their cultures and organizational structures, as shown in the table below.

Demonstration Project Approaches to Implementing Pay for Performance

Using competencies to evaluate employee performance.

High-performing organizations use validated core competencies as a key part of evaluating individual contributions to organizational results. To this end, AcqDemo and NRL use core competencies for all positions. Other demonstration projects, such as NIST, DOC, and China Lake, use competencies based on the individual employee's position.

Translating employee performance ratings into pay increases and awards.

Some projects, such as China Lake and NAVSEA's Newport division, established predetermined pay increases, awards, or both depending on a given performance rating, while others, such as DOC and NIST, delegated the flexibility to individual pay pools to determine how ratings would translate into performance pay increases, awards, or both. The demonstration projects made some distinctions among employees' performance.

Considering current salary in making performance-based pay decisions.

Several of the demonstration projects, such as AcqDemo and NRL, consider an employee's current salary when making performance pay increases and award decisions to make a better match between an employee's compensation and contribution to the organization.

Managing costs of the pay for performance system.

According to officials, salaries, training, and automation and data systems were the major cost drivers of implementing their pay for performance systems. The demonstration projects used a number of approaches to manage the costs.

Providing information to employees about the results of performance appraisal and pay decisions.

To ensure fairness and safeguard against abuse, performance-based pay programs should have adequate safeguards, including reasonable transparency in connection with the results of the performance management process. To this end, several of the demonstration projects publish information, such as the average performance rating, performance pay increase, and award.

Source: GAO.

GAO strongly supports the need to expand pay for performance in the federal government. How it is done, when it is done, and the basis on which it is done can make all the difference in whether such efforts are successful. High-performing organizations continuously review and revise their performance management systems. These demonstration projects show an understanding that how to better link pay to performance is very much a work in progress at the federal level. Additional work is needed to strengthen efforts to ensure that performance management systems are tools to help them manage on a day-to-day basis. In particular, there are opportunities to use organizationwide competencies to evaluate employee performance that reinforce behaviors and actions that support the organization's mission, translate employee performance so that managers make meaningful distinctions between top and poor performers with objective and fact-based information, and provide information to employees about the results of the performance appraisals and pay decisions to ensure reasonable transparency and appropriate accountability mechanisms are in place.

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Abbreviations

AcqDemo	Civilian Acquisition Workforce Personnel Demonstration Project
CPDF	Central Personnel Data File
DOC	Department of Commerce
DOD	Department of Defense
FEPCA	Federal Employees Pay Comparability Act of 1990
GPI	general pay increase
GS	General Schedule

NAVSEA	Naval Sea Systems Command Warfare Centers
NIST	National Institute of Standards and Technology
NRL	Naval Research Laboratory
OPM	Office of Personnel Management
QSI	quality step increase
WGI	within-grade increase

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United States General Accounting Office
Washington, D.C. 20548

January 23, 2004

The Honorable George V. Voinovich
Chairman
Subcommittee on Oversight of Government Management, the Federal
Workforce, and the District of Columbia
Committee on Governmental Affairs
United States Senate

The Honorable Jo Ann Davis
Chairwoman
Subcommittee on Civil Service and Agency Organization
Committee on Government Reform
House of Representatives

To successfully transform themselves, high-performing organizations have found that they must fundamentally change their cultures so that they are more results-oriented, customer-focused, and collaborative in nature, and have recognized that an effective performance management system can help them drive internal change and achieve desired results. Our prior work, done at your request, has identified nine key practices for effective performance management based on experiences in public sector organizations both in the United States and abroad.¹ The key practices are as follows:

1. Align individual performance expectations with organizational goals.
2. Connect performance expectations to crosscutting goals.
3. Provide and routinely use performance information to make program improvements.
4. Require follow-up actions to address organizational priorities.
5. Use competencies to provide a fuller assessment of performance.
6. Link pay to individual and organizational performance.

¹U.S. General Accounting Office, *Results-Oriented Cultures: Creating a Clear Linkage between Individual Performance and Organizational Success*, [GAO-03-488](#) (Washington, D.C.: Mar. 14, 2003).

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7. Make meaningful distinctions in performance.
 8. Involve employees and stakeholders to gain ownership of performance management systems.
 9. Maintain continuity during transitions.

Among these practices, there is a growing understanding that the federal government needs to fundamentally rethink its current approach to pay and better link pay to individual and organizational performance. To this end, Congress has taken important steps to implement results-oriented pay reform and modern performance management systems across government. Most recently, Congress provided the Department of Defense (DOD) flexibility to revise its performance management system to better link pay to performance and required DOD to incorporate employee involvement, provide ongoing performance feedback, and include effective safeguards to ensure fairness and equity, among other things, in DOD's revised system.

Congress also established a Human Capital Performance Fund to reward agencies' highest performing and most valuable employees. To be eligible, agencies are to submit plans for approval by the Office of Personnel Management (OPM) that incorporate a link between pay for performance and the agency's strategic plan, employee involvement, ongoing performance feedback, and effective safeguards to ensure fair management of the system, among other things. In the first year of implementation, up to 10 percent of the amount appropriated is to be available to train those involved on making meaningful distinctions in performance. In addition, Congress created a wider, more open pay range for senior executive compensation, thus allowing for pay to be more directly tied to individual performance, contribution to the agency's performance, or both, as determined under a rigorous performance management system that as designed and applied, makes meaningful distinctions based on relative performance.

Further, in November 2002, Congress established the Department of Homeland Security and provided it human capital flexibilities to design a performance management system and specifically to consider different approaches to pay. We reported that the department's effort to design its system could be particularly instructive in light of future requests for

human capital flexibilities.² Legislation is currently pending, which you sponsored and introduced, that would provide GAO additional authority to more fully link employees' annual salary increases to performance.

Federal agencies have been experimenting with pay for performance through OPM's personnel demonstration projects. Over the past 25 years, OPM has approved 17 projects, 12 of which have implemented pay for performance systems. At your request, this report identifies the approaches that 6 of these personnel demonstration projects have taken to implement their pay for performance systems. These projects are

- the Navy Demonstration Project at China Lake (China Lake),
- the National Institute of Standards and Technology (NIST),
- the Department of Commerce (DOC),
- the Naval Research Laboratory (NRL),
- the Naval Sea Systems Command Warfare Centers (NAVSEA) at Dahlgren and Newport, and
- the Civilian Acquisition Workforce Personnel Demonstration Project (AcqDemo).

To address the objective of this report, we focused on OPM's personnel demonstration projects because they are required to prepare designs, conduct employee feedback, and complete evaluations of their results, among other things. We selected these demonstration projects based on factors such as status of the project and makeup of employee groups covered. We analyzed *Federal Register* notices outlining the major features of each demonstration project, operating manuals, annual and summative evaluations, employee attitude survey results, project briefings, training materials, rating and payout data, and cost data as reported by the agencies without verification by GAO, as well as other relevant documentation. We also interviewed cognizant officials from OPM; demonstration project managers, human resource officials, and

²U.S. General Accounting Office, *Human Capital: DHS Personnel System Design Effort Provides for Collaboration and Employee Participation*, [GAO-03-1099](#) (Washington, D.C.: Sept. 30, 2003).

participating supervisors and employees; and union and other employee representatives. We did not independently evaluate the effectiveness of the demonstration projects. We assessed the reliability of cost, salary, rating, and performance pay distribution data provided by the demonstration projects and determined that the data were sufficiently reliable for the purposes of this report, with the exception of the DOC salary data, which we do not present.

We performed our work in the Washington, D.C., metropolitan area from December 2002 through August 2003 in accordance with generally accepted government auditing standards. Appendix I provides additional information on our objective, scope, and methodology. Appendix II presents profiles of the demonstration projects, including selected elements of their performance management systems, employee attitude data, and reported effects.

Results in Brief

We found that the demonstration projects took a variety of approaches to designing and implementing their pay for performance systems to meet the unique needs of their cultures and organizational structures. Specifically, the demonstration projects took different approaches to

- using competencies to evaluate employee performance,
- translating employee performance ratings into pay increases and awards,
- considering current salary in making performance-based pay decisions,
- managing costs of the pay for performance system, and
- providing information to employees about the results of performance appraisal and pay decisions.

Using competencies to evaluate employee performance. High-performing organizations use validated core competencies as a key part of evaluating individual contributions to organizational results. Core competencies applied organizationwide can help reinforce employee behaviors and actions that support the organization's mission, goals, and values and can provide a consistent message to employees about how they are expected to achieve results. AcqDemo and NRL use core competencies for all positions across the organization to evaluate performance. Other

demonstration projects, such as NIST, DOC, and China Lake, use competencies based primarily on the individual position. (See p. 9.)

Translating employee performance ratings into pay increases and awards. High-performing organizations seek to create pay, incentive, and reward systems that clearly link employee knowledge, skills, and contributions to organizational results. These organizations make meaningful distinctions between acceptable and outstanding performance of individuals and appropriately reward those who perform at the highest level. To this end, the demonstration projects took different approaches in translating individual employee performance ratings into permanent pay increases, one-time awards, or both in their pay for performance systems. Some projects, such as China Lake and NAVSEA's Newport division, established predetermined pay increases, awards, or both depending on a given performance rating, while others, such as DOC and NIST, delegated the flexibility to individual pay pools to determine how ratings would translate into pay increases, awards, or both. While the demonstration projects made some distinctions among employees' performance, the data and experience show that making such meaningful distinctions remains a work in progress. (See p. 12.)

Considering current salary in making performance-based pay decisions. Several of the demonstration projects consider an employee's current salary when making pay increase and award decisions. By considering salary in such decisions, the projects intend to make a better match between an employee's compensation and his or her contribution to the organization. Thus, two employees with comparable contributions could receive different performance pay increases and awards depending on their current salaries. For example, AcqDemo determines if employees are "appropriately compensated," "under-compensated," or "over-compensated" when it compares employee contribution scores to salary. (See p. 23.)

Managing costs of the pay for performance system. According to OPM, the increased costs of implementing alternative personnel systems should be acknowledged and budgeted for up front. Based on data the demonstration projects provided, direct costs associated with salaries, training, and automation and data systems were the major cost drivers of implementing their pay for performance systems. The demonstration projects used a number of approaches to manage the direct costs of implementing and maintaining pay for performance systems. In making their pay decisions, some of the demonstration projects use funding

sources such as the annual general pay increase and locality pay adjustment. Several demonstration projects managed salary costs by considering fiscal conditions and the labor market when determining how much to budget for pay increases, managing movement through the pay band, and providing a mix of one-time awards and permanent pay increases. (See p. 25.)

Providing information to employees about the results of performance appraisal and pay decisions. We have observed that a more performance-based pay system should have adequate safeguards to ensure fairness and guard against abuse. One such safeguard is to ensure reasonable transparency and appropriate accountability mechanisms in connection with the results of the performance management process. To this end, several of the demonstration projects publish information for employees on internal Web sites about the results of performance appraisal and pay decisions, such as the average performance rating, the average pay increase, and the average award for the organization and for each individual department, while other demonstration projects publish no information on the results of the performance cycle. (See p. 36.)

We provided drafts of this report to the Secretaries of Defense and Commerce for their review and comment. DOD's Principal Deputy, Under Secretary of Defense for Personnel and Readiness, provided written comments, which are presented in appendix III. DOD concurred with our report and stated that it is a useful summary of the various approaches that the demonstration projects undertook to implement their pay for performance systems and that their experiences provide valuable insight into federal pay for performance models. DOD also noted that the NAVSEA demonstration project training and automation cost data are estimated rather than actual costs. We made the appropriate notation. While DOC did not submit written comments, DOC's Classification, Pay, and HR Demonstration Program Manager provided minor technical clarifications and updated information. We made those changes where appropriate. We provided a draft of the report to the Director of OPM for her information.

Background

Congress granted OPM the authority to conduct personnel demonstration projects under the Civil Service Reform Act of 1978 to test new personnel

and pay systems.³ A federal agency is to obtain the authority from OPM to waive existing laws and regulations in Title 5 to propose, develop, test, and evaluate alternative approaches to managing its human capital. Under the demonstration project authority, no waivers of law are to be permitted in areas of employee leave, employee benefits, equal employment opportunity, political activity, merit system principles, or prohibited personnel practices. The law also contains certain limitations and requirements, including

- 5-year time limit for duration of projects,
- 5,000 employee cap on participation,
- restriction to 10 concurrent demonstration projects governmentwide,
- union and employee consultation,
- published formal project plan in the *Federal Register*,
- notification of Congress and employees of the demonstration project, and
- project evaluations.

OPM guidance requires that agencies conduct at least three evaluations—after implementation, after at least 3 and a half years, and after the original scheduled end of the project—that are to address the following questions:

- Did the project accomplish the intended purpose and goals? If not, why not?
- Was the project implemented and operated appropriately and accurately?
- What were the costs, relative to the benefits of the project?

³Two governmentwide initiatives were intended to implement pay for performance systems for supervisors and managers. The Merit Pay System was established under the Civil Service Reform Act of 1978 and ended in 1984. Its successor—the Performance Management and Recognition System—ended in 1993.

- What was the impact on veterans and other equal employment opportunity groups?
- Were merit systems principles adhered to and prohibited personnel practices avoided?
- Can the project or portions thereof be generalized to other agencies or governmentwide?

