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Designing and Implementing Performance-Oriented Payband Systems

Human Capital Management Series



James R. Thompson
Associate Professor
Graduate Program in Public Administration
University of Illinois at Chicago



IBM Center for
**The Business
of Government**

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FOREWORD

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, “Designing and Implementing Performance-Oriented Payband Systems,” by James R. Thompson.

According to Professor Thompson, there is widespread agreement among those who have examined compensation practices in the federal government that the approach embodied by the traditional General Schedule is obsolete. A common complaint is that the system is too rigid and that the 15-grade structure induces excessive attention to minor distinctions in duties and responsibilities. Another concern is that pay increases are granted largely on the basis of longevity rather than performance.

Paybanding is not a new concept to the public sector. The essential concept is that for the purpose of salary determination, positions are placed within broad bands instead of narrow grades. The cumulative number of federal employees working within payband systems as of late 2006 was under 250,000. According to Thompson, the preponderance of data shows that these systems have achieved high levels of employee acceptance. However, the degree of success seems to vary, depending on how the systems were designed and implemented.

Thompson’s report describes nine different performance-oriented payband systems that have been in operation in the federal government—in some cases, for more than two decades. He makes the case that successful designs are those that (1) achieve a balance between efficiency, equity, and employee acceptance; (2) acknowledge the importance of soft as well as hard design features; and (3) fit the organization’s context.

We hope that this timely and informative report will be useful to policy officials as well as managers who want advice on how their organization might implement a performance-oriented payband system.



Albert Morales
Managing Partner
IBM Center for The Business of Government
albert.morales@us.ibm.com



Michael Littlejohn
Vice President
Public Sector Human Capital Management Practice
IBM Global Business Services
mvlittle@us.ibm.com



Albert Morales



Michael Littlejohn

MEMO TO AN AGENCY HEAD

To: Agency Head

From: James R. Thompson, Associate Professor of Public Administration, University of Illinois at Chicago

Subject: Designing and Implementing a Performance-Oriented Payband System

This memo is in response to your request for advice on how your agency might implement a performance-oriented payband system. As you know, the essential concept behind paybanding is that, for the purpose of salary determination, positions are placed within broad bands instead of within narrow grades. Most organizations have coupled paybanding with a performance management system to achieve the greatest impact of pay and performance reform in their organization.

The preponderance of data on performance-oriented payband systems throughout the federal government shows that these systems have achieved high levels of employee acceptance after the initial implementation period. There is also an increased awareness among participating employees that their pay is linked more closely to performance than is the case under the General Schedule. However, the degree of success seems to vary, depending on how the systems were designed and implemented. The following six recommendations provide a framework to assist you in the design and implementation of a new pay and performance system in your organization.

Recommendation 1: Determine system objectives.

The design of a pay system requires that trade-offs be made among three competing objectives: efficiency,

equity, and employee acceptance. In linking pay more closely to performance, paybanding promotes the objectives of efficiency and effectiveness but potentially at the cost of both internal equity and employee acceptance. Designers need to have a clear sense of what their objectives are and of the relative priority assigned to each objective.

The personnel reforms at the Government Accountability Office (GAO) serve as an example in this regard. GAO has placed a high priority on the objectives of efficiency and effectiveness and has hence designed a highly performance-oriented payband system. GAO allocates a higher proportion of total funds available for annual pay increases on the basis of performance than do other agencies. However, elements of the system have not been well received by some GAO employees accustomed to working under the General Schedule rules, where both the general pay increase and step increases are virtually guaranteed.

Recommendation 2: Determine the principles that will guide pay system design prior to deciding pay system specifics.

Once you have defined your objective, you then should clarify and make known your design principles. In agencies that have previously developed paybanding systems, three issues seem to drive the principles you may choose to consider when designing system specifics: (1) the degree to which the system will be performance-oriented, (2) the degree to which lower-level managers will be given discretion in administering the system, and (3) whether or not the system will be market-based.

Although a major advantage of performance-oriented payband systems is that they enable a

closer link between pay and performance, these systems can be more or less performance-oriented depending on the features incorporated. This report discusses a number of features that have implications for performance orientation.

The extent to which lower-level managers are allowed to exercise discretion in the pay-setting process has a number of implications for pay system operations. At GAO, supervisors assign a rating for each pre-determined rating element. The pay increase granted each employee is then determined by formula. At the Department of Commerce, in contrast, supervisors have the discretion to decide the rating elements, the weight given each element, the rating, and the pay increase associated with the rating.

There are advantages to both approaches. A “hard-wired” system such as that at GAO tends to be more performance-oriented; managers have less discretion to modify pay decisions, for example, to lessen disparities among employees in the interest of work unit harmony. On the other hand, there is also less opportunity for managers to take into account factors that impact organizational outcomes but which are not formally rated.

Closely related to the issue of managerial discretion is that of rating integrity. For a system to be accepted as fair by employees, performance standards must be widely understood and accepted. This implies that they remain constant both from unit to unit and from year to year. A danger in systems where a specific rating translates into a specific pay increase is that ratings may have to be adjusted to accommodate budgetary constraints. This can compromise rating system integrity. To best accommodate the need to hold down costs, the system should allow for adjustments at the system level rather than at the individual manager level. At GAO, the comptroller general exercises discretion over both the “annual adjustment” and the “budget factor,” which figure prominently in the pay-setting formula. A trade-off, however, is that employees do not know from year to year how large a raise will be associated with a particular rating.

In a market-based system, external equity will be given priority over internal equity. External equity means that a position is fairly compensated relative to similar positions in the private sector. The traditional federal pay and classification system is based

on internal equity, which means that a position is fairly compensated relative to other positions in the federal government. Of the systems reviewed in this report, only GAO's is market-based. The National Security Personnel System at the Department of Defense includes provisions that allow for market-based adjustments to pay in the future. A key advantage of market-based systems is that the agency pays no more than is necessary to procure needed talent in a specific geographical area.

Recommendation 3: Decide the extent to which cost control is an objective.

Early evaluations showed that paybanding resulted in higher pay costs at both the Navy China Lake Demonstration Project and at the National Institute of Standards and Technology (NIST). It may therefore appear contradictory to argue that paybanding can offer cost advantages. This is the case, however, because with paybanding the cost of yearly pay increases can be scaled to accommodate budget realities. For example, at NIST, the size of the pay increment (“i”), which is a central feature of the payband system, can be adjusted each year based on funding availability. At GAO, both the annual adjustment and budget factor are set annually by the comptroller general also on the basis of funding availability. Concerned that the costs associated with the General Schedule are not sustainable over the long term, GAO officials developed a system that provides for flexibility in the face of fluctuating resource levels.

Recommendation 4: Take contextual factors into account.

The adoption of a payband system would allow your organization to move from the “one size fits all” General Schedule to a system that can be tailored to your organization's context. Several of the early adopters of payband systems were research organizations with a high proportion of scientists and engineers. Paybanding has provided these organizations recruitment advantages by allowing the salaries of new employees to be set above the minimum.

Payband systems need to be tailored to organizational realities including, for example, whether the workforce is unionized. The Federal Deposit Insurance Corporation (FDIC)—which has to negotiate its payband system for bargaining unit employees with the National Treasury Employees

Union—has incorporated structural features into its non-managerial payband system that help guard against excessive costs.

The size of the workforce to be covered by a payband system also has implications for system design and implementation. One reason for the success of the Navy Demonstration Project and the NIST payband system is that the workforces at these agencies are relatively small and homogeneous.

The communication between frontline employees and lower management, as well as between lower and upper management, that is crucial to system success is more difficult in large and diverse organizations such as the Departments of Defense (DoD) and Homeland Security. Also top officials in such large agencies are less able to give pay system implementation the degree of attention that is possible in the smaller units. One solution is to phase the system in, as is being done at DoD. Another is to require that units demonstrate readiness for paybanding—for example, by requiring certification or training of lower-level managers in performance-oriented payband system administration.

Recommendation 5: Attend to the cultural aspects of performance-oriented payband systems.

Performance-oriented payband systems are often promoted on the basis that they contribute to the creation of a performance-oriented culture. The creation of such a culture is contingent on the “hard” as well as the “soft” elements of the system. Hard elements relate to specific design features such as number of rating levels. Soft elements relate more to process issues such as whether and to what extent the system engenders communication around performance matters. Systems that foster such communication and that allow a high degree of transparency with regard to system operation are more likely to gain employee acceptance and support.

One means of promoting communication between employees and supervisors is to require or encourage employees to complete a self-assessment prior to the supervisor making an assessment. This helps ensure that the conversation that occurs between employee and supervisor is more than a perfunctory, “Here is your rating; see you next year.”

Some systems, such as the one developed at the Air Force Research Laboratory, require extensive communication among managers at different levels over rating standards. The ostensible purpose is to ensure rating consistency across units, but just the fact that the conversations occur conveys a sense among managers that, “This matters; I’d better pay attention to it.”

Recommendation 6: Train managers in performance-oriented payband system administration.

One of the greatest threats to performance-oriented payband system success is that managers and supervisors are not provided sufficient training in system administration. Such training should take two forms. One is the technical training about pay system operation, including topics such as how to set performance objectives. The other is leadership training, which includes, for example, how to convey performance expectations to subordinates, how to help subordinates develop into high performers, and how to deal with the conflict that inevitably arises as individuals are told that they will be receiving a lower pay increase than their peers.

The supervisory level warrants particular attention. Federal supervisors have traditionally been selected primarily on the basis of their technical expertise rather than their leadership abilities. This is less of a problem under the General Schedule than with paybanding, where the supervisor is at the center of the pay-setting process and has to deal with the human dynamics associated with granting some employees higher pay raises than others.

The report that follows provides many more specifics on these issues. Descriptions of nine different performance-oriented payband systems that have been in operation—in some cases, for more than two decades—are provided. Apparent from the discussion is that successful designs are those that: (1) achieve a balance between efficiency, equity, and employee acceptance; (2) acknowledge the importance of soft as well as hard design features; and (3) fit the organization’s context.

History of Paybanding in the U.S. Federal Government

The interest in paybanding¹ derives in substantial part from the flexibility paybanding affords managers in matters of pay and classification. There is widespread agreement among those who have examined compensation practices in the federal government that the approach embodied by the traditional General Schedule (GS) is obsolete. A common complaint is that the system is too rigid and that the 15-grade structure induces excessive attention to minor distinctions in duties and responsibilities that can affect how a position is classified.

Another concern is that pay increases are granted largely on the basis of longevity rather than performance. With paybanding, multiple grades are combined into a single band, thus expanding the range of salaries associated with any one position. Most payband systems eliminate steps so that pay increases can be scaled according to individual performance. Within the GS, new employees must start at the first step of the grade to which their position is assigned. With paybanding, new employees can enter at a level above the band minimum, thereby providing the organization an advantage in competing for highly skilled recruits.

Table 1: Paybanding Systems in the Federal Government

Date Implemented	Department or Agency	Units/Groups	Units Paybanded	No. of Employees Paybanded
1980	Defense	Navy	Space Warfare Systems Command, San Diego, and Naval Air Warfare Center Weapons Division, China Lake, CA	8,000
1988	Commerce	National Institute of Standards and Technology		3,000
1989	Federal Deposit Insurance Corporation			3,500
	Government Accountability Office			3,600
	National Credit Union Administration			1,000
1996	Administrative Office of the United States Courts			900
	Defense	Acquisition Employees		6,500
	Transportation	Federal Aviation Administration		48,000

Table 1: Paybanding Systems in the Federal Government (continued)

Date Implemented	Department or Agency	Units/Groups	Units Paybanded	No. of Employees Paybanded
1997	Defense		Air Force Research Laboratory	2,400
			Army Aviation and Missile Research Development and Engineering Center	1,200
1998	Commerce	Technology Administration		6
		Economics and Statistics Administration		508
		National Oceanic and Atmospheric Administration		6,377
		National Telecommunications and Information Administration		76
		Office of the Secretary		360
	Defense		Naval Sea Systems Command Warfare Centers	21,000
			Army Engineer Research and Development Center	1,600
			Army Medical Research and Material Command	1,100
			Army Research Laboratory	1,900
1999	Defense		Naval Research Laboratory	2,800
	National Geospatial Intelligence Agency			Not Available
2001	Defense		Army RDECOM Communications - Electronics Research, Development and Engineering Center	2,000
	Treasury	Comptroller of the Currency		2,800
		Internal Revenue Service	Managers only	8,300
2003	Homeland Security	Transportation Security Administration		45,000
2006	Defense/National Security Personnel System			77,000
				248,927

It was partly on the basis of recruitment needs that two naval research facilities, one located in San Diego, California, and the other at China Lake, California, applied for and received approval to test paybanding as part of a personnel demonstration project in 1980. That project provided the first test of paybanding as a concept and was sufficiently successful that it was extended beyond its intended five-year life.² Among the success indicators have been high levels of employee satisfaction with the system and improved recruitment and retention of high-performing employees.

It was not until 1988 that paybanding was put in place in a second agency, the National Institute of Standards and Technology. Like the Navy Demonstration Project, NIST has a research-oriented mission and had encountered difficulties recruiting for positions that required individuals with high levels of scientific, engineering, and technical skills. In 1989, the Government Accountability Office³ instituted paybanding for a portion of its workforce.

During the 1990s, there was a rapid growth in the number and types of agencies or units with payband systems. In 1994, a group of eight research and demonstration laboratories within the Department of Defense was granted the authority to create payband systems. In 1995, the Federal Aviation Administration was given the authority to set up its own personnel system of which paybanding became a part. And as part of the IRS Restructuring and Reform Act of 1998, the IRS was granted the authority to implement paybanding.⁴ Also in the 1990s, several of what are known as the “FIRREA” (Federal Institutions Reform, Recovery and Enforcement Act of 1989) agencies—including the Federal Deposit Insurance Corporation, the Comptroller of the Currency, and the National Credit Union Administration—instituted paybanding pursuant to authorities that they had been granted.

Table 1 on pages 8–9 lists 15 separate payband systems within the federal sector. Included is information on the year each system was inaugurated and the number of employees covered. The cumulative number of federal employees working within payband systems as of late 2006 was approximately 250,000. Pending the outcome of litigation and/or bargaining relating to both the National Security Personnel System (NSPS) at the Department of Defense (DoD) and the Human Capital Operations Plan (formerly the

Acronyms and Abbreviations

AFRL	Air Force Research Laboratory
CHCO	Chief Human Capital Officer
DOC	Department of Commerce
DoD	Department of Defense
FDIC	Federal Deposit Insurance Corporation
GAO	Government Accountability Office
GS	General Schedule
HRM	human resource management
IRS	Internal Revenue Service
NAPA	National Academy of Public Administration
NIST	National Institute of Standards and Technology
NSPS	National Security Personnel System
OPM	Office of Personnel Management
PBC	performance-based compensation
PRB	Performance Review Board
SRS	Standardized Rating Score

MaxHR system) at the Department of Homeland Security, however, that number could grow rapidly over the next few years. An estimated 650,000 civilian employees at DoD alone will, if current plans go forward, eventually be paybanded.

This report draws on the experiences of eight of the 22 agencies/units/groups listed in Table 1 to identify key issues that need to be addressed in designing a performance-oriented payband system. The eight agencies are as follows:

- Navy Demonstration Project (Space Warfare Systems Command, San Diego, and Naval Air Warfare Center Weapons Division, China Lake, California)

- National Institute of Standards and Technology (NIST), Department of Commerce
- Department of Commerce Demonstration Project (DOC)
- Air Force Research Laboratory (AFRL), Department of Defense
- Internal Revenue Service (IRS), Department of the Treasury
- Government Accountability Office (GAO)
- Federal Deposit Insurance Corporation (FDIC)
- National Security Personnel System, Department of Defense

The eight were selected on the basis of several criteria including that collectively they offer a range of different designs. This variation in design provides a useful opportunity to compare features and the implications of those features for system operation and outcomes. The intent is not to designate a single best payband system but to identify the key design issues that need to be addressed as well as the trade-offs that accompany each design option.

