Chapter Three

RESULTS

This chapter presents the results of our analysis. We begin by presenting estimates of personnel cost savings from each A-76 competition. We then summarize the sources of those savings on a case-by-case basis. Next, we discuss the differences between civil service and contractor wages. We conclude with information on the persistence of savings.

QUESTION 1: HOW BIG ARE THE PROJECTED PERSONNEL COST SAVINGS?

The expected personnel cost savings from the A-76 competitions were substantial for both in-house and contractor wins, ranging from 34 to 59 percent of baseline personnel costs.

Figure 3.1 summarizes the projected personnel cost savings as a percentage of the baseline cost for each function. The expected savings ranged from 41 to 59 percent for contractor wins, and from 34 to 59 percent for in-house wins.1 They are generally much greater than the 20–30 percent overall savings estimates generated from historical data.

1If we exclude the 12 percent overhead charge from the baseline personnel cost estimate in the TEL competition, then the initial expected personnel cost savings are 34 percent rather than 59 percent. The difference is substantial and reflects the importance of assumptions about overhead personnel costs. It also calls for careful consideration of whether the 12 percent rate reflects real overhead costs, and hence real savings, in the event of outsourcing.
Figure 3.1 — Expected Post-Competition Costs as a Percentage of Baseline Costs

Figure 3.2 provides information on projected personnel reductions for the functions for which such information was available. Staffing information was not available for the BOS #2 and AM #2 contracts, so we could not calculate personnel billet savings for those functions.

Figure 3.2 reveals that expected personnel reductions stemming from the A-76 competition are substantial, ranging from 24 to 60 percent. The personnel reductions appear to track the overall cost reductions, suggesting that reduction in the number of billets is the chief component of personnel cost savings. However, we note that the percentage reductions in personnel may be more or less than the percentage reductions in cost. This range suggests possible differences in the way personnel costs are reduced.

Figure 3.3 presents projected personnel cost and slot savings information for each function included in the BOS #1 competition. Such detailed information was not available for the BOS #2 competition. This disaggregation suggests that savings can vary dramatically by function, even within a single installation. For example, the
Figure 3.2 — Expected Post-Competition Personnel Costs and Slots as a Percentage of Baseline

Figure 3.3—Expected Post-Competition Personnel Costs and Slots as a Percentage of Baseline in the BOS #1 Study
telephone operator function is one that requires full-time, around-the-clock staffing. There was no room for personnel reduction in that function. Similarly, the MWR billeting function baseline organization was already staffed mainly with low-cost nonappropriated fund (NAF) employees, leaving little room for additional improvement. Our interviews also suggest that some functional managers were more aggressive than others in looking for savings opportunities.

**QUESTION 2: HOW ARE THE PROJECTED PERSONNEL COST SAVINGS ACHIEVED?**

Figure 3.4 summarizes the sources of personnel cost savings across the six functions. Appendix B provides a detailed exposition of the sources of savings in each activity.

As indicated in Figure 3.4, no significant difference appears in the source of cost savings between the contractor and the in-house wins. In every competition we examined, cost savings were generated by reducing the number of personnel used to perform the work. Most
of the in-house and contractor winners also reduced costs by downgrading positions. Surprisingly, lower wages were a factor in the activities cost reduction for only one function. Finally, the substitution of capital for labor was a factor in generating cost savings for only one function (BOS #1), and then it was a minor one.

Using Fewer Workers

Clearly an important way to reduce the cost of an activity is to perform it with fewer workers. But how can an activity be accomplished with fewer workers? What changes allow for such an improvement in efficiency? In the previous chapter, we hypothesized that several strategies might enable an organization to perform work with fewer people: civilianization, multiskilling, organizational restructuring, reduced work scope, and increased work intensity or labor availability.

![Figure 3.5—Summary of Strategies Used to Reduce the Size of the Workforce](image-url)
Figure 3.5 summarizes the approaches the in-house and contractor winners took to reduce the workforce. With the exception of increased labor availability, which was used only by contractors, the MEO seems to use the same labor-saving techniques as contractors to reduce the size of the workforce.

**Civilianization**

Civilianization played a significant role in workforce reduction. As suggested in Figure 2.1, each function except AM #2 used a significant number of military personnel in its baseline structure. In each case, the post-study workforce was completely civilian, either contractor or government civil service. Of course, the fact that military positions were civilianized does not directly imply that this transformation was the source of savings. The link between civilianization and cost savings required a more detailed analysis.

The major benefit of civilianization is the ability of the organization to perform the function with fewer workers. This benefit is often amplified through one or more other avenues, such as organizational restructuring or increased labor availability. If the MEO won, civilianization was accompanied by organizational restructuring in part because certain formal organizational changes are *required* when military personnel are eliminated from a function. For example, in BOS #1, the functional manager reported that squadrons were eliminated because the commander of a squadron must be a military person and all the military positions were being eliminated. Each function reported that eliminating requirements that come with a military workforce helped flatten their organizations or reduce the number of supervisors or managers. In the TEL competition, cutting military personnel eliminated several intermediate-level management positions. Civilianization also eliminated the training officer positions. In AM #1, civilianization substantially reduced the number of supervisory positions.

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2 Isolating one labor-saving strategy from another is often difficult. For example, civilianization allows for (or even demands) organizational restructuring. To the extent possible, we discuss the contribution of different strategies to the organization’s ability to perform the work with fewer people.
Several functional managers noted that by improving labor availability civilianization reduced their need for workers. Perhaps the most extreme example of this was MM, where military positions were eliminated because the uniformed labor was completely unavailable to the function in question. In AM #1, the MEO included one civil service worker for every two military positions eliminated. Managers at each site reported that they lost a lot of time from their military personnel to detailing, physical training, and deployment; a civilian workforce is much more predictable. Indeed, several people involved in developing the MM MEO mentioned that the standard rule used in that command to estimate the number of civil service workers needed is .6 civilians for each military person.