The demonstration projects can link some or all of the funding sources for pay increases available under the current federal compensation system, the General Schedule (GS), to an employee’s level of performance.⁴ Table 1 defines selected funding sources.

Table 1: Selected GS Funding Sources Available for Employee Salary Increases

Funding source	Description
General pay increase (GPI)	Established under the Federal Employees Pay Comparability Act of 1990 (FEPCA), the GPI is to be determined annually and delivered automatically and uniformly to GS employees. The GPI is to be based on the Employment Cost Index, which is a statistical measure maintained by the Bureau of Labor Statistics that considers changes in private sector labor costs.
Locality pay adjustment	Established under FEPCA, locality pay is to address any gap between federal and nonfederal salaries and is to be determined annually and delivered automatically and uniformly to most GS employees within a given locality. Locality pay is to supplement the rate of basic pay in the 48 contiguous states where nonfederal pay exceeds federal pay by more than 5 percent. The President’s Pay Agent, comprised of the Secretary of Labor and the Directors of the Office of Management and Budget and OPM, is to recommend and the President is to approve what, if any, the percentage of increase should be.

⁴The GS is the federal government’s main pay system for “white-collar” positions. The GS is composed of 15 grade levels. Each grade is divided into 10 specific pay levels called “steps.”

(Continued From Previous Page)

Funding source	Description
Within-grade increase (WGI)	The WGI, also known as a "step increase," is a periodic increase in a GS employee's rate of basic pay to the next higher pay level or "step" of that grade. To receive a WGI, an employee must wait a prescribed amount of time and be performing at an acceptable level of competence. OPM reports that the WGI is designed to reward experience and loyalty and is based on a judgment that the employee's work is of an "acceptable level of competence" but does not distinguish between very good and moderately good performance. ^a
Quality step increase (QSI)	A QSI is to recognize high-quality performance. Similar to a WGI, a QSI advances the employee to the next higher step but ahead of the required waiting period. To receive a QSI, an employee must demonstrate sustained high-quality performance.
Career ladder promotion	Federal employees may be appointed to positions with "career ladders," a series of developmental positions of increasing difficulty, through which an employee may be promoted to higher grade levels without competition.

Source: OPM.

^aU.S. Office of Personnel Management, *A Fresh Start for Federal Pay: The Case for Modernization* (Washington, D.C.: April 2002).

Selected Demonstration Projects Took Various Approaches to Implement Their Pay for Performance Systems

High-performing organizations seek to create pay, incentive, and reward systems based on valid, reliable, and transparent performance management systems with adequate safeguards and link employee knowledge, skills, and contributions to organizational results. To that end, we found that the demonstration projects took a variety of approaches to designing and implementing their pay for performance systems to meet the unique needs of their cultures and organizational structures. Specifically, the demonstration projects took different approaches to

- using competencies to evaluate employee performance,
- translating employee performance ratings into pay increases and awards,
- considering current salary in making performance-based pay decisions,
- managing costs of the pay for performance system, and
- providing information to employees about the results of performance appraisal and pay decisions.

Using Competencies to Evaluate Employee Performance

High-performing organizations use validated core competencies as a key part of evaluating individual contributions to organizational results. Competencies define the skills and supporting behaviors that individuals

are expected to demonstrate and can provide a fuller picture of an individual's performance. To this end, we found that the demonstration projects took different approaches to evaluating employee performance. AcqDemo and NRL use core competencies for all positions across the organization. Other demonstration projects, such as NIST, DOC, and China Lake, use competencies based primarily on the individual employee's position.

Applying competencies organizationwide. Core competencies applied organizationwide can help reinforce employee behaviors and actions that support the organization's mission, goals, and values and can provide a consistent message to employees about how they are expected to achieve results. AcqDemo evaluates employee performance against one set of "factors," which are applied to all employees. "Discriminators" and "descriptors" further define the factors by career path and pay band. According to AcqDemo, taken together, the factors, discriminators, and descriptors are relevant to the success of a DOD acquisition organization.⁵

AcqDemo's six factors are (1) problem solving, (2) teamwork/cooperation, (3) customer relations, (4) leadership/supervision, (5) communication, and (6) resource management. Discriminators further define each factor. For example, discriminators for problem solving include scope of responsibility, creativity, complexity, and independence. Descriptors identify contributions by pay band. For example, a descriptor for problem solving at one pay band level is "resolves routine problems within established guidelines," and at a higher level, a descriptor is "anticipates problems, develops sound solutions and action plans to ensure program/mission accomplishment."

All factors must be used and cannot be supplemented. While the pay pool manager may weight the factors, according to an official, no organization within AcqDemo has weighted the factors to date. Managers are authorized to use weights sparingly because contributions in all six factors are important to ensuring AcqDemo's overall success as well as to developing the skills of the acquisition workforce. If weights are used, they are to be applied uniformly across all positions within the pay pool. The six

⁵See U.S. General Accounting Office, *An Evaluation Framework for Improving the Procurement Function (Exposure Draft)* (Washington, D.C.: October 2003), for more information on a framework to enable a high-level, qualitative assessment of the strengths and weaknesses of agencies' procurement functions.

factors are initially weighted equally and no factor can be weighted less than one-half of its initial weight. Employees are to be advised of the weights at the beginning of the rating period.

While AcqDemo applies organizationwide competencies across all employees, NRL has established “critical elements” for each career path and allows supervisors to add individual performance expectations. The critical elements are the key aspects of work that supervisors are to consider in evaluating employee performance. Each critical element has discriminators and descriptors. Specifically, for the Science and Engineering Professionals career path, one critical element is “scientific and technical problem solving.” That element’s discriminators are (1) level of oversight, (2) creativity, (3) technical communications, and (4) recognition. For recognition, the descriptors include “recognized within own organization for technical ability in assigned areas” as one level of contribution and “recognized internally and externally by peers for technical expertise” as the next level of contribution.

NRL’s system allows supervisors to supplement the descriptors to further describe what is expected of employees. According to an NRL demonstration project official, this flexibility allows the supervisor to better communicate performance expectations. Further, pay pool panels may weight the critical elements, including a weight of zero. Weighted elements are to be applied consistently to groups within a career path, such as Bench Level, Supervisor, Program Manager, or Support for the Science and Engineering Professionals career path. According to an NRL official, panels commonly weight critical elements but rarely weight an element to zero. Further, panels use weighting most often for the Science and Engineering Professionals career path.

Determining individual position-based competencies. Other demonstration projects determine competencies based primarily on the individual position. NIST and DOC identify “critical elements” tailored to each individual position.⁶ According to a DOC demonstration project official, DOC tailors critical elements to individual positions because their duties and responsibilities vary greatly within the demonstration project.

⁶At DOC, all managerial and supervisory employees are also evaluated on core critical elements, such as recommending or making personnel decisions; developing and appraising subordinates; and fulfilling diversity, equal opportunity, and affirmative action responsibilities, in addition to program responsibilities.

Each employee's performance plan is to have a minimum of two and a maximum of six critical elements along with the major activities to accomplish the element. Supervisors are to assign a weight to each critical element on the basis of its importance, the time required to accomplish it, or both. According to NIST and DOC officials, weighting is done at the supervisory level and is not tracked at the organizational level.

To evaluate the accomplishment of critical elements, DOC uses its organizationwide Benchmark Performance Standards. They range from the highest standard of performance, "objectives were achieved with maximum impact, through exemplary work that demonstrated exceptional originality, versatility, and creativity" to the lowest, "objectives and activities were not successfully completed, because of failures in quality, quantity, completeness, or timelines of work." Supervisors can develop supplemental performance standards as needed.

Similarly, each China Lake employee has a performance plan that includes criteria tailored to individual responsibilities. The criteria are to be consistent with the employee's work unit's goals and objectives and can be set in two ways, depending on the nature of the position. The "task approach" defines an individual's output. The "function approach" defines the required skills and how well they are to be performed. Employees and supervisors choose from a menu of skills, such as planning, analysis, coordination, and reporting/documentation. A China Lake official stated that some of its work units require core competencies, such as teamwork and self-development, for all employees. According to the official, while developing core competencies sends a message about what is important to the organization, tailoring individual performance plans can focus employees' attention on changing expectations.

Translating Employee Performance Ratings into Pay Increases and Awards

High-performing organizations seek to create pay, incentive, and reward systems that clearly link employee knowledge, skills, and contributions to organizational results. These organizations make meaningful distinctions between acceptable and outstanding performance of individuals and appropriately reward those who perform at the highest level. Performance management systems in these leading organizations typically seek to achieve three key objectives: (1) provide candid and constructive feedback to help individual employees maximize their potential in understanding and realizing the goals and objectives of the agency, (2) provide management with the objective and fact-based information it needs to reward top

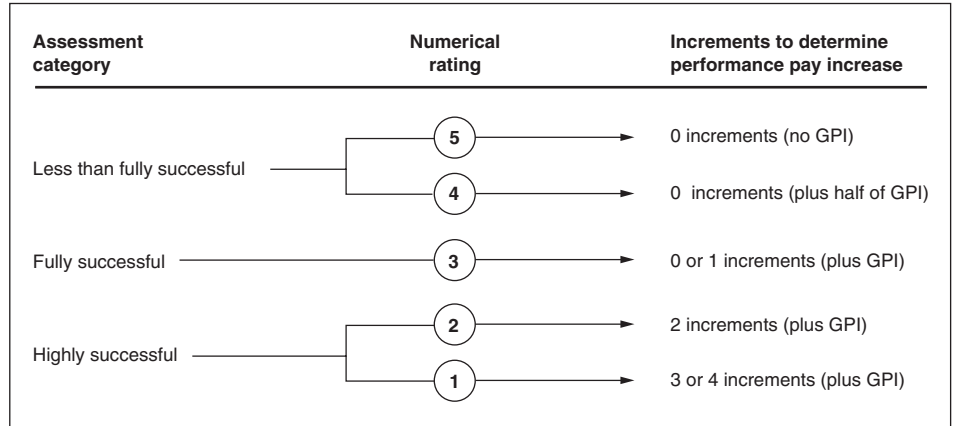
performers, and (3) provide the necessary information and documentation to deal with poor performers.

To this end, the demonstration projects took different approaches in translating individual employee performance ratings into permanent pay increases, one-time awards, or both in their pay for performance systems. Some projects, such as China Lake and NAVSEA's Newport division, established predetermined pay increases, awards, or both depending on a given performance rating. Others, such as DOC and NIST, delegated the flexibility to individual pay pools to determine how ratings translate into pay increases, awards, or both. Overall, while the demonstration projects made some distinctions among employees' performance, the data and experience to date show that making such meaningful distinctions remains a work in progress.

Setting predetermined pay increases and awards. China Lake's assessment categories translate directly to a predetermined range of permanent pay increases, as shown in figure 1.⁷ Supervisors are to rate employees in one of three assessment categories and recommend numerical ratings, based on employees' performance and salaries, among other factors. For employees receiving "highly successful" ratings, a Performance Review Board assigns the numerical ratings. For "less than fully successful" ratings, the first-line supervisor and a second-level reviewer assign the numerical ratings, based on a problem-solving team's findings and a personnel advisor's input. The numerical rating determines how many "increments" the employee will receive. An increment is a permanent pay increase of about 1.5 percent of an employee's base salary.

⁷China Lake gives managers discretion in determining how awards are distributed among employees with ratings of "fully successful" or above.

Figure 1: China Lake’s Rating and Pay Distribution Structure



Source: GAO, based on DOD data.

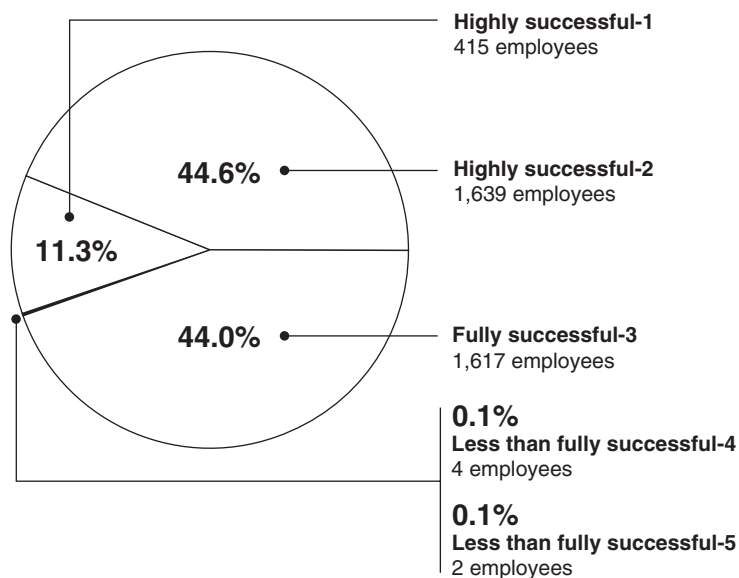
Note: All employees receive the locality pay adjustment regardless of assessment category or numerical rating.

China Lake made some distinctions in performance across employees’ ratings, as shown in figure 2:⁸

- 11.3 percent of employees received a “1,” the highest numerical rating, and
- a total of six employees (0.2 percent) were rated “less than fully successful” and received numerical ratings of “4” or “5.”