Paybanding as an Evolving Approach to Implementing Pay Systems

This section includes a discussion of “what is paybanding?” and “why paybanding?”

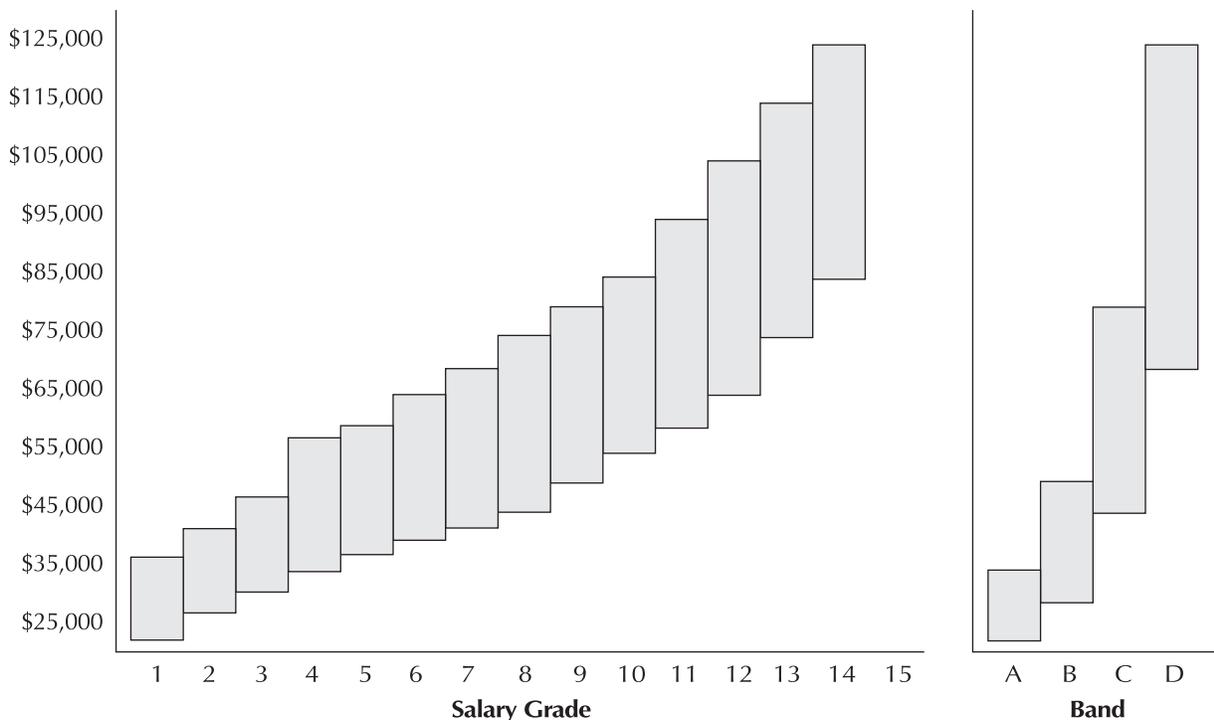
What Is Paybanding?

The essential concept behind paybanding is that, for the purpose of salary determination, positions are placed within broad bands instead of within narrow grades. Figure 1 shows how bands compare to grades. One problem with a grade system such as the GS is that because of the many gradations in salary levels and because the distinctions between any one grade and the next are often somewhat minor, a lot of time and effort is spent determining what

grade a job belongs to. Further, the grade decision is made by a classification expert on the basis of technical criteria rather than by a manager on the basis of management criteria. Matters that have important implications for unit operations are thus displaced onto the personnel office. With paybanding, there is no need to make fine distinctions between the duties or responsibilities of different jobs because many related titles can be accommodated within a single band.

There is substantial variation in practice with regard to payband system structure including number and nature of “career groups,” number and width of

Figure 1: Illustrative Comparison of Conventional Salary Ranges and Bands⁵



paybands, and whether or not to include a “control point” to slow progression through the band. In the federal government, it is common to have three to four career groups and four to five bands for each group. Figure 2 depicts the different career groups and bands at the Navy Demonstration Project. (The details of each of the plans covered in this report are included in the Appendix.) Band width, the percentage spread between the lowest and highest salaries in a band, varies widely not only between but within plans. For example, the Department of Commerce Demonstration Project includes bands as narrow as a single GS grade (30 percent) and as wide as six GS grades (150 percent).

A second distinguishing feature of payband systems is that, in general, there are no “steps” within the band. In the GS, each grade is divided into steps, each of which represents an approximately 3 percent increase in pay. Depending on where they are within the grade, employees move up one step each year, two years, or three years. Although it is possible to deny poor performers a step increase, this is rarely done. With paybanding, the intent is that employees progress through the range on the basis of performance rather than longevity. As discussed further below, agencies operate under a variety of different rules in this regard. In some systems, employees who receive a “met” or “meets expectations” rating may

simply retain their position in the band, as the band is adjusted upward according to the annual comparability increase. In other systems, everyone other than poor performers is guaranteed some increase over and above the comparability increase.

Why Paybanding?

A 2004 report by the National Academy of Public Administration (NAPA) lists the following as reasons “why employers shift to broadbanding”:⁶

- Paybanding “supports organizational change.”**
 This is the case because the rigidities of a conventional system such as the GS greatly complicate attempts to redefine jobs or reduce hierarchical layers. The breadth of the bands in a payband system means that in many instances jobs can be redefined without affecting the salary or status of the incumbent. In 2001, the IRS effectively employed its new payband system to mitigate the impact of its delayering exercise on managers. Approximately 400 mid- and top-level management positions were eliminated in the process of collapsing management layers by half. Managers who had previously been segregated into GS-14 and GS-15 grades were placed into a single “senior manager” band, thereby eliminating hierarchical distinctions and permitting the agency greater flexibility in

Figure 2: Career Paths and Pay Plans at the Naval Air Warfare Center, Weapons Division, China Lake

Career Path	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Senior Professional Staff	A			I			II			III			IV		
Technicians	A			I			II			III					
Technical Specialists	A			I			II			III					
Administrative Specialists	A			I			II			III					
General	A			I		III		IV		V					
					II										

making assignments (see “Modernizing Human Resource Management in the Federal Government: The IRS Model” by James R. Thompson and Hal G. Rainey at www.businessofgovernment.org).

- **Payband systems are more compatible with “high-performance work systems” than are traditional pay and compensation systems.** Among the distinguishing features of high-performance work systems, according to Nadler and Tushman,⁷ are employee empowerment, redesigned processes, the organization of work by teams, broad jobs, and flexible organizational boundaries. Such systems emphasize flexibility in job assignments and de-emphasize both vertical and horizontal boundaries within the organization. Attention is directed less to the “job” as defined in a narrow, bureaucratic way than to meeting the needs of the “customer,” however that is achieved. Paybanding is compatible with this organizational model in that it places greater emphasis on the individual rather than on the job for pay-setting purposes.
- **Paybanding “encourages lateral movement” in delayed organizations.** As organizations reduce the number of hierarchical layers, they simultaneously truncate career ladders. Paybanding makes it possible for those who may not be able to move upward in the organization to nevertheless increase their salaries by expanding the scope of their responsibilities. Payband systems sometimes provide for a “dual track” whereby technical experts can be compensated at the same level as managerial personnel.
- **By allowing line managers more responsibility in pay and classification matters, payband systems contribute to a reduction in administrative costs and to a shift in roles for human resource management (HRM) personnel.** Most payband systems provide managers with expanded authority in pay matters and hence there is less need for HRM officials to serve in a policing role. There is also less of a need for classification experts to determine appropriate grade placements.
- **Paybanding avoids the dysfunctional consequences of traditional grade and step systems.** This is perhaps the most compelling argument in support of paybanding. The importance of

the grade assignment in traditional systems in conjunction with the emphasis on “job” over “person” provides incentives to “game” the classification system, that is, to reward the incumbent of a job for good performance by getting his or her job reclassified. Also, the priority given “internal equity,” that is, the determination of salary levels primarily on the basis of comparison to other internal jobs, rather than to “external equity,” the amount paid similar positions on the outside, can lead to excessive salary costs.

Objectives of a Performance-Oriented Payband System

Issues that must commonly be addressed in the design of any pay system include those of equity, efficiency (including cost control), and employee acceptance. In fact, the design process largely consists of identifying mechanisms by which these objectives can be achieved. The process is complicated by the fact that each can be defined in different ways and that achieving one objective often involves trade-offs with the others.

Balance Internal, External, and Contribution Equity

The Oxford English Dictionary defines *equity* as “the quality of being equal or fair; fairness, impartiality; evenhanded dealing.” A question that arises with regard to pay system design is: Fairness with regard to what standard? The GS places emphasis on internal equity, making sure that a job is graded fairly relative to other jobs within the system. An elaborate “point factor” system has been created for this purpose. In the private sector, there is a greater emphasis on external equity, making sure that a position is fairly paid relative to similar positions in other organizations. The Office of Personnel Management (OPM) has identified the concept of “contribution equity,” which means that individuals who contribute to the same degree to an organization’s success should be paid the same. In instances where application of the alternative standards leads to different pay outcomes, a determination must be made as to which standard applies.

Since none of the three forms of equity can be completely disregarded, the design challenge is to find the right balance between them. Paybanding generally implies a closer association between pay and performance and hence a greater emphasis on contribution equity. Internal equity remains relevant; positions must still be classified for purposes of identifying career

group and band, but such considerations are not given the same weight in pay setting as under the GS. The external market must also be taken into consideration so that the organization can effectively compete for individuals with needed competencies.

The GAO and DoD systems link the pay of their employees more explicitly to the market than do the systems in the other agencies. The intent is both to insure that they can compete for talent and to avoid paying more than is necessary to get that talent. There are implicit trade-offs, however, to the extent that an emphasis on external equity means that the traditional “point factor” system will be given less weight in setting the pay for different occupational groups.

Equity is also important in the design of performance appraisal systems on which performance-oriented payband system outcomes are often contingent. For example, should all employees within the same pay system get rated according to the same criteria? On the one hand, it can be argued that for purposes of comparing relative performance, all employees should be assessed according to the same criteria, as is done, for example, at GAO and the Air Force Research Laboratory. On the other hand, an employee could contend that he or she should be assessed on criteria specific to his or her particular job, as is the practice at NIST.

Achieve Cost Control

Paybanding systems are vulnerable to claims that they lead to increased salary costs. The consolidation of multiple grades into a single band means that some employees who would otherwise have “capped out” within their current grade now have further room for salary growth. For example, in a system where the GS-14 and GS-15 grades are combined into a single band, such as at the IRS, a GS-14 who was capped

out at approximately \$101,000 (2006 base salary schedule) would be eligible for additional increases up to the equivalent of a GS-15, step 10, an additional \$17,000 without having to secure a promotion. The increased flexibility associated with paybanding also allows individuals to move through the range more quickly than in the GS system. Most federal payband systems explicitly attempt to maintain cost neutrality and have put mechanisms in place toward that end, for example, by creating “control points” within each band such that only high-performing employees can advance beyond the control point.

Proponents contend that a combination of paybanding and performance pay contribute to greater efficiency through improved quality and quantity of performance. This is achieved as a result of (1) the general motivational value of linking pay to performance; (2) greater monetary rewards for high performers, who are therefore more likely to stay; and (3) fewer rewards to poor performers, who are therefore more likely to leave. Paybanding can also make it easier to hire highly qualified recruits. In fact, this was the primary reason that paybanding was instituted at the Navy Demonstration Project.

Paybanding is also presumed to enhance organizational effectiveness by providing line managers with more authority within the workplace with regard to compensation and classification matters. The intent, consistent with New Public Management⁸ and reinvention⁹ doctrine, is that in return for being permitted additional discretion in matters of hiring, pay, and promotion, managers are to be held accountable for the performance of their unit.

It may be that whatever additional costs are associated with paybanding are more than offset by improvements in overall performance. However, given the difficulties of making any definitive link between the introduction of a performance-oriented payband system and improved organizational performance, it is likely that these systems will have to continue to adhere to a cost-neutrality standard.

Gain and Ensure Employee Acceptance

New pay systems such as those implemented by the eight agencies that serve as a focus of this study are not implemented in a vacuum. Employees inevitably compare features of the new system to the old. In the federal context, the “old” is represented by the

GS. Employees may not only have worked under the GS themselves but also have opportunities to move to agencies that are governed by GS rules. In several of these agencies, individuals whose pay is governed by GS rules work side by side with those who are paybanded. Inevitably, therefore, the GS serves as a touchstone for most of these employees.

The pay-for-performance element of most payband systems is, at least on its face, disadvantageous to employees to the extent that pay increases that historically have been automatic now become contingent. Agencies moving to paybanding have often had to overcome resistance from at least some employees. In attempting to gain employee acceptance, many agencies have incorporated features that emulate those of the GS. For example, GS employees generally receive a yearly general pay increase, called the “comparability increase,” intended to ensure that federal pay keeps pace with pay elsewhere in the economy. Most of the systems reviewed here continue to grant the general pay increase to the vast majority of their employees consistent with GS practice. Strict pay-for-performance considerations would dictate that general pay increase monies be included in the pay pool and distributed on the basis of performance. However, it would be harder to gain employee acceptance of such a practice given the inevitable comparison with GS employees.

Employee acceptance is in part a function of understandability. Understandability, in turn, is enhanced by clarity in the rules according to which the system operates. A key such rule is that which dictates the link between performance and pay. The Navy Demonstration Project approach, depicted in Table 3 on page 22, is a model in this regard. Specific performance levels, as identified through the performance appraisal process, translate into specific pay increases. (The “i” in the Navy Demonstration Project system represents approximately a half a GS step.) GAO’s system, in contrast—a model in other respects—is complex and difficult to understand. Pay is set according to a complex formula involving a standardized rating score, a competitive pay level, and relative position in the range (see the sidebar on page 32). One portion of the formula dictates the proportion of pay that will be granted as a bonus versus a base pay increase. Compensation theory suggests that the motivational value of such a system is compromised to the extent that employees are unsure what level of performance will translate into what type of pay increase.

Issues in Performance-Oriented Payband Systems

Three broad points regarding pay system design precede a discussion of design specifics. One simply is that there is no perfect system. Most design choices involve trade-offs between different objectives. The “right” system for any one organization is a function of its particular preferences. The second point has to do with system complexity. In this study, payband system design is construed to include performance appraisal and funding processes, both of which are integral to the pay-for-performance system that generally accompanies the payband structure itself. This broader system has many interrelated parts. Because of this interrelatedness, it is rarely possible to associate a particular outcome with a particular design decision. The third general point is that pay system design and implementation inevitably has a cultural dimension. These systems embody specific values and convey specific expectations. With paybanding, performance is given priority over longevity for pay-setting purposes. The implicit emphasis is on efficiency and effectiveness rather than on equity. In the traditional GS, everybody gets the same pay increase; with paybanding, pay increases are scaled according to performance and/or contribution. A challenge in designing a payband system is to leverage system features to promote the change from an entitlement culture to a performance culture.

