

A REPORT OF THE CSIS  
DEFENSE-INDUSTRIAL  
INITIATIVES GROUP

# DoD Workforce Cost Realism Assessment

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# DOD WORKFORCE COST REALISM ASSESSMENT

*David Berteau, Joachim Hofbauer, Jesse Ellman, Gregory Kiley, and Guy Ben-Ari*

## Introduction

Over the past decade, federal spending on service contracts more than doubled in constant terms, from \$164 billion in 2000 to \$343 billion in 2010.<sup>1</sup> Policymakers have recently attempted to reduce or even reverse this increase, emphasizing instead what is now called the “insourcing” of services contracts. Conversions from contractors to government civilians, as well as other actions to expand the federal workforce, are being undertaken for political and cost savings reasons.

In this study, CSIS looks into recent developments of these insourcing efforts within one executive department: the Department of Defense (DoD). DoD is the largest government department in terms of demand for services. In 2010, it awarded \$161 billion worth of service contracts, up from \$67 billion in 2000. This report reviews the analytical validity of the current policy and practices and proposes an alternative methodology for conducting better sourcing decisions between private and public providers.

Overall, the report addresses the following key questions relating to cost estimating in general, and insourcing specifically:

- How can the U.S. government conduct insourcing decisions in a more analytically sound manner?
- How well does DoD’s current methodology capture the fully burdened cost of government performance?
- What lessons can we learn from the successes and failures of the A-76 process?
- How can current processes be improved upon to produce a more robust public cost-estimating taxonomy?

The report emphasizes the need for fully burdened costs and comprises four sections. In the first, we outline how DoD is formulating and implementing its insourcing initiative and examine the repercussions of these efforts. The second section analyzes the cost-estimating methodology DoD currently applies in its insourcing initiative—Directive-Type Memorandum (DTM) 09–007 on Estimating and Comparing the Full Costs of Civilian and Military Manpower and Contractor

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<sup>1</sup> Federal Procurement Data System, 2000 and 2010, available online at [www.fpds.gov](http://www.fpds.gov).

Support—and identifies a number of significant challenges with DoD’s implementation.<sup>2</sup> The third section discusses the Office of Management and Budget (OMB) Circular A-76 process as a more suitable—yet still insufficient—approach to cost comparisons in public-private competitions as a foundation for in- and outsourcing decisions. The fourth and final section provides a detailed description of the alternative CSIS cost estimation methodology and taxonomy, one that considers all the identifiable costs.

The challenge of conducting accurate cost estimating has importance beyond the issue of insourcing. In a time of budgetary strain, the U.S. government must have repeatable, verifiable, and data-driven mechanisms for making decisions and understanding their resource implications, including associated costs. This goes hand-in-hand with the push to bring DoD up to generally accepted government accounting standards. If DoD wishes to justify its resource requirements in a deficit-conscious environment, it must be able to support its decisions with empirically backed figures. The CSIS cost estimation methodology outlined here provides a first step toward this goal. Better access to DoD internal cost data and additional research efforts will be needed to develop a further refined cost estimation methodology.

## Section I: The Department of Defense Insourcing Initiative

On April 6, 2009, Secretary of Defense Robert M. Gates announced a plan to reduce DoD’s reliance on contractors and expand its use of federal civilians to provide services.<sup>3</sup> Between 2010 and 2015, this insourcing initiative would replace more than 30,000 contractors with DoD civilians. According to Gates’ announcement, this would “restore balance” to the workforce by returning the ratio of contractors to DoD civilians to its 2001 level. The plan was also based on an assumption that federal civilians would be significantly less costly than the contractors they replaced. As a result, DoD planned to achieve budgetary savings equal to 40 percent of the cost of the contractors being replaced; more recent DoD statements claimed savings of 25 percent.<sup>4</sup> Though neither figure appears justifiable—research has shown that the about 65 percent any savings achieved through public-private competitions derive from the competition itself, not from any intrinsic advantage on

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<sup>2</sup> A wealth of literature and regulation surrounds the debate between inherently governmental workload, critical skills, and nearly inherently governmental work. In this report, for the most part, that debate is somewhat set aside, and the “services” discussed are those assumed to be not-inherently governmental—those that could be performed both by government worker or contractor.