⁸As a point of comparison, in 2002, about 48 percent of GS employees across the executive branch under a similar five-level rating system were rated in the highest category and less than 1 percent were rated as less than fully successful.

Figure 2: China Lake's Rating Distribution by Numerical Rating (2002)



Source: GAO analysis of DOD data.

Note: Percentages total more than 100 percent due to rounding.

At China Lake, the average pay increase rose with performance, as shown in table 2.

- The average permanent pay increase ranged from 1.8 to 5.3 percent.
- Six employees were rated as “less than fully successful” and thus were to receive no performance pay increases and half or none of the GPI. According to a China Lake official, employees rated as “less than fully successful” are referred to a problem-solving team, consisting of the supervisor, reviewer, personnel advisor, and other appropriate officials, that determines what corrective actions are necessary.

Table 2: China Lake's Pay Increase Distribution (2002)

Assessment category	Numerical rating	Number of employees receiving permanent pay increases	Increase as a percentage of base pay		
			Average	Lowest	Highest
Highly successful	1	191	5.3	1.5	9.3
	2	929	3.4	1.5	5.6
Fully successful	3	526	1.8	1.3	2.7
Less than fully successful	4	0	N/A	N/A	N/A
	5	0	N/A	N/A	N/A
Total		1,646			

Source: DOD.

Legend: N/A= data are not applicable.

Notes: Data do not include the GPI or the locality pay adjustment.

Employees whose salaries are at the top of the pay band cannot receive permanent pay increases; therefore, the number of employees receiving pay increases differs from those receiving ratings.

Similar to China Lake, at NAVSEA's Newport division, a performance rating category translates directly to a predetermined range of permanent pay increases, one-time awards, or both, as shown in figure 3. Newport translates ratings into pay increases and awards in three steps. First, supervisors are to rate employees as "acceptable" or "unacceptable." Employees rated as unacceptable are not eligible for pay increases or awards. Employees rated as acceptable are to be further assessed on their performance relative to their salaries. Supervisors assess acceptable employees into three rating categories: contributors, major contributors, or exceptional contributors. Supervisors also make recommendations for the number of pay points to be awarded, from 0 to 4, depending on the rating category and the employees' salaries. Pay pool managers review and department heads finalize supervisor recommendations. A pay point equals 1.5 percent of the midpoint salary of the pay band. Pay points may be permanent pay increases or one-time awards.

Figure 3: NAVSEA Newport Division's Rating and Performance Pay Distribution Structure

Rating category	Points to determine performance increase/award
Unacceptable	0 pay points
Contributor	0 to 2 pay points
Major contributor	1 to 3 pay points
Exceptional contributor	2 to 4 pay points

Source: GAO, based on DOD data.

Note: All employees receive the full GPI and locality pay adjustment regardless of rating category.

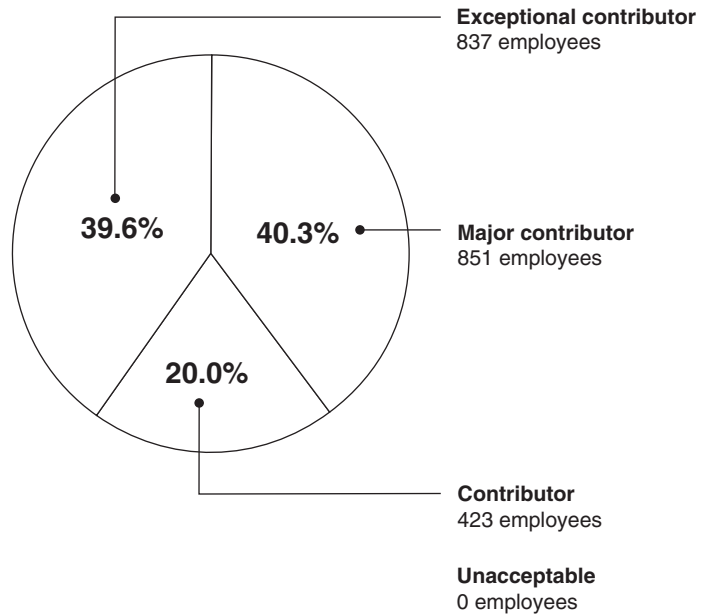
Newport allows for some flexibility in deciding whether employees receive permanent pay increases, one-time awards, or both. Newport's guidelines state that those who make greater contributions should receive permanent increases to base pay, while employees whose contributions are commensurate with their salaries receive one-time awards. In addition, employees whose salaries fall below the midpoint of the pay band are more likely to receive permanent pay increases, while employees above the midpoint of the pay band are more likely to receive one-time awards.

NAVSEA's Newport division made some distinctions in performance across employees' ratings.⁹ As shown in figure 4,

- about 80 percent of employees were rated in the top two categories (exceptional contributor and major contributor) and
- no employees were rated unacceptable.

⁹As a point of comparison, in 2002, about 92 percent of GS employees across the executive branch under a similar four-level rating system were rated in the top two categories and about 0.1 percent were rated as unacceptable.

Figure 4: NAVSEA Newport Division's Rating Distribution (2002)



Source: GAO analysis of DOD data.

Note: Percentages total less than 100 percent due to rounding.

In addition, at NAVSEA's Newport division, the average pay increase and award amount rose with performance, as shown in table 3.

- The average permanent pay increase ranged from 1.6 to 2.9 percent.
- The average performance award ranged from \$1,089 to \$2,216.

Table 3: NAVSEA Newport Division’s Pay Increase and Award Distribution (2002)

Rating	Permanent pay increase			Performance award				
	Number of employees receiving permanent pay increases	Increase as a percentage of base pay			Number of employees receiving performance awards	Performance award amount		
		Average	Lowest	Highest		Average	Lowest	Highest
Exceptional contributor	686	2.9	0.1	7.0	615	\$2,216	\$561	\$5,680
Major contributor	602	2.0	0.9	5.3	613	1,592	561	4,260
Contributor	124	1.6	1.2	1.8	143	1,089	519	2,212
Unacceptable	0	N/A	N/A	N/A	0	N/A	N/A	N/A
Total	1,412				1,371			

Source: DOD.

Legend: N/A= data are not applicable.

Notes: Data do not include the GPI or locality pay adjustment.

Employees can receive their pay as permanent increases or one-time awards; therefore, the number of employees receiving pay increases and awards differs from those receiving ratings.

Delegating pay decisions to pay pools. Some demonstration projects, such as NIST and DOC, delegate the flexibility to individual pay pools to determine how ratings translate into permanent pay increases and one-time awards. For example, supervisors are to evaluate employees on a range of performance elements on a scale of 0 to 100. Employees with scores less than 40 are to be rated as “unsatisfactory” and are not eligible to receive performance pay increases, awards, the GPI, or the locality pay adjustment. Employees with scores over 40 are to be rated as “eligible;” receive the full GPI and locality pay adjustment; and be eligible for a performance pay increase, award, or both.

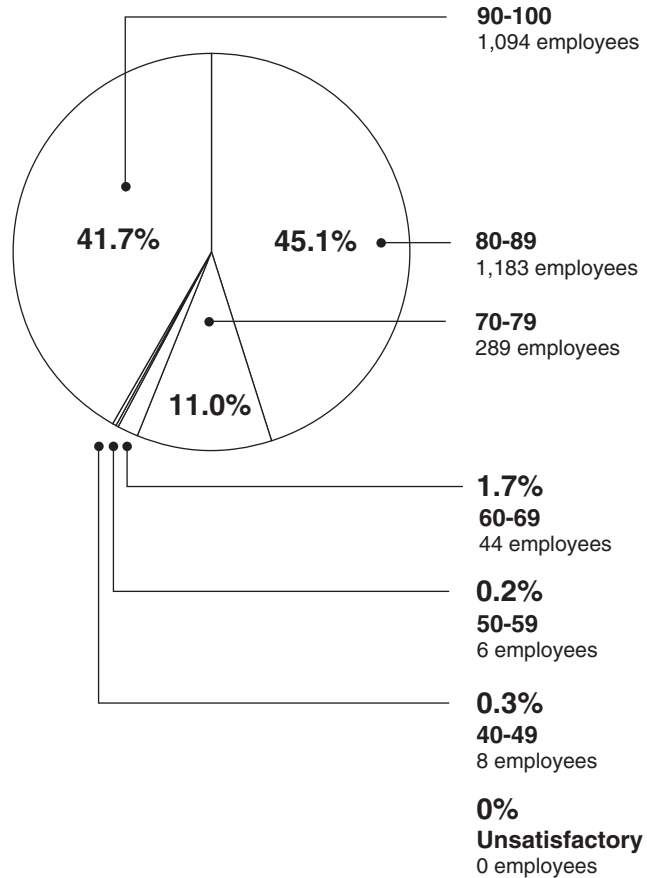
Pay pool managers have the flexibility to determine the amount of the pay increase, award, or both for each performance score, depending on where they fall within the pay band. Employees lower in the pay band are eligible for larger pay increases as a percentage of base pay than employees higher in the pay band, and employees whose salaries are at the top of the pay band and who therefore can no longer receive permanent salary increases may receive awards.

According to our analysis, in its 2002 rating cycle, DOC made few distinctions in performance in its distribution of ratings.¹⁰ As shown in figure 5,

- 100 percent of employees scored 40 or above and over 86 percent of employees scored 80 or above and
- no employees were rated as unsatisfactory.

¹⁰As a point of comparison, in 2002, about 99.9 percent of GS employees across the executive branch under a similar two-level rating system passed and about 0.1 percent failed.

Figure 5: DOC's Rating Distribution (2002)



Source: GAO analysis of DOC data.

According to a DOC official, a goal of the demonstration project is to address poor performance early. An official also noted that poor performers may choose to leave the organization before they receive ratings of unsatisfactory or are placed on a performance improvement plan. Employees who are placed on a performance improvement plan and improve their performance within the specified time frame (typically less than 90 days) are determined to be eligible for the GPI and locality pay adjustment for the remainder of the year.

Our analysis also shows that DOC made few distinctions in performance in its distribution of awards. As shown in table 4, 10 employees who scored from 60 to 69 received an average performance award of \$925, while

employees who scored from 70 to 79 received an average of \$742. Our analysis suggests that DOC's policy of delegating flexibility to individual pay pools to determine performance awards could explain why, without an independent reasonableness review, some employees with lower scores receive larger awards than employees with higher scores. According to DOC, it reviews pay pool decisions within but not across organizational units.

Table 4: DOC's Pay Increase and Award Distribution (2002)

Rating	Permanent pay increase				Performance award			
	Number of employees receiving permanent pay increases	Average as a percentage of base pay			Number of employees receiving performance awards	Performance award amount		
		Average	Lowest	Highest		Average	Lowest	Highest
Eligible								
90-100	1,014	3.9	0.7	15.0	1,079	\$1,781	\$250	\$7,500
80-89	1,121	3.1	0.02	11.0	1,099	1,117	100	6,000
70-79	250	2.4	0.2	9.0	181	742	50	2,000
60-69	18	0.9	0.2	3.2	10	925	300	2,500
50-59	1	1.2	1.2	1.2	1	300	300	300
40-49	0	N/A	N/A	N/A	1	200	200	200
Unsatisfactory	0	N/A	N/A	N/A	0	N/A	N/A	N/A
Total	2,404				2,371			

Source: GAO analysis of DOC data.

Legend: N/A= data are not applicable.

Notes: Data do not include the GPI or the locality pay adjustment.

Not all employees who receive ratings receive pay increases or awards; therefore, the number of employees receiving pay increases or awards differs from those receiving ratings.

NIST also delegates pay decisions to individual pay pools. The NIST 100-point rating system is similar to DOC's system. Employees with scores under 40 are rated as "unsatisfactory" and do not receive the GPI, locality pay adjustment, or performance pay increases or awards. Employees with scores over 40 receive the full GPI and locality pay adjustment and are eligible to receive performance pay increases, awards, or both. Similar to DOC, in its 2002 rating cycle, NIST made few distinctions in performance in its distribution of ratings. Specifically,

-
- 99.9 percent of employees scored 40 or above, and nearly 78 percent of employees scored 80 or above, and
 - 0.1 percent, or 3 employees, were rated as unsatisfactory.