Trade-offs Among Objectives

Many of the major decisions in the design of a payband system require that trade-offs be made between conflicting objectives. Several such trade-offs were identified earlier. For example, what will be the relative priority given internal, external, and contribution equity? Designers of the GS system made internal equity a priority. Pay systems in the private sector often emphasize external equity. Implicit in linking pay more

closely to performance is to make contribution equity a priority. There may also be a conflict between system effectiveness and employee acceptance. It may be more acceptable to employees to grant an across-the-board pay raise to all employees, as is done under the GS. However, it may be more efficient, and ultimately more effective, to distribute part or all of the general increase on the basis of performance. An effective pay-for-performance system further requires that supervisors make “meaningful distinctions” in the relative performance of their subordinates. Some organizations have a “forced distribution” policy whereby managers are required to segregate their employees into groups according to specified percentages. General Electric, for example, limits the top category to 15 percent of the workforce. Such a policy may promote effectiveness but at the cost of perceived equity and acceptance. Table 2 on page 18 lists a series of design alternatives and the trade-offs associated with each.

Pay System Complexity

Were payband system design limited only to the payband structure itself, the design process would be relatively straightforward. Structural decisions relate to, for example, band width, control points, steps, and career paths. However, since paybanding is generally introduced in conjunction with pay for performance, decisions also have to be made about performance appraisal processes, how performance appraisal ratings link to pay increases, and what mechanisms will be put in place to control costs.

In a complex system of this type, it is difficult if not impossible to predict with any degree of confidence what the consequences of a change to any one design element will have on overall outcomes. There is also more than one way to achieve the

Table 2: Trade-offs Among Performance-Oriented Payband System Objectives

Area/Decision: Performance Appraisal		Objective Promoted	Rationale
	Place limit on number of high ratings	Efficiency/ Cost Control	High performers become eligible for larger pay increases
vs.	No limit on number of high ratings	Equity	Ratings are relative to an employee's absolute rather than relative level of performance
		Employee acceptance	Rating standards remain constant from year to year and from unit to unit
	Use the same rating elements for all employees	Equity	Employees are assessed according to the same criteria
vs.	Tailor rating criteria to unit, employee	Employee acceptance	Allow each job to be assessed according to criteria relevant to that job
	Rating is relative to others in the same unit/pay pool	Efficiency/ Cost Control	More accurate judgments can be made relative to others in the same unit
vs.	Rating is relative to everyone in the organization	Equity	Individuals with the same rating receive the same pay increase
Area/Decision: Pay for Performance		Objective Promoted	Rationale
	Grant annual comparability increase to all employees	Employee acceptance	This has been the practice under the General Schedule
vs.	Include comparability monies in pay pool	Efficiency/ Cost Control	More funds are available to distribute according to performance criteria
	Market considerations a factor in pay setting	Efficiency	Pay only as much as required to recruit and retain individuals in an occupation
vs.	Market considerations not a factor in pay setting	Employee acceptance	Market considerations are not generally a factor in pay setting under the General Schedule
	Take current salary into account in pay setting	Efficiency	The performance of highly paid individuals should be assessed according to their overall contribution, not according to last year's performance
vs.	Pay increase based only on prior year's performance	Employee acceptance	This has been the practice under the General Schedule
	Allow funds to be switched between base pay increase and bonus pots	Efficiency/ Cost Control	To the extent that increases are distributed as bonuses rather than as base pay increases, there will be savings in the out years
vs.	Separate pots: base pay increase monies can only be used to pay base pay increase, bonus monies can only be used to pay bonuses	Employee acceptance	Employees are protected against the switching of funds that have traditionally been used for base pay increases to bonuses
	Rating is "hardwired" to pay increase	Employee acceptance	Employees understand the basis for their pay increase
vs.	Supervisor makes separate decisions on rating and pay increase	Efficiency	Supervisor can incorporate other considerations in pay-setting process, for example, current salary
Area/Decision: Paybanding		Objective Promoted	Rationale
	Include "steps" in bands	Employee acceptance	Less uncertainty about pay increase process
vs.	No steps	Efficiency	Managers have more discretion in determining increase amounts

same outcome. Two examples follow. One issue that all payband system designers must confront is that of cost control. Another is how to induce supervisors and managers to make “meaningful distinctions” in performance levels.

Approaches to Controlling Costs

As noted above, a concern about paybanding is that it will result in higher salary costs. Some of the same features of the GS that are criticized as inhibiting managerial flexibility, such as, for example, the existence of steps within grades, do nevertheless assist in controlling the growth of salary costs.

With the elimination of steps and the widening of bands, alternative mechanisms of controlling the growth of salary costs are required. One is simply to narrow the paybands and thereby limit the top salary that can be achieved by employees in the band. For example, the FDIC’s “corporate grade” (non-managerial) payband system includes 15 separate paybands. The number of bands is the same as for the GS system. On the one hand, one could argue that having so many bands defeats one purpose of paybanding, which is to provide managerial flexibility and to simplify classification by expanding the pay range associated with a group of positions. On the other hand, having multiple bands effectively limits salary growth within the band. A consideration for FDIC is that its corporate grade system has to be negotiated with the union that represents FDIC employees. The multiple bands thus provide a safety net of sorts against excessive growth in salary costs.

An alternative to retaining a large number of bands is to identify a “pay pool” that represents the amount to be spent on pay increases for that year. Several of the agencies whose systems are featured here, including the NIST, the DOC, AFRL, and DoD, use pay pools as a primary means of limiting the growth of salary costs. A common approach is to base the size of the pay pool on the percentage of total payroll historically spent on within-grade wage increases, promotions, and quality step increases. In several of the agencies featured here, the corresponding figure was 2.4 percent of total payroll. The “pay pool manager” is responsible for limiting the total increases to the pay pool amount. At AFRL, upper management has adjusted the pay pool amount between 2.1 and 2.4 percent of total payroll, contingent on the overall budget situation.

Approaches to Making ‘Meaningful Distinctions’ in Performance

Another example of how multiple means can be employed to achieve the same end relates to the challenge of inducing supervisors to make “meaningful distinctions” in levels of performance among employees. The tradition in the federal government is that such distinctions are more the exception than the rule. For the pay-for-performance element of paybanding to work as intended, however, top performers must be distinguished from average and low performers.

One way of achieving this objective is simply to require managers to identify a particular percentage of top performers. As noted earlier, at General Electric, the top 15 percent of employees are designated top performers and rewarded accordingly. Of the agencies whose systems are discussed in this report, FDIC comes closest to a “forced distribution” policy of this type. Non-managerial employees at the FDIC are assigned to one of four pay groups. The first group includes the top 25 percent of employees; the second, the next 50 percent; the third, remaining employees with a “meets expectations” rating; and the fourth, all employees with a “does not meet” rating.

The approach used by the IRS does not require managers to designate a specific percentage of high performers, but it does serve to deter managers from assigning too many high ratings. At the IRS, managers are appraised at any one of five levels: “not met,” “marginally satisfactory,” “met,” “exceeds,” and “outstanding.” Unit heads are assigned a “point budget” with four points for each employee. An “exceeds” rating is the equivalent of four points. To give an employee an “outstanding” (six points) and still stay within the point budget, at least one other employee must be given a “met” (two points) rating.

Some agencies, including DoD, rate the supervisors themselves on how well they administer the pay-for-performance system. Key to that assessment, in many instances, is whether or not the manager has made meaningful distinctions in performance.

Approaches to Creating a Performance-Driven Culture

There is an important cultural dimension to payband system design and implementation. In fact, one could argue that the ultimate objective of these

systems is to provoke a change in culture to one in which efficiency via enhanced performance is given priority. A consideration for system designers is that to achieve such change, the “soft” as well as the “hard” elements must be incorporated into the design process. The hard elements of the performance-oriented payband system are the behavioral rules that govern the rating and pay-setting process; for example, the elements according to which performance is appraised, the rating levels, and number of high ratings allowed. Soft elements include those that involve communication between the different players in the rating/pay-setting processes and perceptions of how authorities granted as a result of the process are employed. From a cultural-change perspective, the soft elements are key. Just the fact of interaction around performance issues can help change attitudes and beliefs.

Soft design elements relate primarily to the process dimension of a performance-oriented payband system. For example, GAO encourages each employee to complete a self-assessment as the first step in the rating process. This helps ensure that the performance discussion is a two-way rather than a one-way conversation. FDIC provides all non-managerial employees with the opportunity to include a written response to the supervisor’s appraisal on the pay-for-performance assessment form before it is finalized. Not only does it facilitate dialogue about the rating, but it represents a form of due process that helps engender a sense among employees that the process is fair.

The rating processes at several agencies including AFRL incorporate review procedures that require dialogue between first-line supervisors and officials higher in the management chain. There are a series of meetings in which managers from across the division compare ratings by rating element and overall. The primary purpose is to ensure rating consistency, but ancillary consequences are to convey the priority being given performance issues and to force managers to devote their time and attention to performance matters. The Navy Demonstration Project provides for a two-stage rating process whereby the supervisor determines which of three rating categories is assigned (see Table 3 on page 22). For those in the top and bottom categories, the Performance Review Board (PRB) decides which of two alternative ratings is assigned.¹⁰ The effect is to promote

discussion between supervisor and the PRB about each employee’s performance.

Soft and hard design elements interact in a complex way. On the one hand, the hard design elements make the soft elements possible. The very fact of a performance appraisal process creates the opportunity for communication between employee and supervisor over performance matters. On the other hand, the process also invests supervisors and managers with authority which may be used in ways that engender resentment and distrust. An IRS supervisor expressed some resentment that his manager had simply handed him his “commitments” (objectives) for the next rating period without consultation.¹¹ The same supervisor stated that he had been told that he had given out too many “exceeds” ratings and should therefore lower one or more to “met.” The organization as a whole was within its point budget, but in the view of the manager, the number of “exceeds” in the supervisor’s unit was out of line with that of others. Such behaviors can contribute to a sense that the process is arbitrary and hence lower employee support for and commitment to the process.

Case Studies in Payband System Design and Implementation

The eight performance-oriented payband systems included in this study are as follows:

- Naval Air Warfare Center Weapons Division (Navy Demonstration Project)
- National Institute of Standards and Technology (NIST)
- Department of Commerce Demonstration Project (DOC)
- Air Force Research Laboratory (AFRL)
- Internal Revenue Service (IRS)
- Government Accountability Office (GAO)
- Federal Deposit Insurance Corporation (FDIC)—Managerial Personnel and Non-managerial Personnel
- National Security Personnel System (Department of Defense [DoD])

Key features of the eight systems are summarized in tabular format in the Appendix.

Naval Air Warfare Center Weapons Division (Navy Demonstration Project)

The Navy Demonstration Project paybanding structure, the first in the federal government, was precedent setting. The career groups that were created and the structure of bands in each career group became the basis for the systems at both NIST and the Department of Commerce.

The Navy Demonstration Project was subjected to rigorous evaluation throughout the first 14 years of

its existence. In general, the outcomes have been positive. Employee support for the project grew from 29 percent at the project's inception to 70 percent by year 14.¹² The percentage of employees who perceived pay as linked to performance at the center increased from 47 percent to 60 percent between 1980 and 1992.¹³ OPM found that turnover among high performers at the Navy Demonstration Project between 1983 and 1985 was about 5 percent compared to about 9 percent at the control labs.¹⁴ Further, according to OPM, turnover among low performers was higher at the Navy Demonstration Project than at the control labs.¹⁵ Although salary costs at the Navy Demonstration Project were approximately 2 percent higher than at the control facility as of 1992, the difference was largely attributable to start-up costs.

One reason for the apparent success of the Navy Demonstration Project is its relative simplicity and hence understandability. There are five rating categories, and each category translates into a specific pay increase (with the exception of the highest category, for which there are two pay options). For example, an individual who is rated as "exceeds fully successful" is assured of receiving the general pay increase ("C") as well as 2 x "i"—in which each "i" is equivalent to 1.5 percent (see Table 3 on page 22).

National Institute of Standards and Technology

NIST's payband system, like that of the Navy Demonstration Project, began as a personnel demonstration project under the provisions of the Civil Service Reform Act of 1978. Implementation began in 1988 and changes were made to the system in 2005. The first system was quite complex. Managers/

Table 3: Rating Levels and Associated Pay Increases at the Naval Air Warfare Center, Weapons Division, China Lake, California

Assessment	Rating	Definition	Salary Adjustment	Bonus
Highly Successful, deserves an award	1	Performance that is demonstrably exceptional	C + 4i or C + 3i	0 - 4b
	2	Quality performance that exceeds fully successful	C + 2i	
Fully Successful	3	Fully successful performance	C + 1i or C	0 - 4b
Less Than Fully Successful	4	Below fully successful	C / 2	
	5	Substantially below fully successful	0	

Note: C = general or “comparability” pay increase; i = 1.5 percent; b = 1.5 percent.

supervisors were afforded a high degree of discretion in determining the rating elements, the weight given each element, the rating given each element, and the recommended pay increase (within a specified range). Overall rating scores were on a scale of between 40 and 100 in one-point increments. There were three constraints on the pay-setting process:

1. The pay pool amount.
2. Each payband was divided into five levels with a specific pay increase range assigned to each level. The lower both the band and the level, the higher the maximum permitted increase. Thus, employees in Interval 1 of Band I in the Scientific and Engineering Technician career group are eligible for raises of up to 12 percent, whereas those in Interval 1 of Band V are limited to increases of 6 percent.
3. What NIST officials call the “percent of percent” rule, according to which an employee with a lower rating score cannot receive a higher percent of percent increase than an employee with a higher score. The percent of percent rule has to do with the maximum increase for which an employee is eligible. For example, you cannot give an employee who is eligible for a maximum 6 percent increase a 3 percent increase (50 percent of percent) and simultaneously give another employee in the same pay group with a higher rating score, but who is eligible for a maximum 12 percent increase, a 4 percent increase (33 percent of percent).

According to NIST officials, the percent of percent rule in particular caused confusion among employees and was one reason for the 2005 changes.

Outcomes of NIST’s original performance-oriented payband system were generally congruent with those at the Navy Demonstration Project. After seven years, 56 percent of NIST employees agreed with the statement, “All in all, I am satisfied with my pay.” The government-wide figure was 39 percent.¹⁶ However, according to an OPM evaluation of the project, salaries at NIST increased by 10 percent more than did salaries for the control group over the first seven years of the project.¹⁷ Forty-two percent of NIST employees agreed with the statement, “High performers tend to stay with this organization,” compared to 31 percent of the control group. Fifteen percent of NIST employees agreed with the statement, “Low performers tend to leave this organization,” compared to 10 percent of the control group.”

The structure of NIST’s new system is similar to that of the Navy Demonstration Project. There are six rating categories (compared to five at the Navy Demonstration Project), and a specific rating translates into a specific increase. This feature provides a much greater level of determinacy than previously. In the old system, decisions on pay increases were separate from decisions on rating employees and were contingent only upon the three constraints listed above. It was possible in that system for an employee with a higher rating to get a lower pay increase than someone in a different unit with a lower rating. One difference between NIST and the Navy Demonstration Project is that the “i” referenced in Table 4 has varied at NIST, whereas the “i” at the Navy Demonstration Project (see Table 3) has remained fixed at approximately 1.5 percent of salary. For 2006, the “i” at NIST was set at 1.1 percent of the midpoint of each band.

Department of Commerce Demonstration Project

The payband system at the Department of Commerce Demonstration Project, implemented in 1998, covers only four units, two of which have fewer than 100 employees in the system (see Table 1 on pages 8–9). The largest of the four is the National Oceanic and Atmospheric Administration, with 6,377 employees covered by the payband system. Similar to both the Navy Demonstration Project and NIST, the DOC's payband system was initiated as a personnel demonstration project. The DOC's Demonstration Project, which is similar in structure to NIST's initial system, is scheduled to expire in 2008.