Civilization also can allow for other changes in the way work is organized. In AM #1, it allowed for the establishment of labor progression structures that included helpers and intermediate and journeyman laborers, rather than the journeyman-intensive structure that was inherent in the military workforce. In TEL, workers reported that when the function was being performed in-house, eight different military workers were detailed for some amount of time to clean the building. In addition, there was a contract for grounds maintenance. Now, the contractor has one person who does all the cleaning and grasscutting.

Finally, civilianization can save money independent of the number of slots saved if the military personnel are replaced by civilians. Opportunities for such savings were perhaps most evident in BOS #1, where we observed an instance where a wide range of military personnel (E-3 to E-6) was replaced by GS-4 civil service workers on the billeting desk.

**Multiskilling**

Multiskilling was another important source of savings in one MEO win and two contractor wins. Perhaps the clearest benefit from multiskilling came in TEL, where the contractor cross-trained workers and combined two independent job series, leading to a dramatic reduction in requirements. Multiskilling also was important in both BOS competitions, where generalized clerks and other workers could be used in several functional areas.
In the MM MEO win, multiskilling was not a source of savings per se because the job descriptions of the key civil service workers were already quite general—multiskilling was already being used.

Multiskilling was not a factor in the two AM competitions for two apparent reasons. First, the job descriptions for aircraft maintenance workers are fairly constrained by the PWS. Workers in a certain category are required to have specific training or experience within a certain time frame to qualify for a position. The contractor or MEO cannot simply disregard or modify these requirements. Secondly, in the case of AM #1, the sheer magnitude of the activity reduced the incidence of fractional manpower requirements and therefore reduced the potential gains from multiskilling and increased the relative gains to specialization.

We had anticipated that there would be formal or informal barriers to the use of multiskilling that would make it more difficult for the MEO to use this technique. However, we found none. Government managers are generally aware that they can use multiskilling and seem to use it when appropriate. The functional managers in the BOS #1 study reported that DoD or OPM has no regulations to prohibit it. They noted, however, a requirement to pay workers for the highest-graded regular and recurring activity they perform. To use multiskilling cost-effectively, it is necessary to build a position description that ensures that the primary task of the individual is the more expensive one.

We observed employee resistance to multiskilling. In BOS #1, the union representatives with whom we spoke complained that the MEO was using more multiskilling, generally without offering workers a higher salary. He explained that because workers have more tasks to perform, the pace of work is more intense. The union representatives believe that this amounted to a “change in working conditions” and noted that the union had filed a grievance over this issue. The functional manager at MM also mentioned that after the MEO won, workers petitioned for grade increases because of multiskilling.

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The workers of the winning TEL function, although happy to have jobs with the contractor, complained about multiskilling. As discussed earlier, multiskilling required technicians to perform more mundane operator duties as well. Again, some dissatisfaction accompanied the increased work intensity. However, this dissatisfaction was tempered because the contractor could pay workers a wage premium for performing multiple skills, and workers indeed got a raise when they went to work for the contractor.

On the other hand, the government is restricted by law from paying a worker a multiskilling premium beyond the highest wage for the grade level associated with a regular and recurring task performed by that worker. The government has no flexibility to pay the worker more than the wage of that grade level, even if it is unusual for those skills to be acquired by one individual and if it benefits the government greatly to have one individual with both skills. This restriction is particularly important in cases where the grade level assigned to each task is the same and thus an employee in a multiskilled position receives the same wage as an employee in a regular position.4

Organizational Restructuring

Organizational restructuring can generate cost savings independent of civilianization. For example, in AM #2 the contractor modified processes that were already being performed by civil service employees so that the tasks could be done by fewer workers. In BOS #2, the contractor eliminated distinctions between certain functional areas. In so doing, the contractor was able to eliminate some mid-level managers. MM consolidated the repair functions to one location, thereby reducing delays and streamlining the work process. Moreover, the MM MEO added a production clerk position that was responsible for managing work orders. Again, this adjustment allowed for a more efficient allocation of workload across the mechanics.

4Our interviews with civilian personnel officers suggest that managers and classification specialists are extremely careful in creating multiskilled positions for group tasks at the same grade level to avoid paying a premium. However, the government can pay recruitment bonuses and retention allowances.
Reduced Work Scope

An A-76 competition can reduce the work scope of the activity under study either explicitly or implicitly. It is explicit if reduced work scope is written into the PWS. An A-76 competition provides an important opportunity for cost savings to be achieved through downscoping. Because costs are highly visible during an A-76 competition, customers are confronted—often for the first time—with the trade-off between the cost and quality of service. In developing the PWS, the customers can examine the trade-offs and choose a more reasonable level of service. This important source of cost savings would probably not be achieved without the A-76 competition.

Such a clearly and consciously reduced work scope was the source of savings in two competitions: MM and TEL. In both cases, determining the overall impact of the savings was difficult because the downscoped activities were transferred to other organizations. The costs of these other organizations are not included in the A-76 analyses, and therefore we have no measure of the costs this transfer imposes on those organizations.5

Implicit downscoping, in which the requirements contained in the PWS were unintentionally reduced, may have occurred in several other competitions, particularly AM #2, BOS #2, and BOS #1. Identifying implicit downscoping is difficult. Poor performance might be the result of implicit downscoping because the PWS established unacceptably low quality standards. Similarly, escalation in the contract price or MEO authorizations might result from implicit downscoping because the PWS underestimates the workload and the additional work must be written back into the contract. But not all poor per-