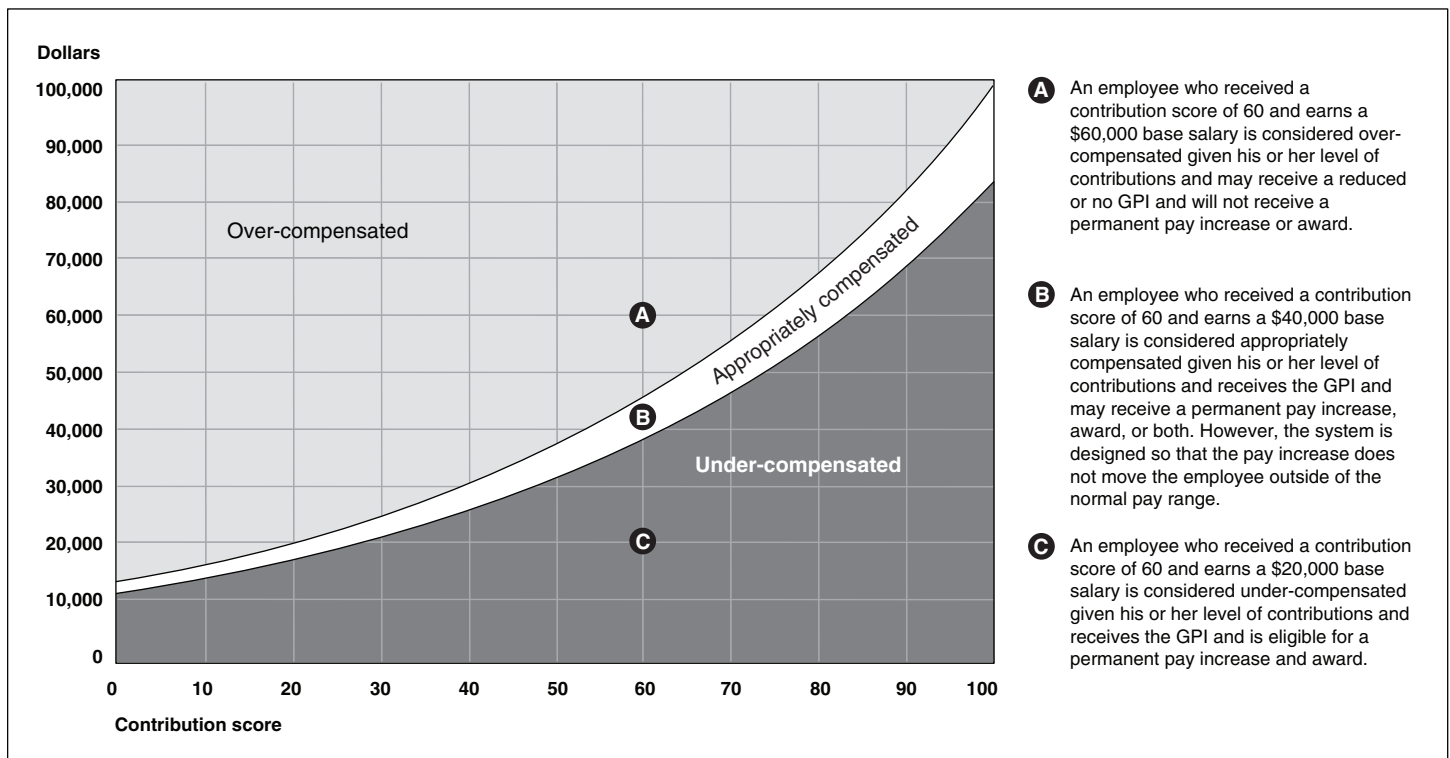
Considering Current Salary in Making Performance-Based Pay Decisions

Several of the demonstration projects consider an employee's current salary when making decisions on permanent pay increases and one-time awards. By considering salary in such decisions, the projects intend to make a better match between an employee's compensation and his or her contribution to the organization. Thus, two employees with comparable contributions could receive different pay increases and awards depending on their current salaries.

At AcqDemo, supervisors recommend and pay pool managers approve employees' "contribution scores." Pay pools then plot contribution scores against the employees' current salaries and a "standard pay line" to determine if employees are "appropriately compensated," "under-compensated," or "over-compensated," given their contributions.¹¹ Figure 6 shows how AcqDemo makes its performance pay decisions for employees who receive the same contribution scores but earn different salaries.

¹¹The "standard pay line" spans from the dollar equivalent of GS-1, step 1, to the dollar equivalent of GS-15, step 10. Appropriately compensated employees' salaries fall within the "normal pay range," which encompasses an area of +/- 4.0 points from the standard pay line.

Figure 6: AcqDemo's Consideration of Current Salary in Making Performance Pay Decisions



- A** An employee who received a contribution score of 60 and earns a \$60,000 base salary is considered over-compensated given his or her level of contributions and may receive a reduced or no GPI and will not receive a permanent pay increase or award.
- B** An employee who received a contribution score of 60 and earns a \$40,000 base salary is considered appropriately compensated given his or her level of contributions and receives the GPI and may receive a permanent pay increase, award, or both. However, the system is designed so that the pay increase does not move the employee outside of the normal pay range.
- C** An employee who received a contribution score of 60 and earns a \$20,000 base salary is considered under-compensated given his or her level of contributions and receives the GPI and is eligible for a permanent pay increase and award.

Source: DOD.

AcqDemo has reported that it has made progress in matching employees' compensation to their contributions to the organization. From 1999 to 2002, appropriately compensated employees increased from about 63 percent to about 72 percent, under-compensated employees decreased from about 30 percent to about 27 percent, and over-compensated employees decreased from nearly 7 percent to less than 2 percent.

NRL implemented a similar system intended to better match employee contributions with salary. Data from NRL show that it has made progress in matching employees' compensation to their contributions to the organization. From 1999 to 2002, "normally compensated" employees, or employees whose contributions match their compensation, increased from about 68 percent to about 81 percent; under-compensated employees decreased from about 25 percent to about 16 percent; and over-

compensated employees decreased from about 7 percent to about 3 percent.

Similar to AcqDemo's and NRL's approach, NAVSEA's Dahlgren division recently redesigned its pay for performance system to better match compensation and contribution. Because Dahlgren implemented its new system in 2002, performance data were not available. Less systematically, China Lake and NAVSEA's Newport division consider current salary in making pay and award decisions. For example, at Newport, supervisors within each pay pool are to list all employees in each pay band by salary before a rating is determined and then evaluate each employee's contribution to the organization considering that salary. If their contributions exceed expectations, employees are considered for permanent pay increases. If contributions meet expectations, employees are considered for one-time awards.

Managing Costs of the Pay for Performance System

OPM reports that the increased costs of implementing alternative personnel systems should be acknowledged and budgeted for up front.¹² Based on the data the demonstration projects provided us, direct costs associated with salaries, training, and automation and data systems were the major cost drivers of implementing their pay for performance systems. The demonstration projects reported other direct costs, such as evaluations and administrative expenses. The demonstration projects used a number of approaches to manage the direct costs of implementing and maintaining their pay for performance systems.

Salary Costs

Under the current GS system, federal employees annually receive the GPI and, where appropriate, a locality pay adjustment, as well as periodically receiving WGIs. The demonstration projects use these and other funding sources under the GS to make their pay decisions, as shown in figure 7.

¹²U.S. Office of Personnel Management, *Demonstration Projects and Alternative Personnel Systems: HR Flexibilities and Lessons Learned* (Washington, D.C.: September 2001).

Figure 7: Funding Sources Linked to Pay Decisions in Selected Personnel Demonstration Projects as of Fiscal Year 2003

Funding source	China Lake	NIST	DOC	NRL	NAVSEA	AcqDemo
GPI	●	●	●	●		● ^a
Locality pay adjustment		●	●			
WGI and QSI	●	●	●	●	●	●
Career ladder promotions	●	●	●	●	●	●

Source: GAO.

^a According to AcqDemo officials, some AcqDemo organizational units guaranteed the GPI for the first year to assure employees' understanding and fair implementation of the process and others guaranteed the GPI for additional, but limited, years to obtain local union agreement to enter the demonstration project.

The aggregated average salary data that some of the demonstration projects were able to provide do not allow us to determine whether total salary costs for the demonstration projects are higher or lower than their GS comparison groups. However, our analysis shows that the demonstration projects' cumulative percentage increases in average salaries varied in contrast to their GS comparison groups. For example, as shown in table 5, after the first year of each demonstration project's implementation, the differences in cumulative percentage increase in average salary between the demonstration project employees and their GS comparison group ranged from -2.9 to 2.7 percentage points.

Table 5: Cumulative Percentage Increase in Average Salaries for Demonstration Project and Comparison Group Employees by Year of the Project, as Reported by the Demonstration Projects

	Year 1			Year 2			Year 3			Year 4			Year 5		
	D %	C %	Difference %	D %	C %	Difference %	D %	C %	Difference %	D %	C %	Difference %	D %	C %	Difference %
China Lake	10.3	7.6	2.7	17.7	14.6	3.1	24.7	20.1	4.6	28.0	23.5	4.5	31.6	27.7	3.9
NIST	4.2	2.7	1.5	10.1	7.1	3.0	17.3	12.1	5.2	24.2	16.6	7.6	31.1	21.9	9.2
NRL	1.9	4.8	-2.9	5.4	8.6	-3.2	10.4	13.6	-3.2						
NAVSEA Dahlgren	3.5	4.9	-1.4	7.8	10.0	-2.2	10.8	13.8	-3.0	13.6	19.1	-5.5			
NAVSEA Newport	3.8	4.8	-1.0	8.5	8.6	-0.1	11.0	13.6	-2.6						

Source: GAO analysis of OPM, DOC, and DOD data.

Legend: D = demonstration project; C = comparison group for the demonstration project in the GS system.

Notes: We calculated the percentage increase in average salaries using the demonstration project's or comparison group's aggregated average salary in the year prior to the project's implementation as the baseline.

Data are as reported by the demonstration projects without verification by GAO.

Shaded areas indicate that the demonstration project has not yet reached those years.

Based on our review of the DOC salary data, we determined that the data were not adequate for use in our comparative analyses of salary growth. Therefore, we do not present DOC's salary data.

According to a demonstration project official, AcqDemo does not collect comparable salary data due to its constantly changing and growing participant base. Therefore, we do not present AcqDemo's average salary data. AcqDemo reports that demonstration project salaries increased 0.7 percent higher than GS salaries in fiscal year 2000 (year 1) and 2001 (year 2) and 0.9 percent higher in fiscal year 2002 (year 3).

The demonstration projects used several approaches to manage salary costs, including (1) choosing the method of converting employees into the demonstration project, (2) considering fiscal conditions and the labor market, (3) managing movement through the pay band, and (4) providing a mix of awards and performance pay increases.

Choosing the method of converting employees into the demonstration project. When the demonstration projects converted employees from the GS system to the pay for performance system, they compensated each employee for the portion of the WGI that the employee had earned either as a permanent increase to base pay or a one-time lump

sum payment. Four of the six demonstration projects (China Lake, NRL, NAVSEA, and AcqDemo) gave employees permanent increases to base pay, while the remaining two demonstration projects (NIST and DOC) gave employees one-time lump sum payments.

Both methods of compensating employees have benefits and drawbacks, according to demonstration project officials. Giving permanent pay increases at the point of conversion into the demonstration project recognizes that employees had already earned a portion of the WGI, but a drawback is that the salary increases are compounded over time, which increases the organization's total salary costs. However, the officials said that giving permanent pay increases garnered employees' support for the demonstration project because employees did not feel like they would have been better off under the GS system.

Considering fiscal conditions and the labor market. In determining how much to budget for pay increases, demonstration projects considered the fiscal condition of the organization as well as the labor market. For example, China Lake, NIST, NRL, and NAVSEA receive a portion of their funding from a working capital fund and thus must take into account fiscal conditions when budgeting for pay increases and awards. These organizations rely, in part, on sales revenue rather than direct appropriations to finance their operations. The organizations establish prices for their services that allow them to recover their costs from their customers. If the organizations' services become too expensive (i.e., salaries are too high), they become less competitive with the private sector.

A demonstration project official at NAVSEA's Newport division said that as an organization financed in part through a working capital fund, it has an advantage over organizations that rely completely on appropriations because it can justify adjusting pay increase and awards budgets when necessary to remain competitive with the private sector. Newport has had to make such adjustments. In fiscal year 2002, the performance pay increase and award pools were funded at lower levels (1.4 percent and 1.7 percent of total salaries for pay increases and awards, respectively) than in 2001 (1.7 percent and 1.8 percent, respectively) because of fiscal constraints. As agreed with one of its unions, Newport must set aside a minimum of 1.4 percent of salaries for its pay increases, which is equal to historical spending under GS for similar increases.

NAVSEA's Newport division also considers the labor market and uses regional and industry salary information compiled by the American

Association of Engineering Societies when determining how much to set aside for pay increases and awards. In fiscal year 2001, Newport funded pay increases and awards at a higher level (1.7 percent and 1.8 percent of total salaries, respectively) than in fiscal year 2000 (1.4 percent and 1.6 percent, respectively) in response to higher external engineer, scientist, and information technology personnel salaries.

Managing movement through the pay band. Because movement through the pay band is based on performance, demonstration project employees could progress through the pay band more quickly than under the GS. Some demonstration projects have developed ways intended to manage this progression to prevent all employees from eventually migrating to the top of the pay band and thus increasing salary costs.

NIST and DOC manage movement through the pay band by recognizing performance with larger pay increases early in the pay band and career path and smaller increases higher in the pay band and career path. Both of these demonstration projects divided each pay band into five intervals. The intervals determine the maximum percentage increase employees could receive for permanent pay increases. The intervals, shown in figure 8, have helped NIST manage salary costs, according to a NIST official.

Figure 8: Pay Bands, Intervals, and Corresponding Permanent Pay Increases for NIST's Scientific and Engineering Career Path

Pay band	Interval	Permanent pay increase (percentage of base pay)
V (GS 15)	5	0 - 4
	4	0 - 4
	3	0 - 4
	2	0 - 5
	1	0 - 6
IV (GS 13-14)	4-5	0 - 6
	3	0 - 6
	2	0 - 8
	1	0 - 10
III (GS 11-12)	4-5	0 - 7
	3	0 - 7
	2	0 - 12
	1	0 - 15
II (GS 7-10)	4-5	0 - 8
	3	0 - 8
	2	0 - 16
	1	0 - 20
I (GS 1-6)	4-5	0 - 7
	3	0 - 7
	2	0 - 12
	1	0 - 14

--- Differences within a career path

--- Differences within a pay band

Source: DOC.