Similar to the other demonstration projects, the DOC project has been subject to annual evaluation. The seven-year evaluation included the following results:

- Fifty-nine percent of those in the demonstration project group agreed with the statement, "I am in favor of the demonstration project."¹⁸
- Total awards for the demonstration group averaged 4.52 percent of salary compared to 3.53 percent of salary for the comparison group.¹⁹
- As illustrated in Figure 3 on page 24, the range of base pay increases for demonstration project participants was much wider than for comparison group members. There was also a scaling of those increases according to performance, which is not apparent in the comparison group.
- The percentage of demonstration group participants responding in the affirmative to the statement, "Pay raises depend on how well you perform," increased from 35 percent in the baseline year to 54 percent in year 7.

The corresponding percentage for the comparison group in year 7 was 35 percent.

- Sixty-three percent of supervisors in the demonstration group responded affirmatively to the statement, "The current pay system provides a competitive range of entry salaries for managers to use in negotiating with applicants." Only 29 percent of those in the comparison group responded in the affirmative to this statement.

Air Force Research Laboratory

The most distinctive feature of the payband system at the Air Force Research Laboratory is that it is contribution-based. In comparison with most other systems in which pay increases are scaled according to the employee's performance during the most recent rating period, at AFRL the rating is of each employee's overall contribution to the organization.

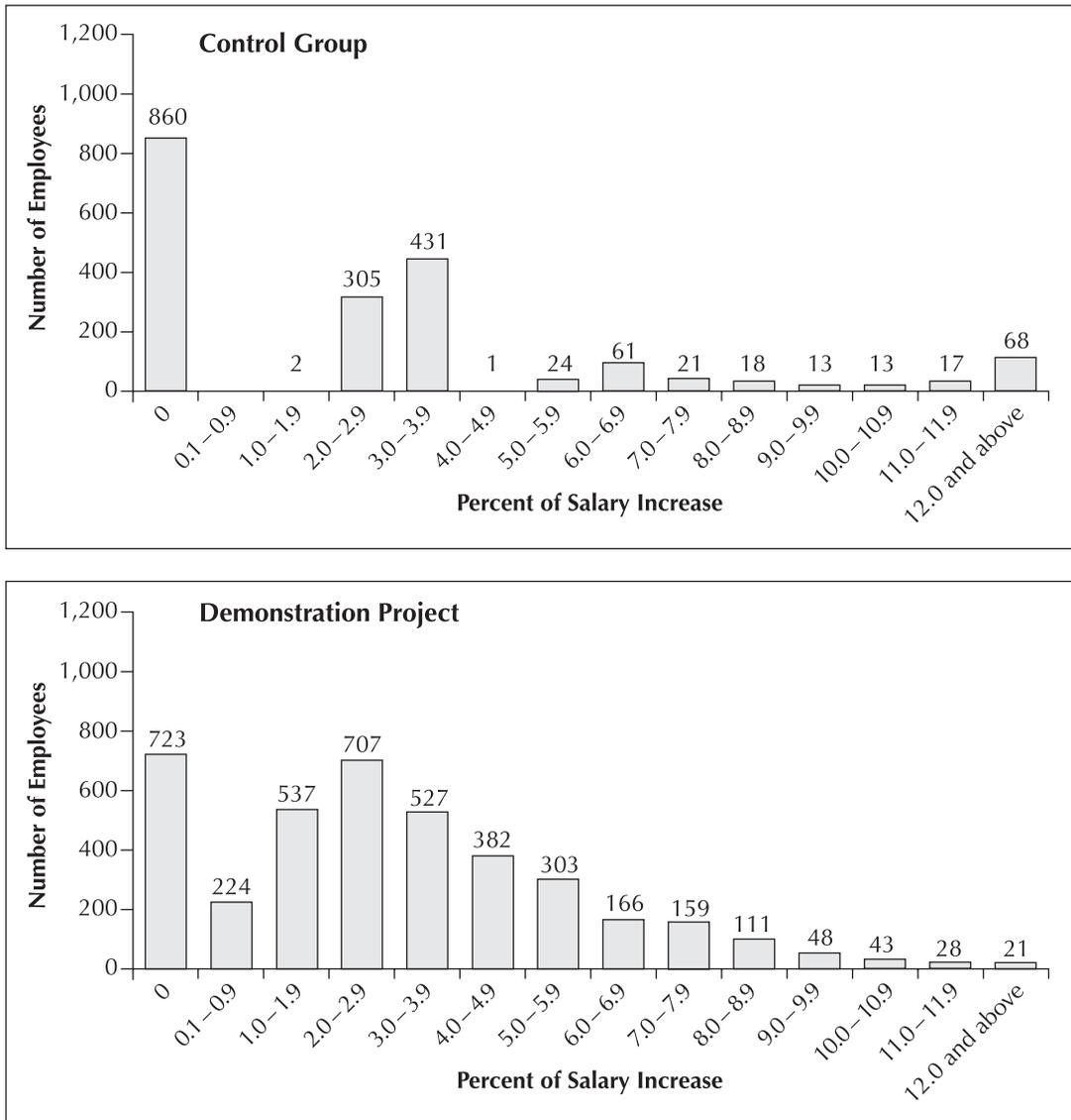
Contribution is measured according to six factors common to all employees: technical problem solving, communications/reporting, corporate resource management, technology transition/technology transfer, R&D business development, and teamwork and leadership. Scores on each of the factors average out to an overall "contribution." A "standard pay line" (SPL), depicted in Figure 4 on page 25, then identifies the expected salary level associated with each score. Each individual's current salary and contribution score can be plotted relative to the SPL. If, based on contribution score, an individual employee's salary is below the SPL, he or she is undercompensated relative to his or her contribution and hence is entitled to a proportionately greater base pay increase than are employees who fall on or above the SPL.

Table 4: Rating Levels and Associated Pay Increases at the National Institute of Standards and Technology

Performance Level	Salary Increase	General Pay Increase	Bonus
Exceptional Contributor	5 x i	Full	Eligible (pay-cap conversion)
Superior Contributor	3 x i		
Significant Contributor	1 x i		
Contributor	0		Eligible
Marginal Contributor		Not eligible	
Unsatisfactory		Not eligible	

Note: The pay increment "i" in NIST's system represents a percentage of the midpoint salary in each band. Generally, i has been in the range of 1.0 to 1.5 percent of the midpoint salary.

Figure 3: Range of Performance-Based Salary Increases—Control Group and Demonstration Project Participants for the Department of Commerce Demonstration Project



Note: Employees receiving a zero percent performance-based salary increase would still be eligible for the general pay increase.

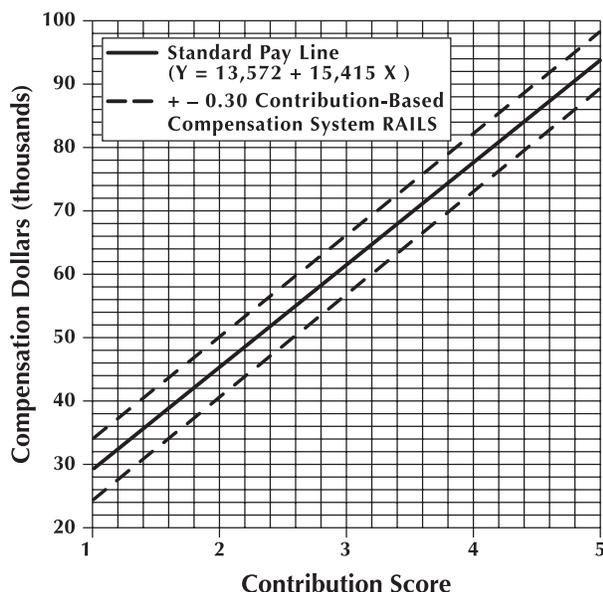
Source: Booz, Allen, Hamilton, Department of Commerce Personnel Management, Demonstration Project Evaluation, Year Seven Report. December 12, 2006.

A key implication of a contribution-based system is that more is expected of highly paid employees; that is, the higher they are on the Y axis shown in Figure 4, the higher their expected contribution according to the standard pay line. Even if they are contributing at a high level, they may not therefore qualify for a performance-based increase. With this approach, a higher proportion of the pay pool can be allocated to lower-paid employees whose actual contribution exceeds their projected contribution.

A second distinctive feature of AFRL’s system is that movement between “levels” (bands) within the system is “seamless.” The levels and corresponding GS grades are as follows:

- Level I: GS-7–GS-11
- Level II: GS-12–GS-13
- Level III: GS-14
- Level IV: GS-15

Figure 4: Air Force Research Laboratory—Standard Pay Line



Source: Federal Register, Vol. 61, No. 230, Nov. 27, 1996, p. 60413.

Consistent with the philosophy behind the contribution-based system, an individual whose position was initially classified as Level I could, in theory, move to Level IV if his or her contribution warranted.

The results of a survey of AFRL personnel conducted by OPM in 2005 showed the following:

- Satisfaction with pay increased from 45 percent in 1996 to 65 percent in 2000.
- Sixty-six percent of employees agreed with the statement, “Pay raises depend on my contribution to the mission of my organization,” compared to 20 percent in 1996.
- AFRL employees in favor of the demonstration project increased from 29 percent in 1996 to 80 percent in 2005.

AFRL’s own evaluation shows that the mean contribution score increased from 3.26 (out of 5.0) to 3.4 between 1997 and 2005 and that the percentage of employees “equitably compensated,” such that salary was appropriate to contribution score, increased from 82 percent in 1997 to 99 percent in 2005.²⁰

Internal Revenue Service

The IRS received authority to implement paybanding pursuant to the IRS Restructuring and Reform Act of 1998. However, that same law provided that the banding of bargaining unit employees had to be negotiated with the union. To date, only managerial personnel have been banded. Initially, only senior managers were banded. Subsequently, payband systems were created for both department managers and frontline managers.

Figure 5 depicts the original version of the senior manager payband, which covers GS grades 14 and 15. Most payband systems do not include steps. However, the original version of the Senior Manager (SM) payband included 10 steps. For purposes of cost control, the IRS incorporated a feature to slow progression through the upper portion of the band. As Figure 5 illustrates, the standard for moving up a step within the band increases the higher up a manager is. Thus, a manager could move from step 1 to step 2 with two “met” ratings over a two-year salary review period, but can move from step 9 to step 10 only with a combination of “exceeded” and “outstanding” performance ratings.

In the original system, a senior manager who did not receive a performance-based pay increase after one two-year rating cycle would have to wait four years between increases (managers would still receive the general pay increase). In the new system introduced in March 2006, performance-based pay

Figure 5: Original IRS Senior Manager (SM) Payband System

		Level II				Level III		Level IV	
		SM - 3	SM - 4	SM - 5	SM - 6	SM - 7	SM - 8	SM - 9	SM - 10
Level I		Met – Exceeded				Exceeded – Exceeded		Exceeded – Outstanding	
SM - 1	SM - 2	Met – Exceeded							
Met – Met									

increase decisions are made on an annual rather than a biennial cycle. There are also no steps in the new senior manager payband. Pay increases are linked directly to a manager's performance rating. Unlike the Navy Demonstration Project, however, where the pay increases are fixed, the amount of the pay increase for each performance level at the IRS is subject to annual determination by the commissioner. For 2007, it was determined that managers who received a "met" rating (level 3 in a five-level system) would receive only the general pay increase. Since the payband itself is adjusted upward by the equivalent of the general pay increase, an individual with a "met" rating would remain at the same position within the band. Only those with "exceeded" or "outstanding" ratings would actually move upward within the band.

An evaluation of the original senior manager payband system was performed after the first year of operation. Among the findings:

- In IRS's five-level rating system, there were fewer "outstanding" (level 5) ratings than under the previous system; 18.4 percent of senior managers received an outstanding rating in 2001 versus 33 percent in 2000, prior to payband implementation; "exceededs" were up from 56 percent to 63 percent and "mets" were up from 11 percent to 19 percent.²¹
- In focus groups and interviews, managers agreed that linking pay to performance was the right thing to do but did not believe that this link was a significant motivator of performance. According to the report, "factors such as job challenge, job impact, recognition of a job well done, and public service were considered far more important in performance motivation."²²
- According to the report, senior managers interviewed "did not believe the system did or would motivate low performers to leave the SMPB (senior manager payband)."
- The banding system did slow the progression at the upper levels of the band. According to the report, only 32 percent of managers at level 4 of the band received a step increase in 2002 compared to 66 percent of those at level 1.²³

Government Accountability Office

GAO has the most sophisticated of the eight systems reviewed here. Among the distinctive features of GAO's system are:

- The absence of an overall rating; instead employees receive an individual rating on each competency.
- The standardization of rating averages by pay groups, which makes rating consistency across groups less important and which de facto identifies relative levels of performance within each group.
- A decoupling from the general pay increase that covers most federal employees. In GAO's system, the comptroller general determines the "annual adjustment" that goes to all but low-performing employees. This feature allows the pay increase amount to be adjusted according to budget circumstances. It also allows a higher percentage of the pay increase "pool" to be distributed according to performance rather than longevity criteria. For example, in 2006, the comptroller general set the annual adjustment at 2.6 percent in comparison with the 3.4 percent received by GS employees. Some portion of the difference was allocated on the basis of individual performance.
- The comptroller general also has discretion over the "budget factor," which dictates the size of the performance-based pay increases. Again, this factor can be adjusted according to budget circumstances.
- GAO's system is one of only two that are explicitly market-based. GAO determines a "competitive pay rate," which represents the market median for positions within each band. The amount of performance-based compensation is calculated as a percentage of the competitive pay rate.

The primary liability associated with GAO's system is that, according to officials, many employees don't fully understand how their annual increase is determined because of the complexity of the formula according to which ratings are translated into pay increases.

Federal Deposit Insurance Corporation

The FDIC has two payband systems, one for non-managerial personnel and one for managerial and executive personnel. The non-managerial system is negotiated with the National Treasury Employees Union, which represents FDIC's bargaining unit personnel. The system for non-managerial personnel includes 15 bands that equate roughly to the 15 grades in the GS system. FDIC's bands are substantially broader than GS grades, however. For example, the lowest band in FDIC's corporate grade has a 50 percent spread between minimum and maximum compared to a 30 percent spread for each GS grade. There are also no steps within the FDIC bands as in the GS system. Under the most recent compensation agreement with the union, employees are assigned to one of four pay groups as follows:

- Pay group 1 includes the top 25 percent of employees. Employees in this category receive a 5 percent base pay increase plus a 1 percent lump-sum bonus.
- Pay group 2 includes the next 50 percent of employees. Employees in this category receive a 3.2 percent pay increase plus a 1 percent lump-sum bonus.
- Pay group 3 includes all other employees with at least a "meets expectations" rating. Employees in this group receive a 2.4 percent base pay increase and no bonus.
- Pay group 4 includes all employees with a "does not meet expectations" rating. These employees get no pay increase.

There is no general pay increase as such.

Managerial personnel are grouped into two separate bands, one for executives and one that includes mid-level managers and first-line supervisors. Pay pool managers are allocated a specific amount (4 percent of total payroll in 2006) for base pay increases and another amount (3 percent of total payroll in 2006) for bonuses. Annually, the FDIC chairman establishes aggregate pay and bonus pool funding levels, based primarily on the chairman's assessment of agency-wide performance measured against identified corporate performance objectives. Annually, the chairman also establishes ranges for both base pay increases

(0–10 percent in 2006) and bonuses (3–9 percent in 2006), as well as the percentage of managers and executives who can receive bonuses (50 percent in 2006). Within those relatively broad constraints, pay pool managers have a large amount of discretion in determining both base pay increases and bonuses.

National Security Personnel System/ Department of Defense

The NSPS is similar in general structure to the Navy Demonstration Project System. Employees are given an overall rating (in whole numbers) between 1 and 5. Each rating then translates into a range of "shares," as depicted in Table 5. In contrast to the Navy Demonstration Project, however, where the share value (or *i*) is fixed at 1.5 percent, in NSPS the share value fluctuates. Share value is determined by dividing the pay pool by the number of shares granted. Since there are no hard constraints on the number of shares granted, if, within a pay pool, a high proportion of employees are given high ratings, share value and the pay increase associated with a high level of performance would diminish. Pursuant to DoD regulations, portions of general pay increase monies may be used to adjust individual bands or to provide local market supplements.