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5The savings for the downscoped function may have been overestimated if the organization to which workloads were transferred needed to hire additional people to perform those functions. In the MM case, the function manager claimed that the customer organization did not have to hire any new people. In the TEL case, staff reported that the functions were simply absorbed by the existing staff. We were not able to verify these claims. Moreover, the worker who had been responsible for coordinating with Defense Information Services Agency (DISA) in the previous in-house organization reported that it was unrealistic to regionalize the function because many tasks involved in the function need to be performed on-site. The employee reports that although the function has been officially “regionalized,” much of the work is still done at that installation and is simply being absorbed by other workers.
formance or expansion of workload is a reflection of implicit downsco-
oping. Thus, to identify implicit downscooping, we were forced to
rely on the opinions of individuals involved in developing the MEO
and in monitoring the contract.6

Civilianization of military positions involves another form of implicit
downscooping. Units with military personnel must generally make
those individuals available to support periodic deployments and
must also invest in the human capital development (e.g., physical
training and general military training) necessary to keep them ready
for deployment. When functions are civilianized, total service de-
ployment requirements are unaffected. The burden of supporting
these requirements is transferred to other units.

Labor Availability/Increased Work Intensity

Contractors were able to perform work with fewer employees by im-
proving labor availability and increasing work intensity. Contractors
improve labor availability by offering less leave time or placing more
restrictions on the time that they make available. In the TEL case,
the contractor hired former government employees with many years
of experience in the civil service. These workers receive ten days of
leave per year with the contractor (as opposed to the 26 days they
were receiving from the government) and they are paid for the days
that they do not use within a fixed time frame.7 The TEL contractor
also noted that he has dramatically cut training-related absences by
reducing the amount of training and encouraging on-site training
through CD-ROM. The AM #2 contractor also noted that contractor
workers have less leave and sick time. These policies increase labor
availability because workers spend more time on the job.

The BOS #2 and AM #2 contractors also noted that their ability to hire
and fire at will improved work intensity. This ability affects work in-
tensity in two ways: it causes workers to work harder because they
know they can be fired if they do not do a good job, and it allows
contractors to have fewer workers on the payroll because they can

6See the summaries in Appendix B for more information on these issues.
7Contractor employees are entitled to more leave time as they accrue more seniority
with a contractor. Workers are entitled to a minimum of ten days after one year of
service, 15 days after ten years, and 20 days after 20 years.
adjust their workforces more quickly to changing needs. We cannot measure the impact these opportunities have on the contractor workforce, although all of the contractors reported that their man-hour availability factors are higher than the government’s.

**Downgrading Positions**

Downgrading individual positions, or changing the grade structure of the workforce so as to lower the average grade level of employees, was an important source of savings in all of the studies that remained in-house. As discussed above, in AM #1, the MEO made more use of helper and intermediate level workers, and created progression structures so that workers could eventually achieve a journeyman skill level. In MM, the MEO revised the job descriptions to reflect more closely the work actually being performed, leading to a greater relative reduction in the number of WG-13 mechanics versus WG-12 mechanics. While the BOS #1 study did not lead to an overall change in the grade structure, there were pockets of grade increases and pockets of grade decreases. In one area (Civil Engineering), many positions were in fact downgraded to WG-2 positions only to be upgraded later to WG-5 positions upon appeal to the civilian personnel office. This result suggests that there are checks in the system that allow the government to downgrade positions only if the original position descriptions were inflated or if the work could be reorganized.

Contractors also downgraded positions to reduce costs. The BOS #2 contractor put in place more low-level personnel such as clerks and helper workers. The AM #2 contractor used fewer foremen, thereby lowering the grade structure of the workforce. However, not all contractors downgraded positions. The TEL contractor, for example,

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8 Federal civil service jobs are often described by pay plan and grade level. The number refers to the grade level, and can range from 1 to 15. The letters refer to the pay plan. Four pay plans cover over 85 percent of the civil service workforce (and a vast majority of the positions examined in an A-76 study): General Schedule (GS), Wage Grade (WG), Wage Leader (WL), and Wage Supervisor (WS). The GS governs white collar positions whereas the WG/WL/WS schedules govern blue-collar positions. In total there are over 70 different pay plans, many of which apply to highly specialized groups of employees.
upgraded the workforce by hiring people for multiskilled positions at higher pay than they had received from the government.

**Paying Lower Wages**

To determine whether lower wages were an important source of cost savings, we compared the wage and benefit costs of the baseline workforce with the wages of the workforce reflected in the winning contractor or MEO bid. The details of those wage comparisons are described in Appendix C. Figure 3.4 indicates that lower wages were a source of cost savings for only one study, BOS #2.

Contractors sometimes pay their employees wages that are lower than government wages. Because the SCA restricts contractor wages and benefits for service employees, the actual employment cost of contractor employees can be higher or lower than the cost of federal employees in similar positions.

Several factors influence the magnitude and direction of the differential. Robbert, Gates, and Elliott (1997) discuss the wage determination issue and the distortions that can be introduced into the process. DoL wage surveys used to establish minimum contractor wages for specific jobs are based on simple averages in the local area. Federal Wage System (FWS) wage rates for civil service employees are determined by regressing local average wages for various jobs on matching FWS grade levels. A wide variety of occupations might fall into a given grade level, and the market wages for those positions might vary dramatically.