Similarly, some of the demonstration projects, including China Lake and NAVSEA's Dahlgren division, have checkpoints or "speed bumps" in their pay bands intended to manage salary costs as well as ensure that employees' performance coincides with their salaries as they progress through the band. These projects established checkpoints designed to ensure that only the highest performers move into the upper half of the pay band. For example, when employees' salaries at China Lake reach the midpoint of the pay band, they must receive ratings of highly successful, which are equivalent to exceeding expectations, before they can receive additional salary increases. A Performance Review Board, made up of senior management, is to review all highly successful ratings.

Providing a mix of awards and pay increases. Some of the demonstration projects intended to manage costs by providing a mix of one-time awards and permanent pay increases. Rewarding an employee's performance with an award instead of an equivalent increase to base pay can reduce salary costs in the long run because the agency only has to pay the amount of the award one time, rather than annually. For example, at NAVSEA's Newport division, as employees move higher into the pay band, they are more likely to receive awards than permanent increases to base pay. According to a Newport official, expectations increase along with salaries and thus it is more likely that their contributions would meet, rather than exceed, expectations.

To manage costs, China Lake allows pay pools to transfer some of their budgets for permanent pay increases to their budgets for awards. A China Lake official said that because China Lake receives a portion of its funding from a working capital fund, it is not only important to give permanent salary increases to high-performing employees, but also to give increases China Lake can afford the next year. China Lake does not track how much funding is transferred from performance pay increase budgets to awards budgets.

Training Costs

We have reported that agencies will need to invest resources, including time and money, to ensure that employees have the information, skills, and competencies they need to work effectively in a rapidly changing and complex environment.¹³ This includes investments in training and developing employees as part of an agency's overall effort to achieve cost-effective and timely results. Agency managers and supervisors are often aware that investments in training and development initiatives can be quite large. However, across the federal government, evaluation efforts have often been hindered by the lack of accurate and reliable data to document the total costs of training efforts. Each of the demonstration projects trained employees on the performance management system prior to implementation to make employees aware of the new approach, as well as periodically after implementation to refresh employee familiarity with the system. The training was designed to help employees understand competencies and performance standards; develop performance plans; write self-appraisals; become familiar with how performance is evaluated

¹³U.S. General Accounting Office, *Human Capital: A Guide for Assessing Strategic Training and Development Efforts in the Federal Government (Exposure Draft)*, GAO-03-893G (Washington, D.C.: July 1, 2003).

and how pay increases and awards decisions are made; and know the roles and responsibilities of managers, supervisors, and employees in the appraisal and payout processes.

Generally, demonstration projects told us they incurred direct and indirect costs associated with training. Direct training costs that the demonstration projects reported included costs for contractors, materials, and travel related to developing and delivering training to employees and managers. As shown in table 6, total direct costs that the demonstration projects reported for training through the first 5 years of the projects' implementation range from an estimated \$33,000 at NAVSEA's Dahlgren division to more than \$1 million at China Lake.¹⁴ (NIST reported no direct costs associated with training.) Training costs, as indicated by the cost per employee, were generally higher in the year prior to implementation, except for AcqDemo's, which increased over time.

¹⁴All dollars were inflation-adjusted to 2002 dollars because the demonstration projects took place over a variety of years.

Table 6: Direct Inflation-Adjusted Cost of Training in the First 5 Years of the Demonstration Projects (in 2002 Dollars), as Reported by the Demonstration Projects

Demonstration project	Year prior to implementation	Cost per demonstration project employee					Total cost
		Year 1	Year 2	Year 3	Year 4	Year 5	
China Lake	\$203	\$21	No data	No data	No data	No data	\$1,226,000
NIST	0	0	0	0	0	0	0
DOC	12	6	\$5	\$8	\$8	No data	105,000
NRL	84	5	4	0			248,000
NAVSEA-Dahlgren	17 (estimate)	0 (estimate)	0 (estimate)	0 (estimate)	0 (estimate)	0 (estimate)	33,000 (estimate)
NAVSEA Newport	26 (estimate)	4 (estimate)	1 (estimate)	1 (estimate)	1 (estimate)		68,000 (estimate)
AcqDemo	No data	8	10	9	20	\$19	458,000

Source: GAO analysis of DOC and DOD data.

Notes: The cost per demonstration project employee is based on the number of employees in the demonstration project at the same time each year, not the actual number of employees trained on the demonstration project, because the demonstration projects do not collect this information.

Data are as reported by the demonstration projects without verification by GAO.

Shaded squares indicate that the demonstration project has not yet reached those years.

While the demonstration projects did not report indirect costs associated with training employees on the demonstration project, officials stated that indirect costs, such as employee time spent developing, delivering, or attending training, could nonetheless be significant. Likewise, the time spent on the “learning curve” until employees are proficient with the new system could also be significant. For example, although NIST did not capture its indirect training costs, agency officials told us that prior to implementation, each NIST employee was in training for 1 day. Since its implementation, NIST offers optional one-half day training three times a year for all employees. AcqDemo offered 8 hours of training for employees prior to implementation and a minimum of 4 hours of training after implementation. All potential new participants also received eight hours of training prior to implementation at their site. Supervisors and human resources professionals at AcqDemo were offered an additional 8 hours of training each year after the demonstration project was implemented. According to a DOC official, prior to conversion to the demonstration project, DOC provided a detailed briefing to approximately 400 employees to increase employee understanding of the project. In addition, employees

could schedule one-on-one counseling sessions with human resources staff to discuss individual issues and concerns.

Some of the demonstration projects, including China Lake, DOC, and NAVSEA's Dahlgren and Newport divisions, managed training costs by relying on current employees to train other employees on the demonstration project. According to demonstration project officials, while there are still costs associated with developing and delivering in-house training, total training costs are generally reduced by using employees rather than hiring contractors to train employees. For example, China Lake took a "train the trainer" approach by training a group of employees on the new flexibilities in the demonstration project and having those employees train other employees. According to a demonstration project official, an added benefit of using employees to train other employees is that if the person leading the training is respected and known, then the employees are more likely to support the demonstration project. The official said that one drawback is that not all employees are good teachers, so their skills should be carefully considered.

AcqDemo used a combination of contractors and in-house training to implement its training strategy. According to an AcqDemo official, the relatively higher per demonstration project employee costs in years 4 and 5 are a result of AcqDemo's recognition that more in-depth and varied training was needed for current AcqDemo employees to refresh their proficiency in the system; for new participants to familiarize them with appraisal and payout processes; as well as for senior management, pay pool managers and members, and human resources personnel to give them greater detail on the process.

Automation and Data Systems Costs

As a part of implementing a pay for performance system, some of the demonstration projects installed new or updated existing automated personnel systems. Demonstration projects reported that total costs related to designing, installing, and maintaining automation and data systems ranged from an estimated \$125,000 at NAVSEA's Dahlgren division to an estimated \$4.9 million at AcqDemo, as shown in table 7.

Table 7: Inflation-Adjusted Cost of Automation and Data Systems for Selected Demonstration Projects (in 2002 Dollars), as Reported by the Demonstration Projects

Dollars in thousands

	China Lake ^a	NIST	DOC	NRL	NAVSEA-Dahlgren	NAVSEA Newport	AcqDemo
Prior to implementation	No data	0	0	\$1,467	\$125 (estimate)	\$333 (estimate)	0
Cumulative cost since implementation	No data	0	\$2,317	2,166	0 (estimate)	463 (estimate)	\$4,871 (estimate)
Total	No data	0	\$2,317	\$3,633	\$125 (estimate)	\$796 (estimate)	\$4,871 (estimate)

Source: GAO analysis of DOC and DOD data.

Notes: Data are as reported by the demonstration projects without verification by GAO.

Costs may not sum to totals due to rounding.

^aAutomation and data systems were not widely used when the China Lake demonstration project was implemented in 1980.

To manage data system costs, some demonstration projects modified existing data systems rather than designing completely new systems to meet their information needs. For example, NAVSEA's divisions worked together to modify DOD's existing Defense Civilian Personnel Data System to meet their needs for a revised performance appraisal system. Similarly, DOC imported the performance appraisal system developed by NIST and converted the payout system to a Web-based system. While NIST reported that it incurred no direct costs for automation and data systems, officials told us it used in-house employees, NIST's Information Technology Laboratory staff, to develop a data system to automate performance ratings, scores, increases, and awards.

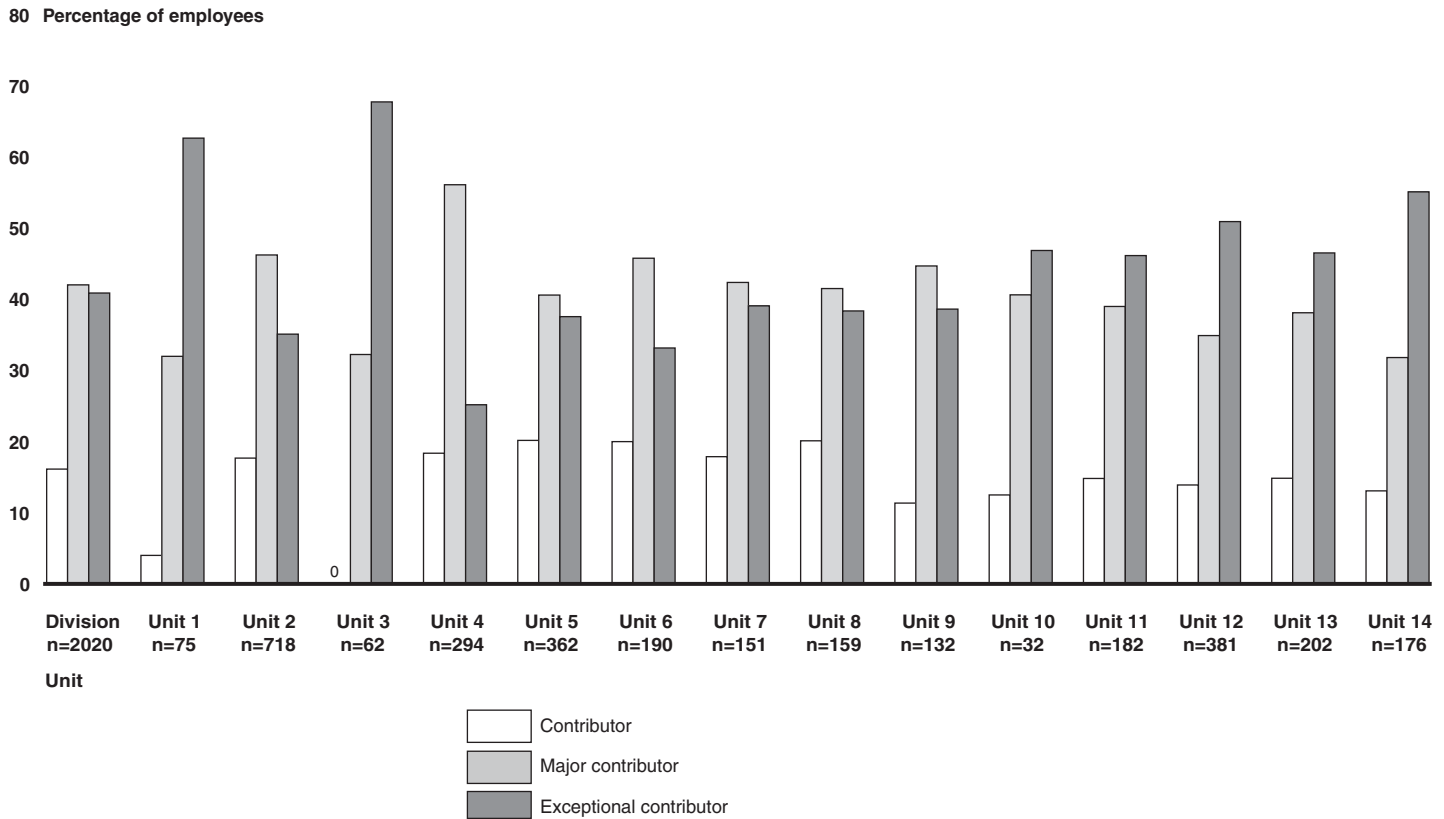
NRL used a combination of in-house employees and contractors to automate its performance management system. While reported automation and data systems' costs were higher for NRL than for most other demonstration projects, NRL reports that its automated system has brought about savings each year of an estimated 10,500 hours of work, \$266,000, and 154 reams of paper since the demonstration project was implemented in 1999.

**Providing Information to
Employees about the
Results of Performance
Appraisal and Pay Decisions**

We have observed that a performance management system should have adequate safeguards to ensure fairness and guard against abuse. One such safeguard is to ensure reasonable transparency and appropriate accountability mechanisms in connection with the results of the performance management process. To this end, NIST, NAVSEA's Newport Division, NRL, and AcqDemo publish information for employees on internal Web sites about the results of performance appraisal and pay decisions, such as the average performance rating, the average pay increase, and the average award for the organization and for each individual unit. Other demonstration projects publish no information on the results of the performance cycle.