Table 5: Rating Levels and Associated Pay Increases at the Department of Defense/ National Security Personnel System

Rating	Shares
5 (Role Model)	5-6
4 (Exceeds Expectations)	3-4
3 (Valued Performer)	1-2
2 (Fair)	0
1 (Unacceptable)	0

Designing a Performance-Based Payband System

Phase I of the design process should include a determination of the general principles that will guide the process. Three such principles are identified here: the degree of performance orientation, the extent of discretion provided managers in administering the system, and whether or not the system will be market-based. Phase II decisions involve design specifics.

Phase I Decisions: Coming to Agreement on Fundamental Principles

Three high-level design issues relating to payband system design are, (1) how performance-oriented the system will be, (2) how “hardwired” the system will be, and (3) how closely pay will be tied to the market.

Degree of Performance Orientation

One of the most compelling reasons to implement paybanding is to enable a closer link between pay and performance. Yet a number of design decisions affect the extent to which a payband system is more or less performance-oriented. One key decision is whether and to what extent the general pay increase that is awarded to executive branch employees every year will be made contingent upon performance.

Three primary options are available:

- **Option 1:** Grant all employees the general increase regardless of performance, as is the policy under the GS.
- **Option 2:** Deny the general increase only to those employees determined to be performing in an unsatisfactory manner.
- **Option 3:** Include part or all of the general pay increase monies in the performance-based

compensation pool in such a way that high performers receive a proportionately higher amount of the total than do average or low performers.

Four of the eight systems reviewed here—the Navy Demonstration Project, NIST, the Department of Commerce Demonstration Project, and AFRL—have adopted option 2 and the others option 3. Option 3 is the most performance-oriented; option 1 the least. While option 2 is more performance-oriented than option 1, in practice there is little difference in outcomes between the two. So few employees are rated as unsatisfactory that virtually all employees end up receiving the increase. For example, at the Navy Demonstration Project, in 2002 only .2 percent of employees were rated at the bottom two levels of a five-level rating system and hence were denied part or all of the general increase.²⁴

The agencies adopting option 3 have each taken different approaches. At GAO, the comptroller general determines the magnitude of the general pay increase or “annual adjustment.” In 2006, the comptroller general set the annual adjustment at 2.6 percent as compared to the 3.4 percent that was provided GS employees. The annual adjustment is provided to all employees other than those rated at “below expectations” on any one rating element. GAO does not explicitly segregate its budget into annual adjustment monies and performance-based compensation (PBC) monies. But by holding the adjustment below that awarded to GS employees, the effect is to reallocate monies to the PBC pool and hence distribute those funds on the basis of performance criteria.

At the IRS, managers do not receive the general pay increase as such. Instead, all general pay increase monies go into the performance-based

increase pool. The IRS commissioner determines each year what percentage increase managers at each rating level will receive. For 2007, the commissioner has determined that managers receiving at least a “met” rating (level 3 in a five-level system) will receive the equivalent of the general pay increase granted GS employees. Those at the “exceeded” and “outstanding” levels will receive proportionately larger increases. This system leaves open the option that in future years, those receiving a “met” rating could receive less than the general pay increase. Even if those receiving a “met” rating continue to receive the equivalent of the general pay increase, they will not move up within the band since the band itself is adjusted upward each year by the general pay increase amount. FDIC employees do not receive the general pay increase. Increases for non-managerial employees in each of the four pay groups are established in the compensation agreement with the union.

In addition to distributing part or all of general pay increase monies on the basis of performance, design features that lead to a greater performance orientation include the following:

- **Including a portion of locality pay monies in the pay pool.**
- **Placing limits on the number of high ratings that can be awarded.** This can be done directly or indirectly. The IRS is the only agency that has in place an explicit mechanism, the “point budget” (see above) to limit high ratings. At NIST, Defense, AFRL, Commerce, and for FDIC managers, the constraint is the budget: Officials are limited in the number of high ratings that can be assigned by the dollars they have available to spend on base pay increases.
- **Giving high ratings disproportionate weight in the pay-setting process.** The amount of the increase given high performers relative to satisfactory performers is in part a function of the weight given the different ratings. For example, NIST has a six-level rating system in which those at level 3 (“contributor”) receive no performance-based increase; those at level 4 (“significant contributor”) receive an increase of $1 \times “i”$ (where $i = 1.1$ percent of the band midpoint); those at level 5 (“superior contributor”) receive an increase of $3 \times “i”$; and those at level 6 (“exceptional contributor”) receive an

Decisions to Be Made in Designing a Performance-Oriented Payband System

Phase I Decisions: Coming to Agreement on Fundamental Principles

- Degree of performance orientation
- Degree of managerial discretion
- Should the system be market-based?

Phase II Decisions: Coming to Agreement on the Specifics of the System

- Determine payband structure
- Determine performance criteria
- Determine rating system
- Determine funding availability
- Determine pay increases
- Determine elements of review process

increase of $5 \times “i.”$ In this system, an “exceptional contributor” receives a performance-based compensation (PBC) increase approximately five times that of a “significant contributor.” According to officials, NIST’s director at the time decided on the 0-1-3-5 option for the specific purpose of rewarding high performers.

- **Including control points in paybands.** The advantage of control points is to ensure that only high performers progress above the mid-point of the range. The higher the proportion of salary dollars going to high performers, the more performance-oriented the system. At GAO, Band IIB includes a control point at approximately the 75th percentile of the range. Band IIB employees are required to be in the top 50 percent of their pay group to receive a base pay increase above the control point.
- **Paying a proportion of performance-based compensation as bonuses rather than as base pay increases.** Base pay increases have become a hal- lowed tradition in the federal government. In the private sector, a much larger proportion of the annual increase comes in the form of a one-time bonus. The advantage of bonuses, of course, is that they are given only once and as a direct

consequence of performance. Base pay increases not only get built into the base, but as a result of the compounding effect, future increases become more expensive. GAO has included in its pay system a feature that grants a proportion of the annual increase as a bonus. In general, the higher one is in the payband, the greater the proportion of the increase one is likely to receive as a bonus.

Degree of Managerial Discretion

A second high-level design issue is how much discretion lower-level managers should be afforded in both the rating and pay-setting processes. In some systems, the ratings assigned individual elements sum to an overall rating and in others the overall rating is done separately. Also at issue is the link between the overall rating and the pay increase. In some systems the rating determines the pay increase; in others, decisions on pay are guided by but independent of the performance rating.

Table 6 provides a summary of the performance orientation of each of the nine systems (two at FDIC) included in this study.

Table 6: Payband System Features That Lead to a Greater Performance Orientation

Payband Features	China Lake	GAO	Commerce	NIST	IRS	FDIC – Non-management	FDIC – Management	AFRL	NSPS
General pay increase denied to poor performers	x	x	x	x	x	x	x	x	x
Portion of general pay increase monies allocated according to performance		x			x		x	x	x
Some portion of locality pay monies allocated according to performance									x
Direct limit on number of high ratings						x			
Indirect limit on number of high ratings	x		x	x	x		x	x	
High rating given disproportionate weight in pay-setting process		x		x		x			
Mechanisms to limit progression to top of band to top performers (e.g., control points)	x	x*	x	x	x			x	
Offset a proportion of the base pay increase with bonuses for some employees		x							x
Total	3	5	3	4	4	3	3	4	4

*Only one of the GAO bands includes a control point.

Several issues must be considered in determining which approach to take. Systems that allow separate decisions to be made at each phase of the process provide the maximum amount of discretion to the supervisor. This serves both to affirm the authority of the supervisor within the workplace and also to compensate for inevitable imperfections in the rating instrument. On the other hand, too much discretion on the part of the supervisor can compromise pay system outcomes. For example, for reasons of workplace harmony, supervisors may be loathe to allow large disparities in pay between high and low performers, thereby defeating the intent of the system.

Systems with low levels of managerial discretion in which ratings on individual performance elements convert directly to an overall rating and in which the overall rating converts directly into a specific pay increase make it easier to manipulate outcomes at the system level. At GAO, supervisors decide only on the rating for each individual performance element. The ratings on the individual elements are then averaged and converted into a Standardized Rating Score (SRS) that reflects an employee's appraisal average compared to others in the same group. An elaborate algorithm is then employed to convert the SRS into a pay increase (see the sidebar on page 32). The algorithm includes a "budget factor" set by the comptroller general that serves to mediate the link between the rating and the pay increase. An advantage is that the budget factor can be adjusted to accommodate funding constraints. A disadvantage is that the motivational impact of the system is dampened to the extent that employees are uncertain as to what size pay increase will be associated with what rating.

Similar to GAO, at the Navy Demonstration Project, the link between the overall rating and the pay increase is direct; no additional intervention by the supervisor is required at the pay-setting stage. An employee who is rated at level 2 is assured of receiving an additional 3 percent (2 x "i") pay increase in addition to the general pay increase (see Table 3). Unlike GAO, however, there is no budget factor to mediate the relationship between the overall rating and the pay increase. An advantage is that employees know the pay increase (or range of pay increases for those at the "fully successful" or

"exceptional" levels) that will accompany each rating. A disadvantage is that should too many high ratings be assigned such that the cost associated with the associated pay increases would otherwise exceed budgeted amounts, revisions would have to be made to individual performance ratings to bring costs back in line. This in turn could threaten the integrity of the ratings process.²⁵

Navy officials could, had they so chosen, adopted the approach used by NIST whereby the "i" in the pay-setting formula (see Table 4 on page 23) is adjusted to accommodate budget realities. However, the "i" at China Lake has remained constant at 1.5 percent over the life of the project. Donald Summer, assistant to the director of human resources at China Lake, states that management has chosen not to change the "i" "because of the commitment we feel to our workforce." He adds that were the organization to encounter "insurmountable budget pressures, we could make changes without impairing the integrity of the ratings process."

By definition, systems in which the rating is "hardwired" to the pay increase limit the discretion of supervisors: They may prefer to allocate the pay increase dollars differently than what the system directs. On the other hand, allowing a high degree of supervisory discretion can create problems with regard to both equity and performance orientation. In revising its original payband system in 2005, NIST went from a less hardwired system to a more hardwired system. Under the original system (similar to that now in place at the Department of Commerce Demonstration Project), the pay increase decision was separate from the rating decision. The separation of the two decisions allowed variation in practice across work units such that equity concerns arose. According to Rob Kirkner, chief human capital officer (CHCO) at NIST, in some instances employees with lower performance scores received higher payouts than employees with higher scores in other units. This was a primary reason for changing the system.

There is also some evidence to support the contention that systems in which the pay increase is hardwired to the rating are more performance-oriented than are those in which the link is not so direct. In the system now in place at NIST, ratings for the individual elements cumulate to an overall rating that

GAO's Annual Adjustment and Performance-Based Calculation Formulas

Salary adjustments are calculated as follows:

Step 1. Apply Annual Adjustment (AA) of ____ %

AA = Current Salary x ____ rounded to the nearest dollar not to exceed the applicable limit (pay range maximum or speed bump)

Step 2: Calculate Total \$PBC (Performance-Based Compensation)

- a. % PBC = SRS (Standardized Rating Score) + budget factor (BF)
- b. Total \$PBC = %PBC x competitive rate (CR) x any proration, if applicable

Step 3: Determine Salary Range Position (RP)

$$RP = \frac{\text{current salary (after AA)} - \text{salary range minimum}}{\text{salary range maximum} - \text{salary range minimum}} \times 200$$

Step 4: Distribute \$PBC Between Merit Increase (\$MI) and \$Bonus

- a. Total \$MI = Total \$PBC x (1 - RP/200)
- b. Total \$Bonus = Total \$PBC - Total \$MI

Step 5: Adjust Merit Increase to at Least XX% of \$PBC*

- a. If the total \$MI calculated in step 4 is \geq XX% of the total \$PBC, then the total \$MI calculated in step 4 is provided as a merit increase.
- b. If the total \$MI calculated in step 4 is $<$ XX% of the total \$PBC, then the total \$MI calculated in step 4 is increased to XX% and the additional amount is deducted from the Total \$Bonus.

(An employee may not receive any portion of a merit increase that would cause his or her salary to exceed the maximum rate applicable to his or her position and or performance level. In addition, if the new salary is below the minimum rate of the band, the salary shall be adjusted to the minimum rate).

Step 6: Adjust Bonus to at Least \$100.

- a. If the total bonus amount as a result of step 5 is below \$100 for an employee who is not subject to proration, it shall be increased to \$100.
- b. If the employee is subject to PBC proration at 66%, then the minimum bonus amount shall be \$66; if he or she is subject to proration at 33%, the minimum bonus amount shall be \$33.

**The percentage of PBC that will be provided in the form of a merit increase shall be determined annually by the comptroller general but shall not be less than 50 percent, not to exceed the maximum rate of the band.*

translates into a specific pay increase (see Table 7). According to Bob Watters, chief of measurement services at NIST, high performers tend to do better under the new hardwired system than the old. In the new system, an "exceptional contributor" is guaranteed a PBC increase of $5 \times "i"$ (with $i = 1.1$ percent in 2006) = 5.5 percent of the band midpoint in addition to the general pay increase. According to Watters, increases of that magnitude were rare under the old system.

The new National Security Personnel System achieves something of a middle ground in this regard. Under NSPS, ratings translate into a range of "shares." For example, a "role model" rating will lead to either 5 or 6 shares as determined by the supervisor and pay pool manager. As noted above, however, actual share value can fluctuate on the basis of the number of shares granted and the size of the pay pool.

Should the System be Market-Based?

Of the eight systems reviewed here, only GAO’s is market-based: Salaries are periodically adjusted according to compensation levels for similar positions in the private sector. The NSPS allows for market considerations to enter the pay-setting process, but according to officials, that portion of the system has not yet kicked in. Market-based systems are, in theory, more efficient in that (1) the organization is not paying its employees more than is warranted by the market, and (2) the organization is competitive with other employers for talent.

GAO follows private sector practice by conducting surveys to determine the market rate for each occupational group. Upon converting to its new system, GAO found that while most employees were appropriately paid, a small proportion were overpaid relative to their responsibilities and to what those with similar responsibilities are paid in the private sector. The agency has had to go through a difficult process of dividing a band into two parts and restricting the growth of the salaries of those employees assigned the lower part.

Although GAO is the only agency at which the market plays a central role in pay setting, Chris Mihm, GAO’s managing director for strategic issues, believes that the government will eventually have to move toward a more market-based system. Says Mihm: “we have been telling other agencies that you can either [make your system market-based] immediately because you think it is the right thing to do or it will be forced upon you in all probability in a relatively short order. When we look at the fiscal problems that the government faces, [citizens] ... are not going to be willing to tolerate a federal personnel system that is rooted in the old

General Schedule scales, step 1, step 2, step 3, irrespective of market sensitivity.”

Phase II Decisions: Coming to Agreement on the Specifics of the System

Most of the Phase I design issues identified above are cross-cutting in nature; each involves decisions about individual system elements. In this section, some of those same elements are addressed individually. The discussion is framed according to the same decision categories depicted in Table 8 on page 34:

1. Determine payband structure.
2. Determine performance criteria.
3. Determine rating system.
4. Determine funding availability.
5. Determine pay increases.
6. Determine elements of review process.