<sup>3</sup> Robert M. Gates, “Defense Budget Recommendation Statement,” as prepared for delivery, Arlington VA, April 6, 2009.

<sup>4</sup> Robert M. Gates, as quoted in Dana Priest and William M. Arkin, “National Security Inc.,” *Washington Post*, July 20, 2010.

either the public or private side<sup>5</sup>—the FY 2010 DoD budget reflected those savings, as have subsequent DoD budget proposals to Congress.

This initiative is consistent with a variety of other legislative and policy decisions on the role of government contractors. The National Defense Authorization Acts of 2006 and 2008 required DoD to consider greater use of federal civilians.<sup>6</sup> In addition, a March 4, 2009, presidential memorandum on government contracting required OMB to review policies for contracting for services.<sup>7</sup> Numerous Government Accountability Office (GAO) and DoD Inspector General (DoD IG) reports have cited DoD’s over-reliance on contractors.<sup>8</sup>

A DoD report to Congress in December 2009 indicated that 17,000 civilian positions would be established in 2010 as the result of new insourcing efforts.<sup>9</sup> Of this 17,000, half are for commercial activities, which the report states can be done at lower cost in-house. Another 42 percent are for commercial activities that DoD would exempt from private-sector performance on the grounds that they support readiness or workforce management needs, including the need to provide for career progression and for the “oversight and control of functions closely associated with inherently governmental work.” The remaining eight percent is for work that DoD has determined is inherently governmental. The reliance on cost analysis for half of the insourcing goals clearly puts a burden on DoD using proper taxonomies and methodologies to compare the cost of government employees and contractors.<sup>10</sup>

The December 2009 DoD report included a number of changes from the plans announced in April 2009. One significant change was to expand the types of services affected by the initiative. The original plan focused on two budget categories—advisory assistance services and the category called “other services.” However, that plan was expanded to allow managers to consider any type of contracted service for insourcing, including activities such as laundry services, installation maintenance, and transportation. Targeting these expanded activities for insourcing is only

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<sup>5</sup> Christopher Snyder, Robert Trost, and Derek Trunkey, *Bidding Behavior in DoD’s Commercial Activities Competitions* (Alexandria, VA: Center for Naval Analyses, 1998); Derek Trunkey, Robert Trost, and Christopher Snyder, *Analysis of DoD’s Commercial Activities Program* (Alexandria, VA: Center for Naval Analyses, 1996).

<sup>6</sup> National Defense Authorization Act for Fiscal Year 2006, H.R. 1815, 109th Cong. (2006); National Defense Authorization Act for Fiscal Year 2008, H.R. 1585, 110th Cong. (2008).

<sup>7</sup> Barack Obama, “Memorandum for the Heads of Executive Departments and Agencies: Subject: Government Contracting,” White House, Washington, DC, March 4, 2009.

<sup>8</sup> See for example Government Accountability Office (GAO), “Contract Management: DoD Vulnerabilities to Fraud, Waste and Abuse,” GAO, Washington DC, July 2006; Department of Defense (DoD) Inspector General, “Semiannual Report to the Congress: October 1, 2008 to March 31, 2009,” DoD, Washington, DC, 2009.

<sup>9</sup> Gail H. McGinn, “Report to the Congressional Defense Committees on the Department of Defense’s FY 2010 In-sourcing Initiative and Plans,” DoD, Washington, DC, 2009.

<sup>10</sup> *Ibid.*



consistent with previous policy directives if cost savings can be realized. CSIS concludes that evidence is lacking for such savings, and there exist sound reasons to suspect they will not be achieved.