NAVSEA's Newport division publishes results of its annual performance cycle. Newport aggregates the data so that no individual employee's rating or payout can be determined to protect confidentiality. Employees can compare their performance rating category against others in the same unit, other units, and the entire division, as shown in figure 9.

Figure 9: Sample of NAVSEA Newport Division's Rating Category Distribution Data Provided to Employees



Source: DOD.

Until recently, only if requested by an employee would NIST provide information such as the average rating, pay increase, and award amount for the employee's pay pool. To be more open, transparent, and responsive to employees, NIST officials told us that in 2003, for the first time, NIST began to publish the results of the performance cycle on its internal Web site. NIST published averages of the performance rating scores, as shown in figure 10, as well as the average recommended pay increase amounts and the average awards by career path, for the entire organization, and for each organizational unit. According to one NIST official, the first day the results were published on the internal Web site, the Web site was visited more than 1,600 times.

Figure 10: Sample of NIST’s Distribution of Average Performance Rating Scores Provided to Employees

Organizational unit	Career path			
	Administrative	Professional	Scientific and Engineering	Technical
1	86	90	86	0
2	80	82	78	81
3	83	83	82	82
4	88	85	87	0
5	86	88	91	0
6	82	81	83	80
7	83	82	82	81
8	84	81	83	82
9	89	85	85	85
10	81	81	81	81
11	86	84	84	83
12	83	85	84	a
Low	80	81	78	80
Average	84	84	84	82
High	89	90	91	85

Source: DOC.

^aIndicates that there were not enough employees in the unit to protect confidentiality; therefore, no data are reported.

Publishing the results of the performance management process can provide employees with the information they need to better understand the performance management system. However, according to an official, DOC does not currently publish performance rating and payout results even though DOC’s third year evaluation found that demonstration project participants continued to raise concerns that indicated their lack of understanding about the performance appraisal process. According to the evaluation, focus group and survey results indicated the need for increased understanding on topics such as how pay pools work, how salaries are determined, and how employees are rated. Employees were also interested in knowing more about the results of the performance appraisal process. One union representative told us that a way to improve the demonstration project would be to publish information. In past years, according to employee representatives, some employees and union representatives at DOC have used the Freedom of Information Act to request and obtain the information. According to a DOC official, DOC plans to discuss the publication of average scores by each major unit and look for options to

increase employee understanding of the performance management system at upcoming Project Team and Departmental Personnel Management Board meetings.

Concluding Observations

Linking pay to performance is a key practice for effective performance management. As Congress, the administration, and federal agencies continue to rethink the current approach to federal pay to place greater emphasis on performance, the experiences of personnel demonstration projects can provide insights into how some organizations within the federal government are implementing pay for performance. The demonstration projects took different approaches to using competencies to evaluate employee performance, translating performance ratings into pay increases and awards, considering employees' current salaries in making performance pay decisions, managing costs of the pay for performance systems, and providing information to employees about the results of performance appraisal and pay decisions. These different approaches were intended to enhance the success of the pay for performance systems because the systems were designed and implemented to meet the demonstration projects' unique cultural and organizational needs.

We strongly support the need to expand pay for performance in the federal government. How it is done, when it is done, and the basis on which it is done can make all the difference in whether such efforts are successful. High-performing organizations continuously review and revise their performance management systems to achieve results, accelerate change, and facilitate two-way communication throughout the year so that discussions about individual and organizational performance are integrated and ongoing. To this end, these demonstration projects show an understanding that how to better link pay to performance is very much a work in progress at the federal level.

Additional work is needed to strengthen efforts to ensure that performance management systems are tools to help the demonstration projects manage on a day-to-day basis. In particular, there are opportunities to use organizationwide competencies to evaluate employee performance that reinforce behaviors and actions that support the organization's mission, translate employee performance so that managers can make meaningful distinctions between top and poor performers with objective and fact-based information, and provide information to employees about the results of the performance appraisals and pay decisions to ensure that reasonable transparency and appropriate accountability mechanisms are in place.

Agency Comments

We provided drafts of this report to the Secretaries of Defense and Commerce for their review and comment. DOD's Principal Deputy, Under Secretary of Defense for Personnel and Readiness, provided written comments, which are presented in appendix III. DOD concurred with our report and stated that it is a useful summary of the various approaches that the demonstration projects undertook to implement their pay for performance systems and that their experiences provide valuable insight into federal pay for performance models. DOD also noted that the NAVSEA demonstration project training and automation cost data are estimated rather than actual costs. We made the appropriate notation. While DOC did not submit written comments, DOC's Classification, Pay, and HR Demonstration Program Manager provided minor technical clarifications and updated information. We made those changes where appropriate. We provided a draft of the report to the Director of OPM for her information.

As agreed with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after its date. At that time, we will provide copies of this report to other interested congressional parties, the Secretaries of Defense and Commerce, and the Director of OPM. We will also make this report available to others upon request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you have any questions about this report, please contact me or Lisa Shames on (202) 512-6806. Other contributors are acknowledged in appendix IV.



J. Christopher Mihm
Director, Strategic Issues

Objective, Scope, and Methodology

To meet our objective to identify the approaches that selected personnel demonstration projects have taken to implement their pay for performance systems, we chose the following demonstration projects: the Navy Demonstration Project at China Lake (China Lake), the National Institute of Standards and Technology (NIST), the Department of Commerce (DOC), the Naval Research Laboratory (NRL), the Naval Sea Systems Command Warfare Centers (NAVSEA) at Dahlgren and Newport, and the Civilian Acquisition Workforce Personnel Demonstration Project (AcqDemo). We selected these demonstration projects based on our review of the projects and in consultation with the Office of Personnel Management (OPM). Factors we considered in selecting these demonstration projects included the type of pay for performance system, type of agency (defense or civilian), status of the project (ongoing, permanent, or complete), date the project was implemented, and number and type of employees covered (including employees covered by a union).

To identify the different approaches that the demonstration projects took in implementing their pay for performance systems, we analyzed *Federal Register* notices outlining the major features and regulations for each demonstration project, operating manuals, annual and summative evaluations, employee attitude survey results, project briefings, training materials, rating and payout data, cost data, rating distribution data from OPM's Central Personnel Data File (CPDF), and other relevant documentation. In addition, we spoke with cognizant officials from OPM; demonstration project managers, human resource officials, and participating supervisors and employees; and union and other employee representatives.

We prepared a data collection instrument to obtain actual and estimated cost data from the six demonstration projects. We tested the instrument with a demonstration project official to ensure that the instrument was clear and comprehensive. After revising the instrument based on the official's recommendations, we administered the instrument via e-mail and followed up with officials via telephone, as necessary. Officials from the six demonstration projects provided actual cost data where available and estimated data when actual data were not available. Cost data reported are actual unless otherwise indicated. We adjusted cost data for inflation using the Consumer Price Index, in 2002 dollars. We provide average salary data, as reported by the demonstration projects and OPM without verification by GAO. The aggregated average salary data do not allow us to determine whether total salary costs for the demonstration projects are higher or lower than their General Schedule (GS) comparison groups.

We did not independently evaluate the effectiveness of the demonstration projects or independently validate the data provided by the agencies or published in the evaluations. We assessed the reliability of cost, salary, rating, and performance pay distribution data provided by the demonstration projects by (1) performing manual and electronic testing of required data elements, (2) reviewing existing information about the data, and (3) interviewing agency officials knowledgeable about the data. We determined that the data were sufficiently reliable for the purposes of this report, with the exception of the DOC salary data, which we do not present. Based on our review of the DOC salary data we determined that the data were not adequate for use in our comparative analyses of salary growth. An evaluation of the DOC demonstration project reported that data were missing in critical fields, such as pay and performance scores.¹

We did not independently verify the CPDF data for September 30, 2002. However, in a 1998 report (*OPM's Central Personnel Data File: Data Appear Sufficiently Reliable to Meet Most Customer Needs*, [GAO/GGD-98-199](#), Sept. 30, 1998), we reported that governmentwide data from the CPDF for key variables, such as GS-grade, agency, and career status, were 97 percent or more accurate. However, we did not verify the accuracy of employee ratings.

We performed our work in the Washington, D.C., metropolitan area from December 2002 through August 2003 in accordance with generally accepted government auditing standards.

¹Booz Allen Hamilton, *Department of Commerce Personnel Management Demonstration Project Evaluation Year Four Report* (McLean, Va.: September 2003).

Demonstration Project Profiles

Navy Demonstration Project at China Lake (China Lake)

<p>Status: Permanent</p> <p>Demonstration sites: Naval Air Warfare Center Weapons Division (sites in China Lake, CA and Point Mugu, CA)</p> <p>Participants: Approximately 3,900 employees as of August 2003</p> <p>Unions: None</p>	<p>Milestones:</p> <hr/> <ul style="list-style-type: none"> • December 1979: Published proposed project plan in the <i>Federal Register</i> • April 1980: Published final project plan in the <i>Federal Register</i> • July 1980: Began project implementation • October 1994: Made project permanent by Pub. L. No. 103-337
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Source: GAO analysis of DOD and OPM data

Purpose

The Navy Demonstration Project¹ was to

- develop an integrated approach to pay, performance appraisal, and classification;
- allow greater managerial control over personnel functions; and
- expand the opportunities available to employees through a more responsive and flexible personnel system.

Selected Elements of the Performance Management System

Competencies: Competencies are tailored to an individual’s position. The employees and their supervisors are to develop performance plans, which identify the employees’ responsibilities and expected results. In addition, all supervisors are to include certain management competencies from a menu of managerial factors that best define their responsibilities, such as developing objectives, organizing work, and selecting and developing people.

Feedback: Supervisors are to conduct two progress reviews of employees’ performance, set at 5 and 9 months in the performance cycle.

¹The Navy Demonstration Project was also implemented at the Space and Naval Systems Command in San Diego, California.

Self-assessment: Employees are strongly encouraged to list accomplishments for their supervisors' information when determining the performance rating.

Levels of performance rating: The levels are highly successful (rating levels 1 or 2), fully successful (rating level 3), or less than fully successful (rating levels 4 or 5).

Safeguards:

- **Second-level review:** Second-level supervisors are to review all assessments. In addition, an overall assessment of highly successful is to be sent to the appropriate department's Performance Review Board for the assignment of an official rating of "1" or "2." The supervisor and reviewer are to assign a "4" or "5" rating based on a problem-solving team's findings and a personnel advisor's input.
- **Grievance process:** Generally, employees may request reconsideration of their ratings in writing to the third-level supervisor and indicate why a higher rating is warranted and what rating is desired. The third-level supervisor can either grant the request or request that a recommending official outside of the immediate organization or chain of authority be appointed. The employee is to receive a final decision in writing within 21 calendar days.

Selected Employee Attitude
 Data

Figure 11: Selected Employee Attitude Data for China Lake

		Demonstration group			Comparison group		
		Agree %	Disagree %	N	Agree %	Disagree %	N
“Under the present system, financial rewards are seldom related to employee performance.”	Baseline (1979)	37	39	2,221	No data	No data	No data
“Pay raises depend on how well employees perform their jobs.”	2003	40	40	1,149	No data	No data	No data
“Job satisfaction—your pay.”	Baseline (1993)	59	28	1,200	No data	No data	No data
“All in all, I am satisfied with my pay.”	2003	52	25	1,149	No data	No data	No data
“I feel that my supervisor will rate my performance (and set my pay) in a fair, impartial manner.”	Baseline (1979)	63	14	2,221	No data	No data	No data
“My performance rating represents a fair and accurate picture of my actual job performance.”	1993	56	26	1,200	No data	No data	No data
“I am in favor of the demonstration project.”	Baseline (1979)	29	No data	2,221	N/A	N/A	N/A
	1998	71	13	No data	N/A	N/A	N/A

Source: DOD.

Legend: N/A = data are not applicable; N = number of respondents.

Other Interventions

Reduction in force. To allow for increased retention of high-performing employees at all levels by ranking employees based on performance for retention standings.

Salary flexibility. To set entry-level salaries to take into account market conditions.

Selected Reported Effects

A demonstration project evaluation reported the following effects.²

²Source: U.S. Office of Personnel Management, *A Summary Assessment of the Navy Demonstration Project* (Washington, D.C.: February 1986).

- Employees viewed performance improvements within their control and reported increased recognition of individual performance.
- The perception of a pay-performance link was significantly strengthened under the demonstration pay for performance system, but not in the comparison group.
- Pay satisfaction increased slightly at the demonstration sites and declined at the control laboratories.
- Employees and supervisors cited improved communication, a more objective focus, and clearer performance expectations as major system benefits.
- Employees and supervisors perceived their performance appraisal system to be more flexible than the comparison group, to focus more on actual work requirements, and thus to be more responsive to laboratory needs.
- Employees at the demonstration project reported having more input into the development of performance plans than employees in the comparison group.