Benefits can also differ between FWS jobs and DoL wage surveys. OMB sets forth benefits cost factors (a percentage rate applied to base pay) to be used when conducting a cost comparison study. The same cost factor is applied to both FWS and GS positions. These rates change from year to year. Two 1995 cost comparison studies we scrutinized used a rate of 29.55 percent of base pay. In contrast, DoL wage surveys for the corresponding area specified a fringe benefit rate for “health and welfare” of no less than a flat hourly rate

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9The FWS governs the pay and benefits for hourly blue-collar workers in the federal government.
Table 3.1
Annual Leave Accrual Rates for Civil Service and Service Contractor Employees

<table>
<thead>
<tr>
<th>Years of Service</th>
<th>Civil Service Leave Accrual (days per year)</th>
<th>Service Contractor Leave Accrual (minimum days per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>1 to 3</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>3 to 5</td>
<td>19.5</td>
<td>10</td>
</tr>
<tr>
<td>5 to 15</td>
<td>19.5</td>
<td>15</td>
</tr>
<tr>
<td>more than 15</td>
<td>26</td>
<td>20</td>
</tr>
</tbody>
</table>

of $2.56, regardless of the wage rate. In addition, the contractor is responsible to pay the employer’s portion of FICA and Medicare taxes. At this level, fringe benefits for “health and welfare” ranged from 18.1 percent of the $14.15 hourly wage of an aircraft mechanic to 34.3 percent of the $7.46 hourly wage of a material handling laborer.

As depicted in Table 3.1, federal civil service vacation days are generally more generous than minimums for workers subject to the SWA. The implicit cost of time off is not included in the wage comparison information. Federal civil servants have ten paid holidays per year, and this is also the SCA minimum number of holidays for the activities we studied.

Lower wages can lead to a decrease in overall personnel costs relative to the baseline organization if two conditions hold: contractor wages are lower than government wages and the contractor wins the competition. The grade level and step of the position determine government wages. The MEO has no flexibility to pay lower wages for a position in a particular grade level. Thus, even if government wages are lower than contractor wages, and the government wins the competition, reduced wages cannot be a source of savings for the MEO relative to the baseline organization: the cost of a GS-5 will be

\[\text{10As discussed earlier, the MEO can lower the wage bill by downgrading positions (replacing workers of a higher grade with workers of a lower grade), civilianizing positions, or reducing the workforce.}\]
the same before and after the cost comparison competition. Both of these conditions held for only one competition: BOS #2.  

Capital-Labor Substitution

We anticipated a possibility of substantial personnel savings generated through capital-labor substitution. In addition, we hypothesized that contractors would have an advantage over the in-house organization in terms of their ability to take advantage of opportunities for such substitution. However, we found little capital-labor substitution in either MEO wins or contractor wins.

Several contractor representatives and many functional managers stressed that the options for capital-labor substitution on the part of a contractor are limited because capital use is usually prescribed by the PWS. Although nothing in the competitive process excludes either the MEO or the contractor bid from using additional capital in place of labor, interviewees stressed that the government provides the facilities, equipment, spare parts, and other physical capital, so that the competition tends to be over labor costs only. We do not suggest that no opportunities exist for the government to benefit from capital-labor substitution or other nonlabor cost savings.

We observed other minor nonlabor-related sources of savings that came from changes written into the PWS. The MM study consolidated the workload into one facility, reducing facility costs as well as the cost of operating a vehicle that transported workers and equipment. BOS #1 competition generated minor savings by closing a warehouse. AM #2 competition likely generated significant

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11 For a more detailed discussion of the wage comparison and the calculations underlying this result, see Appendix C.

12 In MEO wins we were able to observe such substitution directly in the PWS, management study, or both. In contractor wins we could rely only on interview responses to examine this issue. In only one study (BOS #1), did the contractor report installing computers to reduce the workload and cut down on labor costs. In this instance, the contractor admitted that the labor savings benefits inherent in substitution were modest. Indeed, when asked about the sources of personnel savings, the contractor mentioned capital-labor substitution only when probed.
nonlabor savings by consolidating activities onto one installation (but with offsetting transportation costs).

QUESTION 3: ARE THE SAVINGS REAL AND ENDURING?

The magnitude of the estimated expected initial savings suggests that there are in fact positive savings generated by these studies, although we are concerned that the magnitude of the expected savings is overestimated to some degree. The savings also appear to be enduring, but better tracking is needed to be certain of this.

Are the Savings Estimates Real?

The expected personnel cost savings estimates for the competitions we examined are consistent with or exceed expectations based on estimates from previous studies (e.g., Tighe et al., 1996). Given the magnitude of these savings estimates and the fact that the winning bidders did implement their bid, the A-76 savings apparently are real.

Our estimates differ from the standard estimates generated by previous studies by CNA and GAO in two important respects. First, our savings estimates show higher percentages because they consider only personnel costs, and because most if not all of the savings in an A-76 competition are generated through personnel-cost reductions. We emphasize that these personnel cost estimates reflect the savings as a percentage of baseline personnel costs. CNA and GAO studies consider materials and supply costs as well as personnel costs, so their percentage of savings naturally will be lower. Our estimates closely resemble the overall savings estimates in studies with little or no materials and supply costs. However, because our studies do not consider cost of materials or supplies, our percentage estimates will be higher for studies with high materials and supply costs.

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13It is worth noting that any nonlabor savings that are written into the PWS are generally not calculated as cost savings stemming from the A-76 process because they are common to both MEO and contractor wins and thus are not factored into baseline costs. We ignore these savings in our cost estimates; they are usually not significant and are often zero.
A second feature of our analysis is that when calculating baseline costs, we excluded unfilled vacancies at the time of the competition announcement and positions that had already been targeted for elimination. Excluding such positions reduced by the same amount the estimates of baseline personnel cost as well as personnel cost savings, thereby reducing estimated percentage savings. For example, without this adjustment, the estimated cost savings in the MM study would have been 63 percent rather than 59 percent.

However, we have several concerns about the information that is gathered before, during, and after the A-76 competition. These concerns cast doubt on the precision of these cost savings estimates. Although the issues raised herein are not significant enough to shake our confidence in the overall conclusion that A-76 studies do generate substantial personnel cost savings, we believe that the savings estimates could be improved through attention to a number of issues discussed in Appendix D.

Are the Savings Estimates Enduring?

Our analysis suggests that savings persist over time. However, as with the previous question, we believe that data limitations affect the answer to this question. In particular, while it is possible to track whether costs go up or down relative to the initial bid, it is difficult to evaluate whether those changes are appropriate given changes in circumstances.