Determine Payband Structure

In designing the payband structure, determinations have to be made about:

- How career groups will be defined
- How many bands for each career group and how wide the bands
- How and on what basis the paybands will be adjusted
- Whether or not to include “steps” and/or “control points” within the bands

Table 7: Rating Levels and Associated Pay Increases at NIST

Performance Rating	Element Ratings
Exceptional Contributor	At least 8E; none below S
Superior Contributor	At least 6E; none below S
Significant Contributor	At least 3E; up to 2M
Contributor	Up to 3M
Marginal Contributor	4 or more M
Unsatisfactory	1 or more U

E – Exceeds expectations
S – Fully Successful

M – Minimally Meets Expectations
U – Unsatisfactory

Table 8: Performance-Oriented Payband System Design Issues

Determine Payband Structure	Determine Performance Criteria	Determine Rating System	Determine Funding Availability	Determine Pay Increases	Determine Elements of Review Process
Determine career groups	Determine performance elements	Determine rating levels	How will pay increase costs be limited?	Determine how rating levels translate into pay increases	What individuals/groups are involved in the process?
Determine paybands	Are the rating elements common across the organization?	Does overall performance get rated?	Determine how general pay increase monies will be allocated	Is current salary taken into account in the pay-setting process?	Will employees do a self-assessment?
On what basis will bands be adjusted?	Should the elements be weighted?	Should there be constraints on number/proportion of high ratings?	Determine basis for base pay increase vs. bonus pool split	Is organizational performance taken into account in the pay-setting process?	What degree of transparency will be provided?
Will the bands include steps and/or control points?	Determine relative focus on objectives vs. competencies	Does the same rating translate into the same pay increase across the pay pool or organization?			

The National Academy of Public Administration (NAPA) defines career “paths” (or groups) as “occupations with similar career progression patterns.”²⁶ Cheryl Whitaker was responsible for designing a payband structure for those in administrative, professional, and support occupations at GAO. According to Whitaker, the first task was to make sure all the positions were properly classified. The positions were then grouped into eight job families. The job families were then grouped together into three pay plans: “Administrative Clerical,” which includes what Whitaker calls “one-grade interval jobs”; “Program and Technical Specialist,” which includes diverse jobs with similar roles and responsibilities such as budget analyst, human resources, and IT specialists; and “Managerial and Supervisory.”

Although several of the systems reviewed here are not organized around career groups, those that are tend to have between three and five bands per group. NAPA (1995) recommends the following five bands: Trainee, Developmental, Full Performance, Expert & Supervisor, and Manager. At the Navy Demonstration Project (Table 3 on page 22), there are between four

and six paybands per group. In dividing each of their career groups into bands, Whitaker says, “We just had to look at what grouping seemed to work best for GAO in terms of level of responsibility and what gave people some growth.” Margaret Braley, director of performance and compensation at GAO, adds, “There is no science to it. You have to look at your career paths, your levels of responsibility, and group them in ways that treat people the same for pay and promotion purposes.”

GAO has learned the consequences of having an inappropriately designed structure. When GAO’s original payband system was created in 1989, the “Analyst” career group included three bands. Band II combined GS grades 13 and 14 (see Table 9). Subsequent review of the system beginning in 2001, however, revealed differences in roles and responsibilities within this band that should be differentiated by different pay ranges. The result was a process of segregating Band II employees into two groups based on a consideration of several criteria, including employees’ roles and responsibilities and performance. Assignments involving the consistent leadership of

large, complex, highly matrixed, sensitive, and high-risk engagements were considered reflective of the Band IIB (i.e., the higher) level.

According to Comptroller General David Walker, Band IIB employees “are expected to have recurring leadership responsibilities and they are expected to be able to deal with a full range of risk engagements with the understanding that they are going to be doing primarily medium- and high-risk engagements. The people at the IIA occasionally may have the opportunity to lead an engagement, but realistically it’s going to be more lower-risk engagements.”

Walker calls the process of restructuring the band “unscrambling an egg.” The salary growth of those employees whose salaries were in the IIB range but whose responsibilities and/or performance placed them in Band IIA will be limited. As the Band IIA pay range is adjusted upward over time, the salaries of these employees will eventually fall within the parameters of the pay range.

FDIC has the same number of bands in its “corporate grade,” non-managerial pay system as the GS system has grades. On the surface this would appear to defeat one purpose of paybanding, which is to avoid having to make fine distinctions between job responsibilities at different levels. However, since FDIC has to negotiate with its union over pay, the multi-level structure serves as protection against excessive salary growth. Chris Aiello, CHCO at FDIC, comments that, “with paybanding there are always issues of efficiency in terms of what it’s going to cost the organization. Unless you have controls in place, you’re going to find your organization is going to end up paying a lot more for the same work.”

Payband system designers also need to determine the basis on which the bands will be adjusted. The most common practice among the organizations included in this study is simply to adjust the bands upward each year by the amount of the government-

wide general pay or “comparability” increase. In general, the salaries of all employees other than those whose performance on a single element or overall is found to be unsatisfactory are adjusted upward by the same amount.

There are several exceptions to this approach. At the IRS, individual manager salaries are not automatically adjusted upward with the bands. FDIC adjusts the bands for its non-managerial personnel intermittently upon the expiration of its compensation agreement with the union. In determining how much to adjust the bands, FDIC tries to remain competitive with the other financial agencies. The salaries of the individual employees are not adjusted with the bands unless they are at the very bottom of the band, in which case their salaries are adjusted upward to keep them within the band. At NSPS and GAO, the emphasis is on adjusting individual bands according to the market level for each occupational group.

Control points represent a level within the band above which only high performers can progress. Of the agencies reviewed here, only GAO and the Navy Demonstration Project have conventional control points. Employees in Band IIB of the Analyst, Specialist and Investigator occupational group can progress above the control point (which is set at approximately the 75th percentile of the range) only if their performance is in the top 50 percent of their pay group. Donald Summer, assistant to the director of human resources at the Naval Warfare Center Weapons Division, describes how the control point works within their system:

The supervisors on the Performance Review Board have to make an evaluation about whether or not the employee and the position are situated and performing the level of work and the scope of work with the impact and the potential to move on into the upper part of that band. In order to move across the band, you have to have a rating above fully successful. It’s basically a checkpoint, a decision point to say it is appropriate to move this position and this person into the upper ranges of the band.

The other agencies have different mechanisms to slow progression at the upper range of the bands. For example, both FDIC (for managerial personnel)

Table 9: GAO—Pay Plans and Band Levels

Occupational Group	Band Level	Former GS Grades
Analyst, Specialist and Investigator	I	(7-12)
	IIA & IIB	(13-14)
	III	(15)

and AFRL take current salary into account in the pay-setting process. The effect is to limit the salary growth of those who may be contributing at a high level but whose salaries already reflect those contributions. The Department of Commerce Demonstration Project sets ranges of pay increases allowable for each level; the limit for those at higher levels is lower than that for those at lower levels.

Determine Performance Criteria

The determination of performance criteria involves decisions about:

- How many performance elements and what types
- Whether all employees should be assessed according to the same elements
- Whether elements should be weighted
- What should be the relative focus on “objectives” versus behaviors

The policies of the organizations included in this study on rating criteria vary widely. Some organizations such as GAO, the IRS, and AFRL require that all employees be assessed according to the same criteria. For example, the rating criteria or “factors” at AFRL include:

- Technical problem solving
- Communications/reporting
- Corporate resource management
- Technology transition/technology transfer
- R&D business development
- Teamwork and leadership

Michelle Williams, director of AFRL’s demonstration project, says that the six factors “were based on what the laboratory felt it needed of its employees to be a successful laboratory. If all of its employees achieved these things, then the laboratory had the expertise it needed to be successful. That is why we want everyone to operate in all of these different areas.”

Having a common set of rating elements is arguably more equitable since all employees are assessed according to the same criteria. A potential liability, however, is that supervisors are not allowed to

determine on what basis each employee should be assessed. Ron Hunt, deputy chief of the Assessment and Demonstration Division of the Munitions Directorate at AFRL, does not find that having set factors limits his discretion as a supervisor. Hunt says, “Our interpretation of the six tends to be very broad. If there was a certain type of activity or a performance attribute, the supervisor will find a way to fit it into a certain factor area if it is meaningful to him.”

A second potential liability of this approach is that the six factors may not be relevant in all job situations. Hunt says that when confronted with the six factors, younger employees often say, “I have absolutely no idea of how to do any of that.” However, adds Hunt, the benefit of having the factors is that they convey to the employee:

for you to grow professionally within our system, you are going to have to learn how to do these things. You are going to have to learn what we mean by technology transition and what it is, you are going to have to learn what we mean by R&D business development, and you are going to have to get involved with it to grow professionally. It really stretches them out; it forces them into activities that they otherwise wouldn’t be inclined to get involved with, because they know it’s going to have some bearing on their ratings from one year to the next.

GAO also rates the members of each career group at the same band level according to the same competencies. For example, all Band I employees in the Analyst, Specialist, and Investigator group are rated according to:

- Achieving results
- Maintaining client and customer focus
- Thinking critically
- Collaborating with others
- Presenting information orally
- Presenting information in writing

At the Band IIA level, employees are rated on the additional competency of “leading others.”

At the Band IIB level and at Band III, employees are rated on the additional competency of “developing people.”

GAO’s Mihm says that although the system appears rigid on the surface, it does allow for the consideration of the particulars of an individual’s job: “The customization takes place in the discussion between the supervisor and the employee about what would be the specific evidence of performance for that individual given the engagement they are working on and given the opportunities that the individual has.”

Some organizations, such as the Department of Commerce Demonstration Project and NIST, take the opposite approach by allowing the supervisor to identify the rating elements for each employee. Bob Watters, chief of the Measurement Services Division at NIST, says that major job functions and responsibilities become the basis of the critical elements. Despite the flexibility that the system affords, according to NIST CHCO Kirkner, supervisors tend to use the same or similar elements for large groups of employees. For example, research scientists are commonly assessed according to:

- Research planning
- Research implementation
- Reporting results
- Professional development

An advantage of having a more flexible system is that a division that is not responsible for conducting

research can customize the rating elements to its needs. For example, Watters’ division is responsible for the sale of products developed by NIST. Says Watters, “We are in service delivery, and there really is a lot of job differentiation.” There is also the opportunity for a supervisor to introduce an element that addresses divisional priorities. For example, Watters rates each of his employees on an element relating to organizational excellence and improvement according to the Baldrige criteria, which he has made a priority. Dr. Harry Hertz, director of the Malcolm Baldrige Quality Program at NIST, has structured his unit as a self-directed team. The rating elements for his employees include:

- Projects you are leading on your home team
- Projects that you are supporting on your home team
- What you are doing in support of other teams
- Individual assignments and personal development
- One rating based on 360 feedback

A second issue is whether and to what extent different weights should be assigned the various rating elements. Where weighting is allowed, the question arises of who does the weighting. At NIST, each supervisor is allowed to determine the relative weight assigned each rating element. At AFRL, different weights are assigned different rating elements for different job groups, as depicted in Table 10, but the weightings apply across the organization.

Table 10: Rating Element/Factor Weights at the Air Force Research Laboratory (AFRL)

Job Category	Technical Problem Solving	Communications/ Reporting	Corporate Resource Management	Technology Transition/ Transfer	R&D Business Development	Teamwork and Leadership
Supervisor and Manager	1.0	1.0	1.0	1.0	1.0	1.0
Programs S&E	1.0	1.0	1.0	0.8	1.0	1.0
Program Manager	1.0	1.0	1.0	1.0	1.0	1.0
Support S&E	1.0	1.0	1.0	0.5	0.3	1.0
Bench-Level S&E	1.0	1.0	0.7	0.6	0.5	1.0

S&E = Scientists and Engineers

A problem with AFRL's approach, according to Demonstration Project Director Williams, is that once weights have been assigned, AFRL has found it "impossible" to change them. "Once you set them," says Williams, "it is very difficult to come up with a valid argument as to why you want to change them."

GAO does not weight the different rating elements. According to Mihm, GAO's managing director of strategic issues, GAO was advised by the consultant that helped design its appraisal system that weighting the elements would not significantly change overall rankings. Says Mihm, "People who do well in critical thinking and well in writing have a tendency to do well overall. I have seen very few people who were just outstanding in those two areas and then fell off the cliff in other areas."

As a consequence of the Government Performance and Results Act and related measures, a great deal of attention has been directed at setting organization goals, identifying appropriate measures, and creating a "line of sight" for individual employees between their work and that of the organization as a whole. In a performance appraisal/pay-for-performance context, there has been a corresponding emphasis on identifying specific objectives according to which each employee can be assessed.

DoD's new performance management system is explicitly centered around such objectives. The instructions provided DoD supervisors in identifying job objectives for employees are to "draw a line of sight between your work and the organization's goals and focus on results." Supervisors have been told that three to five such objectives should serve as the basis of their performance plans.

At DoD, as in most appraisal systems, however, there is an attempt to find a balance between objectives, sometimes called "commitments," and day-to-day behaviors, sometimes called "responsibilities" or "competencies." At DoD, each objective is assessed according to seven "contributing factors," which take the form of competencies:

- Communication
- Cooperation and teamwork
- Critical thinking

- Customer focus
- Leadership
- Resource management
- Technical proficiency

At DoD, objectives are the primary rating elements, with competencies subordinate to objectives. At GAO and NIST, competencies are the primary rating elements and objectives secondary. According to NIST CHCO Kirkner, supervisors at NIST are instructed to identify "activities" and "outputs" and also "success measures" for each rating element/competency. Says Kirkner, "It's those activities and results that we try to align with organizational goals and objectives." The IRS explicitly balances competencies and objectives. The overall rating assigned managers is based on equal parts "responsibilities" including leadership, employee satisfaction, customer satisfaction, business results, and EEO, and "commitments," which link upward to organizational objectives.

Determine Rating System

Each of the systems reviewed here includes a process for rating the performance of each employee relative to his or her peers. Design issues that arise include:

- How many rating levels/categories
- Whether to rate overall performance and/or individual elements
- Whether and how limits should be placed on the number of high ratings issued
- Whether the same rating will translate into the same percentage pay increase across the organization

The number of rating levels is important in those systems where the rating level automatically converts to a specific pay increment. A key objective is to recognize top performers as such. If there are too few levels, the top performers get lumped in with others who are not top performers; if too many, supervisors may succumb to tendencies to dampen the degree of variation among employees. The implicit consensus among the organizations surveyed here is that somewhere between five and six levels makes the most sense. NSPS, IRS, and the Navy Demonstration Project all have five rating

Table 11: Performance Rating Levels at Six Agencies (“Anchor” Level in Bold)

China Lake (5 Levels)	NIST (6 Levels)	IRS (5 Levels)	FDIC (3 Levels)	NSPS (5 Levels)	GAO (4 Levels)
Performance that is demonstrably exceptional	Exceptional contributor	Outstanding		Role model	Role model
Quality performance that exceeds fully successful	Superior contributor	Exceeded		Exceeds expectations	Exceeds expectations
	Significant Contributor				
Fully successful	Contributor	Met	Meets expectations	Valued performer	Meets expectations
Below fully successful	Marginal contributor	Minimally satisfactory	Minimally satisfactory	Fair	Below expectations
Substantially below fully successful	Unsatisfactory	Not met	Does not meet expectations	Unacceptable	

levels; NIST has six. Each has two levels below “fully successful” and either two or three levels above “fully successful” (see Table 11).

GAO deliberately went with four levels with only one level below “meets expectations.” GAO’s Braley, director of performance and compensation, comments: “The concept behind our system is that we are expecting all our employees to be meeting expectations, and meeting expectations is a very satisfactory level of performance. If you’re not meeting our expectations, there are not two gradations or levels of not doing the job.”

The Department of Commerce Demonstration Project rates employees on a scale of between 40 and 100. That approach had been used by NIST but was discarded in favor of a system with six rating categories. Watters, chief of NIST’s Measurement Services Division, says that the fine distinctions in rating scores that resulted became “artificial.” Watters prefers the new system of what he calls “binning” his employees into the six rating categories. He says that there is a high degree of consensus on which bin or category most employees belong to, so that discussions with supervisors can center primarily on what Watters calls the “borderline cases.”