Since the Gates budget insourcing initiatives of April 2009, DoD has been converting contractor positions to government civilians, for reasons of policy and cost savings. However, in an August 9, 2010, statement,<sup>11</sup> Secretary Gates appeared to deemphasize insourcing, noting:

Last year, the department announced a plan to reduce the number of service support contractors by about 33,000 by 2015 and where necessary, to “in-source” those positions with full time government employees. Based on the data available after one year, I am not satisfied with the progress made to reduce our over-reliance on contractors. Accordingly, to accelerate this process and achieve additional savings, I have directed that we reduce funding for service support contractors by 10 percent a year for each of the next three years. Furthermore, as I will explain in a moment, we will no longer automatically replace departing contractors with full time personnel.

He went on to add:

With regard to insourcing, other than changes planned for FY 10, no more full-time positions in these organizations [OSD, Defense Agency, and Combatant Commands] will be created after this fiscal year to replace contractors. Some exceptions can be made for critical areas such as the acquisition workforce.

It appears clear, then, that while continuing to move away from the use of contractors, Secretary Gates is not convinced that a replacement capacity through insourcing is necessary. One interpretation of his remarks is that instead DoD should reevaluate the requirement for the work to be done at all. In seeming contradiction to Secretary Gates’ statements, DoD officials have since stated that existing insourcing initiatives by the Military Departments remain in full force.<sup>12</sup> In addition, the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 mandates that the “Secretary of Defense shall use the costing methodology outlined in the Directive-Type Memorandum 09–007 (Estimating and Comparing the Full Costs of Civilian and Military Manpower and Contractor Support) or any successor guidance for the determination of costs when costs are the sole basis for the decision.”<sup>13</sup> However, as a possible indicator of eroding support for insourcing, Secretary of the Army John McHugh suspended all of the Army’s insourcing activities through a February 1, 2011, memorandum on “Reservation of In-Sourcing Approval Authority.”

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<sup>11</sup> Robert M. Gates, “Statement on Department Efficiencies Initiative,” as delivered at the Pentagon, August 9, 2010.

<sup>12</sup> Robert Brodsky, “Defense insourcing to continue at military services,” *Government Executive*, September 7, 2010.

<sup>13</sup> Ike Skelton National Defense Authorization Act for Fiscal Year 2011, H.R. 6523, 111th Congress (2010), Section 323.

## What Insourcing May—or May Not—Achieve

Provided that DoD is able to recruit and retain the individuals needed for these positions, insourcing could provide a more accountable government in the long run. Although this might not lead to any immediate savings, it would be consistent with DoD's April 2010 guidance on a workforce mix that puts risk mitigation above cost considerations.<sup>14</sup> If the initiative is carefully designed and implemented, insourcing of 30,000 to 40,000 contractor positions in the United States could help DoD achieve several desirable effects. First, DoD could overcome some long-standing problems in its civilian labor force, including strengthening the performance of inherently governmental functions and other in-house capabilities. Second, insourcing could enable DoD to recruit more experienced procurement professionals to perform acquisition tasks that are either inherently governmental or closely related. Numerous reports cite the need for DoD to increase its in-house acquisition workforce and reduce the role of contractors in order to control conflicts of interest and fraud.<sup>15</sup> Third, insourcing some advisory positions might provide DoD managers with more direct control of their missions and operations. Fourth, other positions might be in-sourced to provide career progression for federal employees with scientific, engineering, and technical skills. Without an adequate base in these areas, DoD cannot be a good manager or a smart buyer.

The potential value of insourcing is clear for inherently governmental functions and for areas where DoD needs to strengthen its managerial or technical capability. However, it is not clear that insourcing can provide large budgetary savings. In fact, an extensive empirical literature review indicates that increasing in-house support functions such as building maintenance, printing, laundry, and food service would result in a cost increase of between 20 to 40 percent. That increase would reflect higher labor costs due primarily to the inefficient use of labor by the in-house monopolist rather than higher wages for the same type of workers. History is clear: the absence of potential competition leads inexorably to cost growth.