There is widespread concern that competitions won by contractors are subject to cost escalation. At the same time, the MEO might possibly suffer from cost escalation as well. To explore this issue we examined changes in the cost of the contract over time.

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14 The calculation of baseline personnel costs involves estimating the number of people currently performing the function and then estimating the cost of those personnel. This calculation would appear to be fairly straightforward. However, we noticed a strong tendency on the part of installations to make the estimate of baseline personnel costs as large as possible in order to create the appearance of more substantial savings. Several of the cost comparison studies provided three types of personnel lists: authorized, actual, and MEO. Whenever possible, we used the actual personnel to estimate the baseline costs, although the installations (and hence the CAMIS database) generally used the authorized personnel to calculate the baseline if that number was larger.
Table 3.2

Difference Between Contractor Bid and Actual Contract Payment

<table>
<thead>
<tr>
<th>Function</th>
<th>Performance Period</th>
<th>Cost Change (%)</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOS #2</td>
<td>1</td>
<td>+ 1.5</td>
<td>Work performed over and above normal duty hours</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>+ 3.4</td>
<td></td>
</tr>
<tr>
<td>Total: 1 and 2</td>
<td></td>
<td>+ 2.5</td>
<td></td>
</tr>
<tr>
<td>AM #2</td>
<td>1</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TEL</td>
<td>1</td>
<td>− 13</td>
<td>Contract line items deleted due to declining workload</td>
</tr>
</tbody>
</table>

Analysis of Changes in Contract Cost and MEO Staffing

Changes in the contract price over time for contractor wins are displayed in Table 3.2. One performance period is one year in duration. Thus, for the BOS #2 and AM #2 studies we report the change in contract price over two years; for the TEL competition we report the change over one year. Changes in the number of authorized positions for the MEO for in-house wins are displayed in Table 3.3.\(^\text{15}\) In calculating the escalation in contract costs, we included only additional payments to the contractor for services rendered, not additional payments to reimburse the contractor for supplies required to perform the function. Also note that these estimates do not include changes in the cost to the government of monitoring and administering the contract.

Tables 3.1 and 3.2 do not suggest a major difference between contractor wins and in-house wins. Within each set of results, we witness one cost or billet increase, one decrease, and one instance of no change. Under both scenarios, cost or authorization increases or decreases are concurrent with changes in mission. The cost reduction in TEL clearly stems from the services being in the process of closing the function at that location. By the end of the first performance period, several line items had been deleted from the contract, and more

\(^{15}\)As noted earlier, no information was available on the cost of an implemented MEO.
Table 3.3
Difference Between Personnel Slots in MEO Bid and Current Staffing

<table>
<thead>
<tr>
<th>Function</th>
<th>Performance Period</th>
<th>Authorization Change</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOS #1</td>
<td>Net change, July 1994 to July 1998</td>
<td>+ 4% overall plus upgraded eight WG-2 and four WG-3 positions to WG-5</td>
<td>Overall mission change: increase in student load (the organization’s primary mission is technical training)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Civil Engineering: + 26% due to expanded mission (increase in the number of students). Positions upgraded because initial job descriptions were inadequate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Supply: – 8% due to closing the supply shop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Transportation: + 9.3% due to expanded mission</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MWR: – 10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Telephone: + 40%. Added two GS-3 positions and upgraded one GS-5 position to a GS-6. MEO did not account adequately for absences.</td>
</tr>
<tr>
<td>AM #1</td>
<td>Net change, April 1989 to July 1998</td>
<td>– 10%</td>
<td>Authorizations are linked to flight hours by a formula stipulated in the MEO plan. The responsible major command monitors authorizations according to this formula and has adjusted, added, or deleted authorizations eight times.</td>
</tr>
<tr>
<td>MM</td>
<td>October 1997 to September 1998</td>
<td>No change</td>
<td>Current authorizations reflect MEO bid.</td>
</tr>
</tbody>
</table>

were slated for removal in the second performance period. Similarly, in AM #1, the number of personnel authorizations was controlled by the responsible major command, which had linked the number of authorizations required to the expected number of flying hours at that particular installation. However, while the total number of authorizations was monitored rather closely, apparently the grade level
of those authorizations or the cost of personnel filling those billets received no special scrutiny. They were monitored no more closely than similar changes in authorizations for non-MEO activities.

Both BOS #1 and BOS #2 exhibit some cost increase. In the case of BOS #2, there is a clear cost increase: an addition to the contract for “over and above work” outside of normal duty hours. This work, for one reason or another, does not appear in the contract. With BOS #1, this situation is complicated by an increase in mission (student load) at the installation leading to an increase in the workload. However, it is also clear that some of the changes, such as upgrading the WG-2 and WG-3 positions, are not caused by mission changes. Even the increase in the telephone operator function appears to result from a simple underestimate of the number of people required to do the work, rather than an increase in mission.

Endurance of Savings is Difficult to Track

The analysis presented in the previous section provided no clear evidence of large-scale cost escalation. In spite of this, we hesitate to conclude that cost escalation does not exist. We consider several issues. First, tracing changes in cost to changes in mission is often difficult. Second, the cost of the MEO is not well tracked. Finally, the government does not track changes in the cost of monitoring contracts.

- Changes in cost versus changes in mission. The cost of performing a service is clearly related to the level of work required. Cost comparison competitions are conducted at a specific point in time. While they often try to account for possible or even anticipated changes in workload, anticipating all possible contingencies in a contract or MEO is impossible. Regardless of whether changes are anticipated, changes in mission will generate changes in the cost of performing the service. These changes raise challenges in evaluating the information on cost escalation for a contract or an MEO. In both BOS competitions, there were increases in cost or authorizations that were explained by changes in mission on those installations. However, the question remains as to whether the increase in cost was appropriate given the change in mission. Because the mission change was not tracked in a concrete way and because there was no formal
link between “mission” and costs, it is not possible to evaluate the appropriateness of those increases. We describe some of the mission changes we observed in our site visits and the possible cost implications of those changes.