It was partly out of concern with these borderline cases that GAO adopted its current system, in which ratings on each of an employee’s competencies are averaged. The resulting average is converted to a standardized rating score that reflects the relationship of the employee’s rating average to that of the employee’s pay group. This allows GAO to calculate pay on a relative scale and, as Whitaker notes, it allows them to avoid the “cliff effect.” When utilizing a categorical pay placement mechanism, an employee who falls just below the cutoff for a rating category may receive a reward considerably below someone whose rating is just slightly better. “They are really unhappy,” says Whitaker. “They have just missed this cutoff, and this guy over here who is pretty much equal to him is getting a lot more money than he is.”

GAO’s system produces a standardized rating score for each employee but no overall categorical rating. Braley, GAO’s director of performance and compensation, says, “The idea of categorizing somebody as A, B, C, or D is not very conducive to performance growth. If we focus people on the standards and work activities, that gives people a lot of incentive to improve all the aspects of performance.”

Both the Department of Commerce Demonstration Project and AFRL also have numerical rather than categorical overall ratings. In both systems, ratings on individual elements roll up into the overall rating so that no separate judgment on overall performance is required. Placing emphasis on the individual elements in this way arguably introduces a higher degree of rigor to the system: It is easier to set and enforce standards for performance on individual elements than for overall performance.

Ratings “inflation” has long been an issue within the federal government. Data compiled by Paul Light²⁷ shows that in 1996, 56 percent of all GS 13 and 15 managers and supervisors were rated in the top of five rating categories. Pay for performance presumes that “meaningful distinctions” will be made in levels of employee performance so that salary dollars can be targeted at the truly top performers. Several agencies included in this study have had some success in this regard. At the IRS, less than 15 percent of managers are rated in the top category, a level that is consistent with what several private firms use as a target (see Table 12).

The IRS achieves this result by use of a “point budget” on managers that places hard limits on the number of high ratings that can be granted. However, this approach has been controversial within the agency. In a 2002 evaluation of the senior manager payband, the Hay Group reported as follows:

One of the strongest and most passionate themes among SMs [senior managers] was that the rating point budget unfairly led to serious constraints on how ratings were made. They felt that some who deserved Outstanding ratings were not given those

ratings because there are a limited number of high ratings that can be given.... Even so, most executives agreed to the need for a rating budget in order to properly recognize high performers.²⁸

The Performance Review Board for each division reviews the ratings of subordinate managers to determine the rating standards and to ensure consistency. In many instances, according to officials, divisions end up “turning back points” as a result of having fewer “outstanding” and/or more “met” ratings than the point budget system allows. Divisions may also request additional points if organizational performance so warrants.

The mechanism to prevent ratings inflation and to encourage managers to make meaningful distinctions at both NIST and the Navy Demonstration Project is less direct than at the IRS. At these agencies the forcing mechanism is the pay pool that is allocated to each unit. With a direct link between the rating and the pay increase at both units, managers are limited in the number of high ratings that can be awarded by the pay pools that are allocated. Pay pool managers at several agencies including AFRL and NIST address issues of ratings inflation by convening meetings of their subordinate supervisors at which performance expectations and rating standards are discussed. Watters, NIST’s chief of measurement services, says that this has worked well within his unit: “One group would come in to me with grade inflation, but because I involve them in the decision now, they know it, they’ve adjusted, they’ve leveled themselves. This time around when people came in, I found that the grade inflators had learned their lesson.”

For equity and employee acceptance purposes, there are advantages to having a system in which the same rating translates into the same pay increase (percentage-wise) across the organization. This has been a feature of the the Navy Demonstration Project system and has arguably contributed to the success of that system. The IRS also provides the same percentage increase to all managers receiving the same rating. NIST changed its system in part because its prior approach did not provide for this type of equity: Pay increases associated with a particular rating score varied widely across units. GAO’s standardized rating score is calculated on the basis of how the employee’s performance compares

Table 12: Performance Rating Distribution—IRS Managers

Year	Outstanding	Exceeded	Met	Less Than Met
2005	14%	56%	29%	1%
2004	13%	56%	30%	1%
2003	13%	54%	33%	0
2002	11%	54%	35%	0
2001	11%	53%	36%	0
2000	13%	58%	28%	0

to those of others in his or her pay group. As a consequence, individuals with similar ratings in different pay groups could receive different pay increases.

Equity also, however, implies that a particular rating score means the same thing across the organization; that those receiving the same rating in different units actually perform or contribute at the same level. Ratings consistency can be achieved in different ways. Several of the agencies included in this study use boards of senior managers to review ratings across units. GAO's system, on the other hand, does not assume or require rating consistency. The standardized rating score on which each employee's pay increase is based is a function of relative performance within each employee's work group.

Determine Funding Availability

The intent is that payband systems cost no more in aggregate than does the GS. Design issues include:

- How constraints will be placed on pay increase costs
- How general pay increase monies will be allocated
- What proportion of annual increase is granted as a bonus versus base pay increase

A key issue for agencies with payband systems is how to ensure that these systems are cost neutral, that is, how to ensure that salary costs do not exceed what they would have been under the GS. In its 1993 report on paybanding, OPM states, "The most important factor for any organization considering the implementation of broad bands is the need to control cost."²⁹ OPM found that the paybanding projects at the Navy Demonstration Project and NIST were not cost neutral. Salary costs at the Navy Demonstration Project were 2.35 percent higher than at the control site, and those at NIST were estimated to be 4 percent higher than they would have been under the GS. At the Navy Demonstration Project, much of the difference was attributed to the cost of converting employees from the old to the new pay system. According to OPM, "Mean salaries at the demonstration labs did not increase at a faster rate than at the control sites during the 10-year period following project implementation."³⁰

Salary discipline at the Navy Demonstration Project is achieved by allocating a specific pay pool amount to each unit. The amount set aside for base pay increases has remained constant over the life of the project at 2.4 percent of total salaries, which is approximately the amount that was spent per year on within-grade increases, quality step increases, and promotions prior to paybanding. The bonus pot has remained constant at .8 percent of total payroll.

The pay pool approach is also in place at NIST, DOC, AFRL, DoD, and for managerial employees at FDIC. At AFRL, the pay pool amount has fluctuated between 2.1 and 2.4 percent of total salaries based on a determination of what the organization can afford. Pay pool levels also fluctuate at NIST. For 2006, the director determined that the amount available for base pay increases would be 2.12 percent of total salaries and for bonuses 1.3 percent of total salaries.

GAO does not use pay pools. Adjustments to ensure that salary costs stay within budgeted amounts occur only at the top. The comptroller general determines both the "annual adjustment" analogous to the general pay increase received by GS employees and the "budget factor," which figures prominently in the calculation of individual performance-based compensation increases.

GAO's system was designed with cost considerations in mind. Consistent with a broader concern relating to the federal government's fiscal condition, officials anticipate that the government will be subject to intense fiscal pressures in the near future. There are questions whether the GS, with its guarantees of annual increases and step increases, will be viable in such an environment. GAO's Mihm observes: "We really think that we are at the forefront of where other agencies are going to end up in perhaps the short but certainly the intermediate term. They are just not going to be able to keep affording these increases. At some point, Congress may take action on it statutorily."

The comptroller general has the authority under 31 USC 732 (c) to determine the amount of the annual adjustment provided to GAO employees as well as the budget factor associated with performance-based compensation. This allows GAO to keep all pay adjustments within available resources and, in the

event of significant budgetary reductions, would permit GAO flexibility to avoid layoffs. An advantage is that no changes are required to the mechanics of the rating and pay-setting processes. This discretion provides the comptroller general with a high level of flexibility to respond to changing budget circumstances without disrupting subordinate processes.

Allocating cost constraints through a pay pool mechanism is potentially disruptive to the system. At agencies where the rating is automatically converted into a specific pay increase and the pay increase amount is fixed, the only way to cut costs is to reduce individual ratings, which threatens the integrity of the rating process. Both NIST and the Navy Demonstration Project could adjust the “i” to accommodate budget constraints. However, the top performers who receive 5 x “i” as a base salary increase under NIST’s system would be the biggest losers from a reduction in “i.” DoD faces a similar circumstance. As pay pool amounts are adjusted down, absent changes in rating practices, the share value will get watered down and fewer resources will go to top performers.

Issues relating to how the general pay increase monies are allocated are addressed in the section on performance orientation, above. The primary issue is whether these monies are allocated to everyone as is traditional under the GS or whether they are allocated on the basis of performance. As noted earlier, in most of the systems reviewed here, virtually all employees end up getting the general pay increase. That will also be the case at the IRS for 2007, since the commissioner has determined that everyone with a “met” rating will get at least the equivalent of the general pay increase. However, that is discretionary and could change from year to year, depending on budget circumstances. At GAO, the comptroller general has deliberately skewed the pay increase equation to give a greater weight to performance. The annual adjustment of 2.6 percent for 2006 is lower than the general pay increase of 3.44 percent for GS employees, but the difference is made up in part by a larger allocation for performance-based compensation.

The FDIC’s system for non-managerial personnel is very different from its system for managerial personnel. The pay increases for bargaining unit personnel for each of the different pay groups are locked in pursuant to the compensation agreement reached

with the union. For managerial personnel, however, the chairman determines the funding pool available for base pay increases and bonuses each year. For 2006, 4 percent of total salary costs were available for base pay increases and 3 percent of total salary costs for bonuses. The levels are set in part on the basis of overall organizational performance; if the organization did well relative to its objectives, the amounts will be higher than if the organization did not do well.

DoD’s system allows the secretary of defense a great deal of discretion in deciding how funds will be spent, although the law under which the system was authorized specifies that at least as much should be available for salary increases under NSPS as was available under the GS. According to Shirley Scott, director of human resources for NSPS, traditionally, 2.26 percent of payroll was spent on within-grade increases, quality step increases, and promotions. The system has been set up so that some or all of the general pay increase monies can be used to adjust individual bands consistent with market factors or to supplement the funding available for performance-based increases. There is also discretion in terms of how pay increase monies are split between base pay increases and bonuses.

A third funding issue has to do with bonuses. A number of agencies offer bonuses to managers and employees. For example, as noted above, at the Navy Demonstration Project, .8 percent of payroll is allocated for bonus purposes. At the Navy Demonstration Project, those with fully or highly successful ratings can get bonuses of up to four times “i” (where i is roughly 1.5 percent of salary). At the IRS, those with “exceeded” or “outstanding” ratings must get bonuses; those with “met” ratings do not receive a bonus except under extraordinary circumstances. Bargaining unit employees in pay groups 1 and 2 at FDIC receive a 1 percent bonus in addition to base pay increases of either 5 or 3.2 percent respectively. In these agencies, bonuses are regarded as a supplement to base pay increases except for those at the top of the pay scale, for whom the entire performance-based increase comes as a bonus.

Although the size of the bonus pot has important cost implications, more important from the design perspective is whether and to what extent bonuses can be substituted for base pay increases. The issue of whether pay increases are granted as bonuses or

base pay increases has obvious budget implications. Most pay-for-performance systems reviewed here award base pay increases on the basis of performance over the previous rating cycle. There is a disconnect to the extent that the reward is permanent even though the achievement is temporary. One official describes this as “the gift that keeps on giving.” Further, since the increase gets built into the base, each subsequent year’s increase becomes more costly. To the extent that performance is rewarded in the form of a bonus, it is rewarded only once, and to the extent that less salary money is eaten up by base pay increases, more would be available for bonus purposes.

GAO is the only agency to tackle this issue head on. In GAO’s system, the higher an employee is in the band, the greater the proportion of the annual increase that is granted as a bonus rather than as a base pay increase. GAO’s Braley says that this policy “has not been well received” at GAO. Partly as a result, the policy has been modified so that no less than 50 percent of the increase is granted as a base pay increase regardless of where the employee is in the band.

At NIST, 2.2 percent of payroll was allocated for base pay increases and 1.3 percent of payroll for bonuses in 2006. However, according to NIST CHCO Kirkner, pay pool managers can shift funds from the “base pay increase pot” to the “bonus pot.” According to Kirkner, many managers do this in a calculated way during lean budget years to hold down long-term costs. NSPS allows for a similar shifting of funds between pots.

Determine Pay Increases

A critical decision in the design of any pay-for-performance system is how pay increases are determined. Three key issues include:

- How performance ratings translate into pay increases
- Whether current salary should be taken into account in the pay-setting process
- Whether organizational performance should be taken into account in the pay-setting process

In substantial part, the issue of how performance ratings translate into pay increases is that of “hardwiring,” discussed above. In hardwired systems, the

translation is mechanical in that a specific rating results in a specific pay increase. Hardwiring can contribute to equity to the extent that everyone is treated the same, and also to employee acceptance to the extent that rating results are known in advance. The Navy Demonstration Project is the most hardwired of those included in this study: Specific percentage increases are associated with specific ratings (see Table 3 on page 22).³¹ Those in the top or “outstanding” rating category can receive either three times “i” or four times “i.” Those rated as “fully successful” may receive “i” plus the general pay increase or only the general pay increase. NIST’s system is similar except that at NIST the “i” in the pay formula (see Table 4 on page 23) is variable. Employees know approximately but not precisely what size pay increase to associate with a particular rating based on history.

NSPS is marginally less hardwired than the Navy Demonstration Project. In NSPS, a particular rating translates into a range of “shares” such that separate decisions are required on the rating and the number of shares. Unlike the Navy Demonstration Project, however, where the value of an increment is stable at approximately 1.5 percent of salary, the share value at DoD varies. The share value is determined by dividing the total pay pool by the amount of shares granted. Share value thus could vary from year to year as well as from pay pool to pay pool.

FDIC’s systems (managerial and non-managerial) are the least hardwired of the eight reviewed here. For non-managerial personnel, there is a two-level, pass-fail performance appraisal system. Since virtually all employees are rated “pass,” pay group determination is done via a separate appraisal-like process in which employees are rated from 1 to 5 on a series of competencies such as “technical skills” and “analytical skills.” There is also a section on the form to recognize an employee’s “corporate contribution” with regard to “business results,” “competency,” “working relationships,” and “learning and development.” FDIC CHCO Aiello says that ratings on the individual elements are not “dispositive” of the pay group to which the employee is assigned. Employees can be placed in a pay group on the basis of performance as rated according to the competencies or on the basis of contribution or any combination thereof. Aiello says that FDIC had a more hardwired system in the past but that it “led

to conversations that focused on the wrong things,” such as how to get the next tenth of a rating point on the evaluation scale.

AFRL has what is called a contribution-based pay system. Pay increases are based on one’s overall contribution to the organization rather than on one’s recent performance. The pay increase determination is made on the basis of contribution relative to current salary. If one is contributing at a level above that which would be predicted by the standard pay line (see Figure 4 on page 25) than one is due a performance-based pay increase. If one is contributing at the predicted level, no performance-based pay increase would be forthcoming. An individual who contributes at a high level but who is also highly paid may not qualify for an increase. In most performance-based systems, in contrast, such an individual would likely qualify for an increase. Williams, director of AFRL’s demonstration project, says, “We can give a high score, but we don’t have to give that huge increase for every top person. We can control the increases because of the target pay.” Taking salary into account in this manner tends to slow salary growth within AFRL’s system.