**Sources for Additional
Information**

<http://www.nawcwpns.navy.mil/~hrd/demo.htm> (Last accessed on Nov. 7, 2003)

<http://www.opm.gov/demos/main.asp> (Last accessed on Nov. 7, 2003)

National Institute of Standards and Technology (NIST)

Status: Permanent
Demonstration sites: Gaithersburg, MD, and Boulder, CO
Participants: Approximately 3,000 employees as of May 2003
Unions: International Association of Firefighters, International Association of Machinists and Aerospace Workers, and American Federation of Government Employees

Milestones:

- **October 1986:** Established demonstration project by Pub. L. No. 99-574
- **July 1987:** Published proposed project plan in the *Federal Register*
- **October 1987:** Published final project plan in the *Federal Register*
- **January 1988:** Began project implementation
- **October 1991:** Extended project until September 1995
- **May 1995:** Extended project through September 1998
- **March 1996:** Made project permanent by Pub. L. No. 104-113

Source: GAO analysis of DOC and OPM data.

Purpose

The NIST demonstration project, formerly known as the National Bureau of Standards, was to

- improve hiring and allow NIST to compete more effectively for high-quality researchers,
- motivate and retain staff,
- strengthen the manager's role in personnel management, and
- increase the efficiency of personnel systems.

Selected Elements of the Performance Management System

Competencies: Competencies, called "critical elements," are based on the individual position. Employee performance plans are to have a minimum of two and a maximum of six critical elements, which the supervisor weights, based on the importance of the critical element, the time required to accomplish the critical element, or both. Managers' and supervisors' performance plans are to include a critical element on diversity and it must be weighted at least 15 points.

Feedback: Supervisors are to conduct midyear reviews of all employees to discuss accomplishments or deficiencies and modify the initial performance plans, if necessary.

Self-assessment: Employees are to submit lists of accomplishments for their supervisors' information when determining the performance ratings.

Levels of performance rating: The levels are "eligible" or "unsatisfactory." On a scale of 0 to 100, employees who receive scores over 40 are rated eligible and those with scores below 40 unsatisfactory.

Safeguards:

- **Second-level review:** Pay pool managers are to review recommended scores from supervisors and select a payout for each employee. Pay pool managers are to present the decisions to the next higher official for review if the pay pool manager is also a supervisor. The organizational unit director is to approve awards and review all other decisions.
- **Grievance procedure:** Employees may grieve their performance ratings, scores, and pay increases by following DOC's Administrative Grievance Procedure or appropriate negotiated grievance procedures.

Selected Employee Attitude
 Data

Figure 12: Selected Employee Attitude Data for NIST

		Demonstration group			Comparison group		
		Agree %	Disagree %	N	Agree %	Disagree %	N
"Under the present system, financial rewards are seldom related to employee performance."	Baseline (1987/1988)	38	47	2,319	36	44	396
	1995	24	56	^a	44	36	^a
"All in all, I am satisfied with my pay."	Baseline (1987/1988)	49	39	2,319	34	56	395
	1995	56	27	^a	42	39	^a
"My performance rating represents a fair and accurate picture of my actual performance."	Baseline (1987/1988)	58	29	2,319	61	20	397
	1995	56	21	^a	56	25	^a
"I have trust and confidence in my supervisor."	Baseline (1987)	71	17	2,319	No data	No data	No data
	1995	65	18	^a	58	23	^a
"I am in favor of the demonstration project."	1989	47	18	2,319	N/A	N/A	N/A
	1995	70	8	^a	N/A	N/A	N/A

Sources: U.S. Office of Personnel Management, *Implementation Report National Institute of Standards and Technology Personnel Management Demonstration Project* (Washington, D.C.: Aug. 18, 1989) and *Summative Evaluation Report National Institute of Standards and Technology Demonstration Project: 1988-1995* (Washington, D.C.: June 27, 1997).

Legend: N/A = data are not applicable; N = number of respondents.

^aOPM reported that 47 percent of 3,200 NIST employees and 44 percent of 2,392 comparison group employees responded to the survey.

Other Interventions

Reduction in force. To credit an employee with an overall performance score in the top 10 percent of scores within a peer group with 10 additional years of service for retention purposes.

Supervisory differential. To establish supervisory intervals within a pay band that allow for a maximum rate up to 6 percent higher than the maximum rate of the nonsupervisory intervals within the pay band.

Hiring flexibility. To provide flexibility in setting initial salaries within pay bands for new appointees, particularly for hard-to-fill positions in the Scientific and Engineering career path.

Extended probation. To require employees in the Scientific and Engineering career path to serve a probationary period of 1 to 3 years.

Selected Reported Effects

A demonstration project evaluation reported the following effects.³

- Recruitment bonuses were used sparingly but successfully to attract candidates who might not have accepted federal jobs otherwise.
- NIST has become more competitive with the private sector and employees are less likely to leave for reasons of pay.
- NIST was able to provide significant performance-based awards, some with merit increases as high as 20 percent. NIST succeeded in retaining more of its high performers than the comparison group.
- Managers reported significantly increased authority over hiring and pay decisions.
- Managers reported that they felt significantly less restricted by personnel rules and regulations than other federal managers.

Source for Additional Information

<http://www.opm.gov/demos/main.asp> (Last accessed on Nov. 7, 2003)

³Source: U.S. Office of Personnel Management, *Summative Evaluation Report National Institute of Standards and Technology Demonstration Project: 1988-1995* (Washington, D.C.: June 27, 1997).

Department of Commerce (DOC)

Status: Active

Demonstration sites: Technology Administration, Economics and Statistics Administration, National Telecommunications and Information Administration, and National Oceanic and Atmospheric Administration

Participants: Approximately 2,900 employees as of August 2003

Unions: American Federation for Government Employees, National Federation of Federal Employees, and National Weather Service Employees Union

Milestones:

-
- **May 1997:** Published proposed project plan in the *Federal Register*
 - **December 1997:** Published final project plan in the *Federal Register*
 - **March 1998:** Began project implementation
 - **February 2003:** Extended project to March 2008

Source: GAO analysis of DOC and OPM data.

Purpose

The DOC demonstration project was to test whether the interventions of the NIST demonstration project could be successful in environments with different missions and different organizational hierarchies.

Selected Elements of the Performance Management System

Competencies: Competencies, called “critical elements,” are tailored to each individual position. Performance plans are to have a minimum of two and a maximum of six critical elements. The supervisor is to weight each critical element, based on the importance of the element, the time required to accomplish it, or both, so that the total weight of all critical elements is 100 points. Organizationwide benchmark performance standards are to define the range of performance, and the supervisor may add supplemental performance standards to a performance plan. Performance plans for managers and supervisors are to include critical elements such as recommending or making personnel decisions; developing and appraising subordinates; fulfilling diversity, equal opportunity, and affirmative action responsibilities; and program and managerial responsibilities.

Feedback: Supervisors are to conduct midyear reviews of all employees to discuss accomplishments or deficiencies and modify the initial performance plans, if necessary.

Self-assessment: Employees are to submit lists of accomplishments for their supervisors' information when determining the performance ratings.

Levels of performance rating: The levels are "eligible" or "unsatisfactory." On a scale of 0 to 100, employees who receive scores over 40 are rated eligible and those with scores below 40 unsatisfactory.

Safeguards:

- **Second-level review:** The pay pool manager is to review recommended scores from subordinate supervisors and select a payout for each employee. The pay pool manager is to present the decisions to the next higher official for review if the pay pool manager is also a supervisor.
- **Grievance procedure:** Employees may request reconsideration of performance decisions, excluding awards, by the pay pool manager through DOC's Administrative Grievance Procedure or appropriate negotiated grievance procedures.

Selected Employee Attitude
 Data

Figure 13: Selected Employee Attitude Data for DOC

		Demonstration group			Comparison group		
		Agree %	Disagree %	N	Agree %	Disagree %	N
"Pay raises depend on how well you perform."	Baseline (1998)	36	39	1,024	34	44	512
	2001	52	28	1,112	33	40	609
"All in all I am satisfied with my pay."	Baseline (1998)	47	35	1,024	41	39	512
	2001	58	30	1,112	46	41	609
"My performance rating represents a fair and accurate picture of my actual performance."	Baseline (1998)	59	22	1,024	58	23	512
	2002	56	24	1,112	54	26	609
"I have trust and confidence in my supervisor."	Baseline (1998)	59	22	1,024	60	23	512
	2001	62	23	1,112	59	25	609
"I am in favor of the demonstration project."	Baseline (1998)	37	26	1,024	25	13	512
	2001	47	29	1,112	22	24	609

Source: Booz Allen Hamilton, *Department of Commerce Personnel Management Demonstration Project Evaluation Operational Year Technical Report* (Washington, D.C.: Oct. 8, 2002).

Legend: N = number of respondents.

Other Interventions

Reduction in force. To credit employees with performance scores in the top 30 percent of a career path in a pay pool with 10 additional years of service for retention purposes. Other employees rated "eligible" receive 5 additional years of service for retention credit.

Supervisory performance pay. To offer employees who spend at least 25 percent of their time performing supervisory duties pay up to 6 percent higher than the regular pay band.

Probationary period. To require a 3-year probationary period for newly hired science and engineering employees performing research and development duties.

Selected Reported Effects

A demonstration project evaluation reported the following effects.⁴

- The pay for performance system continues to exhibit a positive link between pay and performance. For example, in year 4 of the demonstration project, employees with higher performance scores were more likely to receive pay increases and on average received larger pay increases than employees with lower scores.
- Some of the recruitment and staffing interventions have been successful. For example, supervisors are taking advantage of their ability to offer more flexible starting salaries. Additionally, the demonstration project has expedited the classification process. DOC's evaluator recommended that DOC should more fully implement the recruitment and staffing interventions.
- The 3-year probationary period for scientists and engineers continues to be used, but assessing its utility remains difficult.
- On the other hand, some retention interventions receive little use or have not appeared to affect retention. For example, the supervisor performance pay intervention is not affecting supervisor retention.

Sources for Additional Information

http://ohrm.doc.gov/employees/demo_project.htm (Last accessed Nov. 7, 2003)

<http://www.opm.gov/demos/main.asp> (Last accessed Nov. 7, 2003)

⁴Source: Booz Allen Hamilton, *Department of Commerce Personnel Management Demonstration Project Evaluation Year Four Report* (McLean, Va.: September 2003).

Naval Research Laboratory (NRL)

Status: Active

Demonstration sites: Washington, DC; Chesapeake Beach, MD; Stennis Space Center, MS; Monterey, CA; Mobile, AL; and Arlington, VA

Participants: Approximately 2,600 employees as of May 2003

Unions: None

Milestones:

-
- **October 1994:** Authorized Science and Technology Demonstration Project Reinvention Laboratories by Pub. L. No. 103-337
 - **February 1999:** Published proposed project plan in the *Federal Register*
 - **June 1999:** Published final project plan in the *Federal Register*
 - **September 1999:** Began project implementation
 - **October 2000:** Removed OPM review of Authorized Science and Technology Demonstration Project Reinvention Laboratories by Pub. L. No. 106-398

Source: GAO analysis of DOD and OPM data.

Purpose

The NRL demonstration project was to

- provide increased authority to manage human resources,
- enable NRL to hire the best qualified employees,
- compensate employees equitably at a rate that is more competitive with the labor market, and
- provide a direct link between levels of individual contribution and the compensation received.

Selected Elements of the Performance Management System

Competencies: Each career path has two to three “critical elements.” Each critical element has generic descriptors that explain the type of work, degree of responsibility, and scope of contributions. Pay pool managers may weight critical elements and may establish supplemental criteria.

Feedback: Supervisors and employees are to, on an ongoing basis, hold discussions to specify work assignments and performance expectations. The supervisor or the employee can request a formal review during the appraisal process.

Self-assessment: Employees are to submit yearly accomplishment reports for the supervisors' information when determining the performance appraisals.

Levels of performance rating: The levels are acceptable or unacceptable. Employees who are rated acceptable are then determined to be "over-compensated," "under-compensated," or within the "normal pay range," based on their contribution scores and salaries.

Safeguards:

- **Second-level review:** The pay pool panel and pay pool manager are to compare element scores for all of the employees in the pay pool; make adjustments, as necessary; and determine the final contribution scores and pay adjustments for the employees.
- **Grievance procedure:** Employees can grieve their appraisals through a two-step process. Employees are to first grieve their scores in writing, and the pay pool panel reviews the grievances and makes recommendations to the pay pool manager, who issues decisions in writing. If employees are not satisfied with the pay pool manager's decisions, they can then file formal grievances according to NRL's formal grievance procedure.

Selected Employee Attitude
 Data

Figure 14: Selected Employee Attitude Data for NRL

		Demonstration group			Comparison group		
		Agree %	Disagree %	N	Agree %	Disagree %	N
"Pay raises depend on how well I perform."	Baseline (1996)	41	38	1,656	No data	No data	No data
	2001	61	22	678	No data	No data	No data
"All in all, I am satisfied with my pay."	Baseline (1996)	41	40	1,663	No data	No data	No data
	2001	48	35	675	No data	No data	No data
"My performance rating represents a fair and accurate picture of my actual performance."	Baseline (1996)	63	22	1,656	No data	No data	No data
	2001	59	19	676	No data	No data	No data
"I have trust and confidence in my supervisor."	Baseline (1996)	61	20	1,639	No data	No data	No data
	2001	67	16	674	No data	No data	No data
"I prefer the following personnel system."	2001			667			N/A
	Demonstration system	46			N/A		
	Traditional personnel system	28			N/A		

Source: DOD.

Legend: N/A = data are not applicable; N = number of respondents.