The BOS #1 case illustrates some of the concerns in this area. This installation provides training courses for military personnel. These courses have recently been opened to personnel in other services, generating an increase in the average daily student load. This increase led to the addition of eight authorizations in CE, two in the transportation function, and two in the telephone operator area. Interestingly, the MWR billeting function witnessed a decrease in personnel during this same period.

The concerns are similar, but perhaps more subtle, when there are decreases in mission. When missions contract, the cost of providing support services should decline over time. The question is whether the decline in costs is appropriate given the decline in mission. This issue is particularly important to consider because most of these studies were being implemented in a period of overall downsizing within DoD. Thus, the fact that we have not observed much contract cost escalation in this environment does not imply that cost escalation will not occur in the future. Had the original scope of work been maintained, the TEL contract likely would have experienced a cost increase of between 5 and 10 percent in the second year due to the unionization of the workforce. However, because workload had declined so much in the major command responsible for the function, the activity was being phased out at that location, contract line items were eliminated, and there was an overall reduction in the cost of the contract.

16In this study, the contractor’s workforce was unionized within six months of the start of the contract. The contractor petitioned for those wage increases to be covered immediately, but the government denied the request, stating that if it occurred so quickly, then the contractor should have known that it would happen and should have written those wage levels into the contract bid. Thus, the government determined that it would begin covering the cost of the wage increase starting in the first option period (the second year of the contract). The union agreement increased wages by 10 percent and the government is responsible only for the direct costs associated with that wage increase. There is no overhead rate or contract fee applied to this amount.
In the BOS #2 competition, the installation was gaining mission in some areas and downsizing in others, and determining the overall impact of these two forces on BOS workload was difficult. Moreover, the installation expanded the scope of work in the contract to include the supply purchase function, which was not part of the original contract.

Both AM competitions used flying hours by aircraft in supported organizations as measures of mission-related demand. For the AM #1 MEO, the number of manpower authorizations was adjusted (both upward and downward) several times in response to flying-hour fluctuations. In addition, for the first several years after implementation, the command had a “no grade increase without a grade decrease” policy so that the grade level of the authorizations was also more-or-less fixed. This policy indirectly controlled the costs of this MEO. In spite of this policy, however, the civilian personnel officer noted some grade creep over time in the years after this restriction was relaxed. Payments for the AM #2 contract are similarly tied to flying hours.

- **Tracking the cost of an MEO.** Our second concern is that once the cost comparison study is over, the government does not appear to treat an MEO differently from any other function; the manpower office or service command continues to monitor the number of authorizations but not the cost of filling those authorizations. No installation was able to provide us with a cost estimate of the current staffing for the function. One civilian personnel officer said, “We should produce information that way, but we don’t.” This CPO reported that the only cost estimate available for individual functions would simply take the number of authorizations and multiply that by the base-wide composite rate: the installation-wide average personnel cost.

While there was a general sense among functional managers and installation manpower officials that the cost of the MEO was being monitored, no one was able to identify who was doing the monitoring. An installation manpower official for the BOS #1 competition viewed it as his personal responsibility to ensure that the MEO targets were being met. He suggested that the losing contractors might look at the MEO costs and complain if they
saw the costs going up. However, we saw no evidence of this review and complaint occurring.

In the MM competition, there had been no change in the number of authorizations over the life of the MEO and current staffing reflected the number of authorizations. However, the functional manager said that he was expecting a cut because workload was declining. Because missile maintenance occurs through an interservice support agreement (ISSA), the customer organization has some incentive to monitor MEO costs.

Although authorizations are a good proxy for personnel costs, the two may not be directly linked. Costs may not track authorizations because of problems with staffing— inability to fill authorizations completely or in a timely way. Staffing is clearly a challenge for the MEOs. Ironically, this difficulty might improve the government’s cost performance in the short run by holding down labor costs; however, it might also lead to problems with MEO development in the future. With the general downsizing of the workforce in DoD, many commands have imposed personnel restrictions on installations, such as hiring freezes and mandatory personnel cuts. In addition, installations must consider filling a vacant position through the priority placement program (PPP), or "stopper list," before they can hire someone outside of DoD for a vacant position. Several of the functional managers and local civilian personnel officials we spoke with said that the recent regionalization of civilian personnel staffing functions has exacerbated delays in the staffing process. They stressed that such delays become extremely important when the MEO wins a competition that had been staffed with a substantial number of military personnel because new civil service workers must be hired to fill those military positions. They also mentioned that staffing delays create problems for functions with high turnover rates or functions that are located at bases undergoing a major downsizing.

\[17\text{We note that staffing problems attributed to regionalization may be transitional or may be related to understaffing of regional activities. Tracing the cause of these problems was beyond the scope of this study.}\]
Another reason that costs might not track authorizations is that the cost of a person filling a position may not equal the cost projected in the MEO bid. Although it is possible that some new hires would, for a time, be less costly than the composite costs used in pricing the MEO, a number of factors tend to push actual costs above composite levels. This increase would occur if the individual filling the position benefited from retained higher grade or pay following a reduction in force (RIF). RIFed employees could become part of the workforce either through local bumping and retreating or through the PPP if they are eligible for a position in the MEO under such policies.