Several agencies including the IRS and FDIC explicitly take organizational performance into account in making salary decisions for managerial personnel. Within each organizational division at the IRS, rating decisions are in part a function of how the unit performed relative to its objectives. Former IRS CHCO Beverly Babers says that the Performance Review Board, composed of senior officials within each unit, “looks at the organizational performance to see if that reflects the points assigned by each manager. So, for example, if an organization did top-notch, they could have a lot of ‘outstandings,’ but if an organization didn’t meet goals, then they would probably have a lot more ‘mets.’ ”

At the FDIC, the chairman makes a determination of both the size of the pay pools available for managerial raises and bonuses and the range of permissible increases on the basis of overall organizational performance. In 2006, the pool for base pay increases was set at 4 percent of total salaries and the bonus pool at 3 percent of total salaries. Managers could receive a base pay increase of between zero and 10 percent. Stan Ivie, director of the Dallas FDIC regional office, said that the higher the manager is

in the organization, the more weight given organizational performance in the pay-setting process.

Determine Elements of Review Process

Process issues include:

- Which groups and individuals are involved in the rating/pay increase determination process
- Whether employees do a self-assessment
- How transparent is the process with regard to outcomes

In all eight payband systems, first-line supervisors make the initial appraisal of performance/contribution. However, the systems vary in roles and responsibilities of officials at higher levels. At the Navy Demonstration Project and the IRS, Performance Review Boards composed of senior managers oversee the rating and pay determination processes. The boards make the final rating and pay increase decisions. At the IRS, the “point budget” for appraisal purposes is enforced at the division level.

The Navy Demonstration Project employs a two-stage rating process involving both the supervisor and the PRB. The first-line supervisor makes a determination as to which of three rating categories an employee is assigned—highly successful, fully successful, or less than fully successful—and typically recommends a rating and payout. The PRB then makes the determination as to which of two ratings those in the highly successful and less than fully successful categories are assigned. The boards are also responsible for enforcing the pay pool restrictions. At NIST, DOC, FDIC, and AFRL, pay pool managers serve in a similar role as do the PRBs at the Navy Demonstration Project and the IRS. Pay pool managers have final authority over ratings, base pay increases, and bonuses, and are responsible for enforcing pay pool restrictions.

AFRL’s pay-setting process features a series of meetings between managers at various levels to compare ratings and to ensure rating consistency. The managers make both “vertical” and “horizontal” comparisons between employees. First there is a comparison of ratings on a single factor such as technical problem solving; then there is a comparison of overall ratings for all the employees in the division. The purpose is to make sure that the rankings have face

validity and that nothing is out of kilter. This is done first at the division level among branch chiefs and then at the directorate level among division heads for direct report employees. The pay pool manager then looks at statistics for the entire organization to ensure comparability among the divisions.

Both GAO and FDIC are strong proponents of employee self-assessments. At FDIC, employees have a chance to review the supervisor's assessment of their "Total Performance" on the Pay-for-Performance Assessment document before it is finalized. The assessment form includes a block in which the employee can comment on the appraisal before it goes to the pay pool manager. CHCO Aiello says that it has been conducive to dialogue between supervisors and employees and has gone a long way to improve transparency and the sense that the process is fair. Aiello says that pay-for-performance-related grievances have dropped since the practice was instituted.

At GAO, each employee is encouraged to complete a self-assessment even prior to the supervisory assessment. Braley, director of performance and compensation, says that they consider it to be a best practice and adds, "It is an excellent starting point for performance discussions. It doesn't have the supervisor swooping down from on high and saying this is how I'm rating you. It allows them to see where the employee is coming from. It leads to more fruitful discussions."

Several agencies have introduced an element of transparency into their systems by, for example, posting the aggregate results of the rating and pay-setting process internally. For example, NIST posts the results of its ratings process on its intranet so that employees can see the distribution of ratings by career path and by organizational unit. Also available is the distribution of payments and bonuses. FDIC has a similar practice for its managerial personnel. At GAO, each employee is provided a statement of his or her total compensation for the year by category. For example, they are told how much they received as a result of the annual adjustment, performance-based compensation, awards, and even benefits. Comptroller General Walker says that part of the purpose is to "educate people as to where we are compared to the market."

Conclusion

The most important conclusion from this study is simply that virtually every payband system design choice involves trade-offs between objectives. The key challenge for designers is to develop a mix of design elements that both accommodates the organization's objectives and is internally consistent. For purposes of employee acceptance and system effectiveness, it is important that the integrity of the rating process be protected.

A second key point has to do with the cultural dimension of these systems. Although the emphasis here has been on the technical matters, one criterion for assessing pay system success is whether and to what extent the system works at a cultural level, whether it helps convey to employees a new set of values. It should not be presumed that this will happen simply by the fact of the system itself. Managers and employees need to be convinced that the emphasis on performance is more than just rhetorical, that performance considerations will be dominant in matters of not only pay but also placement, promotion, and budget. Key questions in this regard include the following:

- Is the performance appraisal process more than just a perfunctory annual exercise?
- Is performance discussed at other than just appraisal time?
- Does the head of the organization convey to employees the importance of performance?
- Does the system provide venues in which managers are encouraged to discuss performance issues among themselves—for example, with regard to what constitutes an “outstanding” or an “exceeds expectations” rating?

The process of designing a payband system can itself contribute to the creation of a performance-oriented culture. The design process represents a major organizational initiative that impacts all employees and hence provides opportunities for communicating new values—for example, by including employees on the design team and by making the process as transparent as possible. Acceptance of the new system can be promoted by soliciting input from all interested parties, by holding open meetings, and by posting meeting minutes on the intranet. Also, the rating and pay-setting process can include features conducive to dialogue between supervisor and employee over matters of performance, such as allowing the employee to complete a self-appraisal.

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Ms. Michelle Williams, Chief, Air Force Laboratory Personnel Demonstration Project, Directorate of Personnel, Air Force Research Laboratory, Department of the Air Force

Appendix: Paybanding System Structures

Table A.1: Naval Air Warfare Center Weapons Division (China Lake) Banding Structure

Career Groups	Bands	Approximate GS Grade Equivalent
Scientists, Engineers, and Senior Professional Staff	A	1-4
	I	5-8
	II	9-11
	III	12-13
	IV	14-15
Technicians	A	1-4
	I	5-7
	II	8-10
	III	11-12
Technical Specialists	A	1-4
	I	5-8
	II	9-10
	III	11-12
Administrative Specialists	A	1-4
	I	5-8
	II	9-10
	III	11-12
General	A	1-3
	I	4-5
	II	5-6
	III	6-7
	IV	8-9
	V	10-11

Degree of performance orientation: Low

Degree of managerial discretion: Low

Is the system market-based? No

Table A.2: National Institute of Standards and Technology Banding Structure

Career Groups	Bands	Approximate GS Grade Equivalent
Science and Engineering	I	1-6
	II	7-10
	III	11-12
	IV	13-14
	V	15
S&E Technician	I	1-4
	II	5-8
	III	9-10
	IV	11-12
	V	13
Administrative	I	1-6
	II	7-10
	III	11-12
	IV	13-14
	V	15
Support	I	1-2
	II	3-4
	III	5-6
	IV	7-8
	V	9-10

Degree of performance orientation: Medium

Degree of managerial discretion: Low

Is the system market-based? No

Table A.3: Department of Commerce Demonstration Project Banding Structure

Career Groups	Bands	Approximate GS Grade Equivalent
Scientific and Engineering	I	1-6
	II	7-10
	III	11-12
	IV	13-14
	V	15
Scientific and Engineering Technician	I	1-4
	II	5-8
	III	9-10
	IV	11-12
	V	13
Administrative	I	1-6
	II	7-10
	III	11-12
	IV	13-14
	V	15
Support	I	1-2
	II	3-4
	III	5-6
	IV	7-8
	V	9-10

Degree of performance orientation: Low

Degree of managerial discretion: High

Is the system market-based? No

Table A.4: Air Force Research Laboratory Banding Structure

Career Groups	Bands	Approximate GS Grade Equivalent
	There is no band as such. Everything is measured relative to the Standard Pay Line.	
Scientists and Engineers	Level 1	7-11
	Level 2	12-13
	Level 3	14
	Level 4	15

Degree of performance orientation: Medium

Degree of managerial discretion: High

Is the system market-based? No

Table A.5: Internal Revenue Service Banding Structure

Career Groups	Bands	Approximate GS Grade Equivalent
Senior Manager	Senior Manager	14-15
Department Manager	Department Manager	11-13
Frontline Manager	FM-5	5
	FM-6	6
	FM-7	7
	FM-8	8
	FM-9	9
	FM-10	10
	FM-11	11
	FM-12	12
	FM-13	13
	FM-14	14
FM-15	15	

Degree of performance orientation: Medium

Degree of managerial discretion: Low

Is the system market-based? No

Table A.6: Government Accountability Office Banding Structure

Career Groups	Bands	Approximate GS Grade Equivalent
Analysts, Specialists, and Investigators (excluding special rates)	I	7-12
	IIA	13
	IIB	14
	III	15
Attorney	I	12-13
	II	14
	III	15
Administrative	I	3-7
	II	8-9
	III	10-11
	IV	12
Program & Technical Specialists (non-IT)	I	7-11
	II	12-13
	III	14
	IV	15
Managerial & Supervisory (non-IT)	I	13-14
	II	15

Degree of performance orientation: High

Degree of managerial discretion: Low

Is the system market-based? Yes

Table A.7: Federal Deposit Insurance Corporation (Managers) Banding Structure

Career Groups	Bands	Approximate GS Grade Equivalent
Executive Managers	EM - I	NA
Corporate Managers	CM - I	NA
	CM - II	NA

Degree of performance orientation: Low

Degree of managerial discretion: High

Is the system market-based? No

Table A.8: Federal Deposit Insurance Corporation (Non-managers) Banding Structure

Career Group	Bands	Approximate GS Grade Equivalent
Corporate Grade	CG-1	1
	CG-2	2
	CG-3	3
	CG-4	4
	CG-5	5
	CG-6	6
	CG-7	7
	CG-8	8
	CG-9	9
	CG-10	10
	CG-11	11
	CG-12	12
	CG-13	13
	CG-14	14
	CG-15	15

Degree of performance orientation: Medium

Degree of managerial discretion: Medium

Is the system market-based? No

Table A.9: National Security Personnel System Banding Structure

Career Groups	Bands	Approximate GS Grade Equivalent
Standard		
Professional/Analytical	1	5-11
	2	9-13
	3	13-15
Technician/Support	1	1-6
	2	7-10
	3	11-12
Supervisor/Manager	1	7-11
	2	12-14
	3	14-15
Scientific and Engineering		
Professional	1	5-11
	2	9-13
	3	14-15
Technician/Support	1	1-6
	2	7-10
	3	11-12
	4	12-13
Supervisor/Manager	1	7-11
	2	12-14
	3	13-15

Career Groups	Bands	Approximate GS Grade Equivalent
Medical		
Physician/Dentist	1	12-15
Professional	1	5-11
	2	9-14
	3	13-15
Supervisor/Manager	1	7-11
	2	12-14
	3	14-15
Protective Services		
Investigative	1	5-11
	2	9-13
	3	13-15
Fire Protection	1	1-6
	2	7-10
	3	11-12
	4	12-14
Police/Security Guard	1	1-6
	2	7-10
Supervisor/Manager	1	7-11
	2	12-14
	3	14-15

Degree of performance orientation: Medium
Degree of managerial discretion: High
Is the system market-based? Yes*

**This part of the system has not yet been implemented.*

Endnotes

1. For purposes of this report, the terms “paybanding” and “broadbanding” are considered interchangeable.
2. The Navy Demonstration Project was made permanent pursuant to Public Law 103-337 in 1994.
3. Then the General Accounting Office.
4. The law required the IRS to bargain with the employee union over the specifics of any system involving bargaining unit personnel. To date, the IRS has implemented paybanding for managerial personnel only.
5. This figure is taken from the National Academy of Public Administration. 2003. *Broadband Pay Experience in the Private Sector*. Washington, DC: National Academy of Public Administration.
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10. For those in the bottom category, a Problem Solving Team (PST) is assigned to work with the supervisor and employee to put together a plan to review the deficiencies that have been identified in the performance assessment and to decide on a course of action that will correct them.
11. Although IRS Performance Management System guidance directs that commitments be jointly developed between a manager and an employee.
12. B. Schay. 1996. Broadbanding in the Federal Government: A 16 Year Experiment. *ACA Journal*, 5(3): 32–43.
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17. *Ibid.*, p. 18.
18. Booz, Allen, Hamilton. 2006. Department of Commerce Personnel Management Demonstration Project Evaluation Year Seven Report. McLean, VA: Booz, Allen, Hamilton.
19. *Ibid.*
20. Air Force Research Laboratory. 2006. Air Force Personnel Demonstration Project 9th Cycle CCS Results.
21. Hay Group. 2002. Internal Revenue Service Senior Manager Payband Evaluation. First Year Report.
22. *Ibid.*, p. 22.
23. *Ibid.*
24. U.S. Government Accountability Office. 2005. Human Capital: Implementing Pay for Performance at Selected Personnel Demonstration Projects.
25. Donald Summer, assistant to the director of human resources at the Navy Air Warfare Center Weapons Division, comments as follows: “At China Lake, the funds are assigned as a guideline. If a supervisor believes they do not have enough to appropriately rate their employees, they make their case for additional funds to the PRB. If the

PRB concurs and can accommodate the request within their overall guideline, it is granted. If necessary, the PRB endorses the request and forwards it to higher management for review and approval. This safeguards both the PRB process and the integrity of the individual rating.”

26. National Academy of Public Administration. 1995. *Modernizing Federal Classification: Operational Broad-Banding Systems Alternatives*, p. 13.

27. P. Light. 1999. *The True Size of Government*, p. 95

28. Hay Group. 2002. *Internal Revenue Service Senior Manager Payband Evaluation. First Year Report*, p. 18.

29. Office of Personnel Management. 1993. *Broad-Banding in the Federal Government: Management Report*, p. 14.

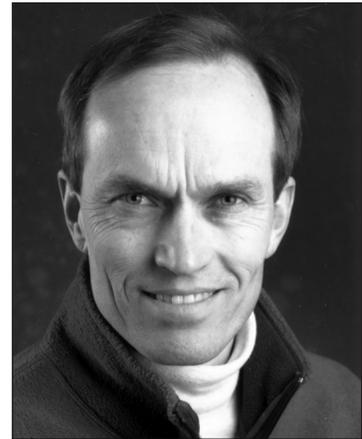
30. *Ibid.*, p. 15.

31. Officials at the Naval Air Warfare Center at China Lake state that they have the authority to adjust the “i” but have, to date, maintained a constant “i” as a commitment to the workforce.

ABOUT THE AUTHOR

James R. Thompson is Associate Professor in the Graduate Program in Public Administration at the University of Illinois–Chicago, where he teaches courses in public personnel management, information technology, and public management.

His primary research interests are in the areas of personnel management, civil service reform, administrative reform, and organizational change in the public sector. He is the co-editor of *Transforming Government: Lessons From the Reinvention Laboratories* (1998) and the author or co-author of several articles addressing issues of administrative reform and strategic change in public organizations, including “Reinvention as Reform: Assessing the National Performance Review,” winner of the Mosher Award as best article by an academician in *Public Administration Review* in 2000.



Professor Thompson received his Ph.D. in public administration from the Maxwell School of Citizenship and Public Affairs at Syracuse University in 1996.

KEY CONTACT INFORMATION

To contact the author:

James R. Thompson

Associate Professor
Graduate Program in Public Administration
University of Illinois–Chicago (M/C 278)
133 CUPPA Hall
412 S. Peoria St.
Chicago, IL 60607-7064
(312) 355-0304
fax: (312) 996-8804

e-mail: jthomp@uic.edu

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1301 K Street, NW
Fourth Floor, West Tower
Washington, DC 20005
(202) 515-4504, fax: (202) 515-4375

e-mail: businessofgovernment@us.ibm.com

website: www.businessofgovernment.org