Other Interventions

Reduction in force. To credit an employee's basic Federal Service Computation Date with up to 20 years based on the results of the appraisal process.

Hiring flexibility. To provide opportunities to consider a broader range of candidates and flexibility in filling positions.

Extended probationary period. To extend the probationary period to 3 years for certain occupations.

Selected Reported Effects

A demonstration project evaluation reported the following effects.⁵

From 1996 to 2001:

- Managers' satisfaction with authority to determine employees' pay and job classification increased from 10 percent of managers to 33 percent.
- Employees' satisfaction with opportunities for advancement increased from 26 percent to 41 percent.
- The perceived link between pay and performance is stronger under the demonstration project and increased from 41 percent to 61 percent.
- On the other hand, the percentage of employees who agreed that other employers in the area paid more than the government for the kind of work that they do increased from 67 to 76 percent.

Sources for Additional Information

http://hroffice.nrl.navy.mil/personnel_demo/index.htm (Last accessed on Nov. 7, 2003)

<http://www.opm.gov/demos/main.asp> (Last accessed on Nov. 7, 2003)

⁵Sources: U.S. Office of Personnel Management, *2002 Summative Evaluation DOD S&T Reinvention Laboratory Demonstration Program* (Washington, D.C.: August 2002), and DOD. The OPM report evaluated all of the projects in the Science and Technology Reinvention Laboratory Demonstration Program and presented the results together, rather than by demonstration project. Data are based on survey information provided by DOD.

Naval Sea Systems Command Warfare Centers (NAVSEA)

Status: Active

Demonstration sites: Carderock Division, Crane Division, Corona Division, Dahlgren Division, Indian Head Division, Port Hueneme Division, Keyport Division, and Newport Division

Participants: 21,000 employees as of April 2003

Unions: American Federation of Government Employees, National Association of Government Employees, National Federation of Federal Employees, Metal Trades Council, International Association of Machinists, and Fraternal Order of Police

Milestones:

-
- **October 1994:** Authorized Science and Technology Demonstration Project Reinvention Laboratories by Pub. L. No. 103-337
 - **February 1997:** Published proposed project plan in the *Federal Register*
 - **December 1997:** Published final project plan in the *Federal Register*
 - **March 1998:** Began project implementation
 - **July 1999:** Expanded to include over 24,000 employees
 - **October 2000:** Removed OPM review of Science and Technology Demonstration Project Reinvention Laboratories Pub. L. No. 106-398

Source: GAO analysis of DOD and OPM data.

Purpose

The NAVSEA demonstration project was to

- develop employees to meet the changing needs of the organization;
- help employees achieve their career goals;
- improve performance in current positions;
- retain high performers; and
- improve communication with customers, colleagues, managers, and employees.

Selected Elements of the Performance Management System

Competencies: Each division may implement regulations regarding the competencies and criteria by which employees are rated. NAVSEA's Dahlgren division uses three competencies for all employees, and the Newport division uses eight competencies.

Feedback: Each division may implement regulations regarding the timing and documentation of midyear feedback. Dahlgren requires at least one documented feedback session at midyear. Beginning in fiscal year 2004, Newport requires a documented midyear feedback session.

Self-assessment: Each division has the flexibility to determine whether and how employees document their accomplishments. Dahlgren requires employees to provide summaries of their contributions for their supervisors' information. Newport encourages employees to provide self-assessments.

Levels of performance rating: All of the divisions use the ratings "acceptable" and "unacceptable."

Safeguards:

- **Second-level review:** Divisions are to design the performance appraisal and payout process. Supervisors at Dahlgren's division and department levels review ratings and payouts to ensure that the competencies are applied uniformly and salary adjustments are distributed equitably. At Newport, second-level supervisors review recommendations by direct supervisors, make changes to achieve balance and equity within the organization, then submit the recommendations to pay pool managers, who are to go through the same process and forward the recommendations to the department head for final approval.
- **Grievance procedure:** Divisions are to design their grievance procedures. Dahlgren and Newport have informal and formal reconsideration processes. In Dahlgren's informal process, the employee and supervisor are to discuss the employee's concern and reach a mutual understanding, and the pay pool manager is to approve any changes. If the employee is not satisfied with the result of the informal process, the employee is to submit a formal request to the pay pool manager, who is to make the final decision. In Newport's informal process, the employee is to submit a written request to the pay pool manager, who may revise the rating and payout decision or confirm it. If the employee is not satisfied with the result of the informal process, the employee may formally appeal to the department head, who is to render a decision.

Selected Employee Attitude
 Data

Figure 15: Selected Employee Attitude Data for NAVSEA

		Demonstration group			Comparison group		
		Agree %	Disagree %	N	Agree %	Disagree %	N
"Pay raises depend on how well I perform."	Baseline (1996)	23	56	6,372	No data	No data	No data
	2001	50	32	2,606	No data	No data	No data
"All in all, I am satisfied with my pay."	Baseline (1996)	34	47	6,397	No data	No data	No data
	2001	49	32	2,603	No data	No data	No data
"My performance rating represents a fair and accurate picture of my actual performance."	Baseline (1996)	56	27	6,400	No data	No data	No data
	2001	55	25	2,609	No data	No data	No data
"I have trust and confidence in my supervisor."	Baseline (1996)	57	22	6,350	No data	No data	No data
	2001	64	18	2,602	No data	No data	No data
"I prefer the following personnel system."	2001			2,563			N/A
	Demonstration system	43			N/A		
	Traditional personnel system	36			N/A		

Source: DOD.

Legend: N/A = data are not applicable; N = number of respondents.

Other Interventions

Advanced in-hire rate. To set, upon initial appointment, an individual's pay anywhere within the band level consistent with the qualifications of the individual and requirements of the position.

Scholastic achievement appointments. To employ an alternative examining process that provides NAVSEA the authority to appoint undergraduates and graduates to professional positions.

Selected Reported Effects

A demonstration project evaluation reported the following effects.⁶

From 1996 to 2001:

- The percentage of people who agreed that their managers promote effective communication among different work groups increased from 31 to 43 percent.
- On the other hand, NAVSEA employees' response to the statement "High performers tend to stay with this organization" stayed constant at about 30 percent during this time.
- Additionally, the percentage of employees who said that they have all of the skills needed to do their jobs remained consistent at 59 and 62 percent, respectively.

Sources for Additional
Information

<http://www.nswc.navy.mil/wwwDL/XD/HR/DEMO/main.html> (Last accessed on Nov. 7, 2003)

<http://www.opm.gov/demos/main.asp> (Last accessed on Nov. 7, 2003)

⁶Sources: U.S. Office of Personnel Management, *2002 Summative Evaluation DOD S&T Reinvention Laboratory Demonstration Program* (Washington, D.C.: August 2002), and DOD. The OPM report evaluated all of the projects in the Science and Technology Reinvention Laboratory Demonstration Program and presented the results together, rather than by demonstration project. Data are based on survey information provided by DOD.

Civilian Acquisition Personnel Demonstration Project (AcqDemo)

Status: Active

Demonstration sites: Various organizational units of the Air Force, Army, Navy, and Marine Corps and the Office of the Under Secretary of Defense (Acquisition, Technology and Logistics)

Participants: 6,500 employees as of February 2003^a

Unions: American Federation of Government Employees, National Federation of Federal Employees, and National Association of Government Employees

Milestones:

-
- **February 1996:** Established demonstration project authority by Pub. L. No. 104-106
 - **March 1998:** Published proposed project plan in the *Federal Register*
 - **January 1999:** Published final project plan in the *Federal Register*
 - **February 1999:** Began phased implementation
 - **December 2002:** Extended project authority to 2012

Source: GAO analysis of DOD and OPM data.

^aPub. L. No. 105-85 removed the 5,000 employee participant cap at AcqDemo.

Purpose

AcqDemo was to

- attract, motivate, and retain a high-quality acquisition workforce;
- achieve a flexible and responsive personnel system;
- link pay to employee contributions to mission accomplishment; and
- gain greater managerial control and authority over personnel processes.

Selected Elements of the Performance Management System

Competencies: Six core contribution “factors,” as well as “discriminators” and “descriptors,” are used to evaluate every employee.

Feedback: AcqDemo requires at least one formal feedback session annually and encourages informal and frequent communication between supervisors and employees, including discussion of any inadequate

contribution. Each service, agency, or organization may require one or more additional formal or informal feedback sessions.

Self-assessment: Employees can provide a list of contributions for each factor.

Levels of performance rating: The levels are “appropriately compensated,” “over-compensated,” and “under-compensated.”

Safeguards:

- **Second-level review:** The supervisors and the pay pool manager are to ensure consistency and equity across ratings. The pay pool manager is to approve the employee’s overall contribution score, which is calculated based on the employee’s contribution ratings.
- **Grievance procedure:** Employees may grieve their ratings and actions affecting the general pay increase or performance pay increases. An employee covered by a negotiated grievance procedure is to use that procedure to grieve his or her score. An employee not under a negotiated grievance procedure is to submit the grievance first to the rating official, who will submit a recommendation to the pay pool panel. The pay pool panel may accept the rating official’s recommendation or reach an independent decision. The pay pool panel’s decision is final unless the employee requests reconsideration by the next higher official to the pay pool manager. That official would then render the final decision on the grievance.

Selected Employee Attitude
 Data

Figure 16: Selected Employee Attitude Data for AcqDemo

		Demonstration group			Comparison group		
		Agree %	Disagree %	N	Agree %	Disagree %	N
"In this organization, my pay raises depend on my contribution to the organization's mission."	Baseline (1998)	20	54	2,748	12	67	470
	2003	59	28	2,027	18	60	275
"All in all, I am satisfied with my pay."	Baseline (1998)	49	32	2,748	45	39	470
	2003	57	32	2,027	52	35	275
"My performance rating represents a fair and accurate picture of my actual performance."	Baseline (1998)	75	14	2,748	62	26	470
	2003	54	33	2,027	66	20	275
"I have trust and confidence in my supervisor."	Baseline (1998)	63	18	2,748	60	20	470
	2003	66	18	2,027	77	9	275
"I am in favor of the demonstration project."	Baseline (1998)	25	48	2,748	N/A	N/A	N/A
	2003	52	30	2,027	N/A	N/A	N/A

Source: DOD.

Legend: N/A = data are not applicable; N = number of respondents.

Other Interventions

Voluntary emeritus program. To provide a continuing source of corporate knowledge and valuable on-the-job training or mentoring by allowing retired employees to voluntarily return without compensation and without jeopardizing retirement pay.

Extended probationary period. To provide managers a length of time equal to education and training assignments outside of the supervisors' review to properly assess the contribution and conduct of new hires in the acquisition environment.

Scholastic achievement appointment. To provide the authority to appoint degreed candidates meeting desired scholastic criteria to positions with positive education requirements.

Flexible appointment authority. To allow an agency to make a modified term appointment to last from 1 to 5 years when the need for an employee's services is not permanent.

Selected Reported Effects

A demonstration project evaluation reported the following effects.⁷

- Attrition rates for over-compensated employees increased from 24.1 in 2000 to 31.6 percent in 2002. Attrition rates for appropriately compensated employees increased from 11.5 in 2000 to 14.1 percent in 2002. Attrition rates for under-compensated employees decreased from 9.0 in 2000 to 8.5 in 2001 and then increased to 10.2 percent in 2002.
- Increased pay-setting flexibility has allowed organizations in AcqDemo to offer more competitive salaries, which has improved recruiting.
- Employees' perception of the link between pay and contribution increased, from 20 percent reporting that pay raises depend on their contribution to the organization's mission in 1998 to 59 percent in 2003.

Sources for Additional Information

<http://www.acq.osd.mil/acqdemo/> (Last accessed on Nov. 7, 2003)

<http://www.opm.gov/demos/index.asp> (Last accessed on Nov. 7, 2003)

⁷Source: Cubic Applications, Inc., *DOD Civilian Acquisition Workforce Personnel Demonstration Project: Interim Evaluation Report Volume I – Management Report* (Alexandria, Va.: July 2003).

Comments from the Department of Defense



PERSONNEL AND
READINESS

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DEC 15 2003

Mr. J. Christopher Mihm
Director, Strategic Issues
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Mihm:


This is the Department of Defense response to the GAO draft report, GAO-04-XXX, *HUMAN CAPITAL: Implementing Pay for Performance at Selected Personnel Demonstration Projects*, dated November 21, 2003 (GAO Code 450183).

We concur with the report but ask that you please add the following note to Tables 6 and 7 on pages 30 and 32: NAVSEA-Dahlgren and Newport did not separately track the cost of training and automation efforts specifically related to the Personnel Demonstration Project over the past 5 years. The cost data shown on pages 30-32 of the report are estimates and may not accurately reflect the actual costs incurred.

The report provides a useful summary of the various approaches that the personnel demonstration projects undertook to implement their pay for performance systems. The experiences of the personnel demonstration projects provide valuable insight into federal pay for performance models. The Department's review of the successes, lessons learned, and challenges of the personnel demonstration projects resulted in the identification of the best practices in performance management. In collaboration with our employee representatives, the Department will now fashion these best practices into a meaningful pay for performance model under the new National Security Personnel System.

We appreciate the opportunity to comment on the draft report.

Sincerely,


Charles S. Abell
Principal Deputy



GAO Contacts and Staff Acknowledgments

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