- **Contract monitoring costs.** A-76 provisions place an upper limit on the contract administration costs that can be included in the cost comparison study. The number of allowable contract administration personnel is directly linked to the number of workyears in the MEO bid. For example, if the MEO staffing was 100, a maximum of four full-time equivalents (FTE) can be included in the cost of contract administration. We found that there was often a disconnect between the estimated and actual contract monitoring costs. We observed substantial variation among the contractor wins in the costs of monitoring and administering the contracts. Although there were differences in the size and complexity of the contracted activities, the size of the activity alone does not appear to explain all the differences. We believe that the government would benefit from a more careful tracking of contract administration and monitoring costs, associating variation with function, contract features, and the size of the function.

Several interviewees noted substantial problems administering the BOS #2 contract. Consequently, the number of Quality Assurance Evaluators (QAEs) has been increased from seven to 11 and the number of full-time contracting officers and administrators from one to three. According to many involved, the problems are multifaceted and stem from an inadequate PWS (which was based on a command template and was not well suited to the installation), the contract structure (firm, fixed price contract), and a generally adversarial relationship between the government and the contractor. The contracting officer mentioned several times that she felt like her hands were tied because a contractor was living up to the (albeit inade-
quate) PWS. According to the contracting officer, the firm fixed price contract does not provide a carrot (to motivate good performance) or stick (to punish poor performance). Although in theory the commander could choose not to renew the contract, this is in fact very hard to do without a record of contract discrepancy reports and documentation of established trends of failure to perform. Additionally, recompeting the contract takes a long time, and there is a risk that the contractor’s performance would deteriorate further while the installation waited for the new contractor. Apparently, the impact of a past performance report on future contract selections has the strongest impact on the contractor’s current performance.

The variation in the amount of time devoted to contract monitoring is driven home by a comparison with the TEL case. In the latter case are one local contracting officer’s representative (who is also working as the contracting officer’s representative (COR) for several other contracts in the command) and a contracting officer in the regional office who administers this contract in addition to several others. The contracting officer reports spending “nowhere near one FTE” administering this contract and attributes this efficiency to the good relationship between the government and this contractor. Both want to see things go as smoothly as possible. The contracting officer’s representative explained the situation in the following way: Only a handful of companies exist that can perform this sort of work for the government. Because the government expects to let more contracts and recompete old contracts in this area in the near future, the contractor places a high value on its past performance rating. Therefore, the contractor is willing to go beyond the letter of the contract as long as it is not too costly.

The AM #2 contract was also creating contract administration problems because the PWS, while accounting for possible changes in mission, did not take into account possible changes in workload mix. The AM #2 function involves two types of service: scheduled overhaul and unscheduled maintenance. The contract is pegged to the number of flying hours and uses historical trends to determine how many scheduled and unscheduled repairs will be needed. The contractor receives a certain amount per unit serviced, regardless of the type. However, the number of unscheduled repairs has been declining and the difficulty of those that remain has increased. This command has consolidated aircraft repair in regional centers. The con-
solidation has generated a change in the composition of the workload because other installations tend not to ship components to this regional activity for minor repairs that can be performed locally. As a result, the average cost per repair exceeds the target cost. Another problem is that the government is having a supply problem, and the contractor is being forced to cannibalize other aircraft for parts in order to complete the repairs.

**QUESTION 4: COULD THE COST SAVINGS BE ACHIEVED OUTSIDE THE A-76 PROCESS?**

In the course of this study, we uncovered no obvious strategy that would allow DoD to reap the savings achieved through the A-76 process through other means. In order to promote reengineering broadly, DoD would need to institute comprehensive reforms aimed at shifting the incentives for efficiency improvement currently faced by managers.

**Avenues Exist for Government Managers to Make Cost Saving Changes**

When we embarked upon this study we anticipated that we might find specific rules or regulations that prevent government managers from making cost-saving changes and that ultimately put the government at a disadvantage in cost comparison studies. We found no such barriers. The government can take advantage of a wide array of savings opportunities including multiskilling, downgrading positions, and organizational streamlining. The only cost-saving technique that is unavailable to the government is paying lower wages, but that does not seem to be an extremely important source of savings.

**Government Managers Are Discouraged from Pursuing Savings**

Our interviews indicate that A-76 competitions are needed to provoke such efficiency improvements. Without the credible threat of outsourcing, there are few incentives to find and implement workforce cost reductions. At the same time, managers face numerous
disincentives that deter them from doing so—they suffer some direct burden if they do it.

In the private sector, managers face strong incentives to improve efficiency and effectiveness. The quality of the output and the cost of generating that output are monitored and the manager is evaluated on the basis of that cost and quality, among other things. If a manager identifies a way to produce the same quality output at less cost, he or she may get a bonus, a raise, or a promotion. At the same time, a manager who is unable to control costs and quality, or does not seek out opportunities to reduce costs, could be fired if such cost-cutting is expected.

Government managers are often not evaluated on organizational outputs or outcomes because outcomes are too difficult to measure or because they depend on factors beyond the managers’ control. If managers are judged on outputs or outcomes, such evaluations tend to be based on quality but not cost. With such incentives, managers tend to maximize the availability of resources—including human resources—required to produce quality outputs. At the same time, government managers face virtually no threat of being fired for a failure to control cost. One civilian personnel officer noted that there is no reason that government managers could not be evaluated and promoted on a cost-effectiveness basis; they simply are not. Most managers we spoke with reported that they did not think about these issues until the A-76 competition began. Even when faced with the competitive threat posed by an A-76 competition, many managers still resisted. For example, the manpower officer of the BOS #1 study noted that some managers resisted cutting or downgrading positions. These behaviors are consistent with economic perspective on public choice. Niskanen (1971) argues that bureaucrats maximize their own self-interest (salary, perquisites of office, public reputation, power, and patronage) by maximizing the size of their agencies.

This behavior is consistent with incentives that work against managerial efforts to cut costs or streamline the workforce. As discussed above, OSD, Military Departments and Defense Agencies tend to control costs by controlling authorizations. This control process is often remote and slow to react to changing circumstances, and may be applied in an across-the-board manner that does not take into account local conditions or past performance improvements. Why
should a manager volunteer to cut staff or budget if prior cost-cutting actions are not considered when across-the-board budget cuts (e.g., base-wide or command-wide) are instituted? Further, in the event that workload increases, managers may not be able to obtain additional authorizations, much less additional employees, for quite some time. This condition creates incentives for managers to hoard labor (or at least authorizations) for fear of being shorthanded if workload increases or authorizations are cut. This fear becomes all the more salient when a hiring freeze is in effect.

Another important factor discouraging personnel cost-cutting is the human element of the streamlining process. As we have seen, performing a function at lower cost generally means performing the function with fewer people. One manpower officer noted the difficulty of cutting an authorization because of the potential impact on the affected person in terms of lost salary and retirement benefits, etc. Managers have a very difficult time with this problem. Streamlining the workforce also means that the remaining workers may have to work harder. In two of the three MEOs, workers were extremely resentful of the changes brought about by the MEO and were filing numerous grievances through their union.

The A-76 competitive process essentially corners managers into making these tough decisions. The choice is no longer between the relatively comfortable status quo and a more streamlined organization, but between that streamlined organization and outsourcing. As one manpower officer stressed to the functional managers in charge of developing the MEO, if they do not submit a lean bid, they and everyone else would lose their jobs. Even with such a dismal possibility facing them, the functional managers were reluctant to pursue savings aggressively. In one study, won by a contractor, the in-house workforce was confident that the MEO would win the bid because the in-house workforce had won other competitions at that installation. Some people involved in the MEO development suggested that complacent managers did not cut as much as they could have in the MEO.

However, even when there is a threat of losing a large number of jobs, getting employees to accept necessary changes can be difficult. In two MEO wins, managers complained that they got support for certain changes (organizational restructuring, multiskilling) from the
union and the workforce. However, once the study was over and the MEO was implemented, the union again became hostile to the MEO. At BOS #1, grievances had been filed over “changes in working conditions” because multiskilling led to a more intense work pace. At MM, workers were petitioning for grade increases and complaining that there were now so few WG-13 positions that they saw little hope of a promotion. The union at MM distrusts management and has suggested that the managers have attempted to reduce authorizations to a level that would allow them to outsource the function under a direct conversion. We observed nothing in MM that suggested managers were interested in such outsourcing.

**Government Managers Are Often Not Trained to Identify and Implement Savings**

We also found some indication that managers are not properly trained to identify and implement cost-saving changes. One functional manager who provided key input into the PWS and MEO of the TEL study stressed that it is difficult to get managers to think “outside the box.” Many of these people have been doing things the same way for up to 20 years. Over this time, they have perceived their primary obligation as following the rules and regulations. When faced with a task such as developing an MEO, they find it difficult to think about how to change the process.

The functional manager for the MM study echoed this sentiment, noting that many managers of service functions started as regular workers and have been promoted through the functional ranks into supervisory positions. Often they are promoted for reasons, such as seniority or technical expertise, that have little to do with their managerial abilities and potential. Many are less than fully prepared to be good managers. The MM functional manager said that available management-training programs tend to focus on bureaucratic procedures (e.g., how to fill out a particular form used in the A-76 process), not on ways to improve efficiency or manage people. He suggested that workforce productivity could benefit from a more broad-based management-training program.
“Come as You Are” Competition

The A-76 process leads to productivity improvement by eliminating the current way of doing business as a credible option. Competition forces managers to improve efficiency or risk losing their (and everyone else’s) job. While any change to the existing system would require an in-depth analysis considering the potential intentional and unintentional effects, it is worthwhile to consider whether other, more efficient ways to eliminate the current way of doing business might exist as a viable choice for managers.

For example, one inefficiency of the current A-76 program is that its impact is limited to activities identified for cost comparison studies. A-76 incentives could be broadened to all DoD commercial activities, not just those identified for study, if activities were required to compete on a “come as you are” basis. The organization in place at the time a study is announced would compete against the best private-sector bid.

This approach would be even more effective if it targeted in-house activities that made the least efficiency gains. Such an approach would amplify the incentive to improve efficiency: activities that make themselves more efficient would not only fare better if eventually competed, they also would face a lower probability of having to undergo an A-76 competition in the first place. Additionally, competitions focused on the least efficient in-house activities might yield greater savings than competitions involving more efficient in-house activities.

The success of these efforts would depend on the services’ and agencies’ abilities to identify the least efficient organizations—in other words, the existence of productivity measures. In cases where the government could not identify satisfactory measures of productivity, such a selection policy would penalize organizations that were already operating more efficiently before the implementation of the policy.

Another important limitation of this approach is that activities that face a possible competition at some future time would have less incentive to organize efficiently than activities facing imminent competition under current policy. Nonetheless, when all in-house commercial activities face a weaker incentive to become efficient, the
savings might be greater than when only a subset of commercial activities, identified for A-76 studies, face a somewhat stronger incentive.

To make themselves more competitive on a “come as you are” basis, each in-house commercial activity would have to reengineer in ways similar to those identified while developing an MEO for an A-76 competition.\textsuperscript{18} Although long-run savings would be expected, these reengineering efforts are expensive in the short run. Many DoD organizations may not have the resources or skills needed to reengineer all of their commercial activities in the near term. Moreover, such a policy might be viewed as incompatible with the spirit of A-76, which gives government employees the right to compete with the private sector to provide a good or service. Finally, in the absence of imminent competition, functional managers within higher headquarters staffs might be unwilling to permit the kinds of cross-functional reorganization and multitasking that often contribute significantly to the efficiencies found in MEOs. Thus, additional analysis would be required to assess the fairness and feasibility of using “come as you are” competitions.

\textsuperscript{18}Such reengineering could include efforts to restructure or regroup different functions or to change the scope of work.