On March 4, 2009, President Barack Obama signed a memorandum that emphasized the importance of competition in controlling costs for the whole of the federal government. Yet DoD's April 2010 guidance on workforce mix does not cite the degree of competition as a factor in determining which contracts to in-source.<sup>16</sup> Nor does DoD's December 2009 report to Congress indicate the extent to which the insourcing is planned for functions in which competition has proven its ability to reduce costs.

There exist, nonetheless, service contracts for which insourcing savings might be achieved, even if the level of savings is below DoD projections. These include personal services-type contracts that

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<sup>14</sup> Clifford L. Stanley, "Department of Defense Instruction 1100.22: Policy and Procedures for Determining Workforce Mix," DoD, Washington DC, April 12, 2010.

<sup>15</sup> See, for example, GAO, "Contract Management: DoD Vulnerabilities to Fraud, Waste and Abuse" and DoD Inspector General, "Semiannual Report to the Congress: October 1, 2008 to March 31, 2009."

<sup>16</sup> Stanley, "Department of Defense Instruction 1100.22: Policy and Procedures for Determining Workforce Mix."

provide employees who sit at government desks, taking direction from DoD personnel, and performing tasks for which there is a clear long-term requirement. In some cases, these de-facto government employees were brought in under contracts to meet what was initially seen as a temporary or emergency requirement. In addition, congressional and administrative ceilings on DoD civilian authorizations—particularly in headquarters activities—encouraged the use of contractors even if this meant paying higher costs, because the alternative was simply not to do the work, an unacceptable alternative for DoD missions or readiness. Finally, the slow, difficult, and inflexible process for recruiting DoD civilians, as well as limitations on DoD pay, also contribute to this potentially inappropriate reliance on contractors.

DoD's insourcing guidance recognizes this by calling for a focus on work for which there is a long-term requirement. However, even in these cases, inclusion of total lifecycle costs is essential to determining the real cost impacts. Moreover, in many of these cases, the government faces a real challenge competing for available talent. Often, the market value of technology-related skills may well exceed the government's capacity to pay. In addition, DoD's insourcing plans do not quantify the percentage of targeted positions that meet these tests, nor do those plans quantify actual savings by billet.

There is far less potential for savings from insourcing of other service categories, such as the type of work done by consulting firms that perform studies and analyses. These firms often hire specialized professional personnel at salaries the government cannot match. Because the labor is costly, it is intensively managed. Professionals may contribute to multiple projects for multiple clients—public and private—in a matter of weeks and still not always be fully utilized. Individuals whose skills are not in demand and who cannot generate sufficient billable hours are not retained. According to one survey, such firms must typically bill two dollars for every dollar charged to clients for direct labor in order to cover their expenses and earn a profit margin of 5 to 10 percent.<sup>17</sup> This statistic gives the impression that DoD could achieve large savings by insourcing the work. In this case, however, the appropriate comparison is not between the cost of a DoD employee and the hourly cost of the individuals working on the contract. It is between the cost of a private-sector consulting firm and the costs that DoD would incur if it tried to meet its needs by running a similar operation in-house. None of DoD's cost comparison practices satisfy this appropriate comparison test.

## Implementation Issues

For the past two years, the military departments and defense agencies have been insourcing very rapidly based on top-down goals provided by the Office of the Secretary of Defense (OSD). OSD guidance permits them to exceed the goals for the numbers of positions converted, but they are not permitted to fall short.

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<sup>17</sup> Grant Thornton, *15th Annual Government Contractor Industry Highlights Book: Industry Survey Highlights 2009* (Chicago: Grant Thornton LLP, 2009).

The use of goals to drive the workforce mix is consistent with past practices. Top-down goals can be an imperfect but useful tool for congressional overseers or senior managers who have clear strategic objectives—such as moving inherently governmental work in-house and strengthening institutional capabilities—but who lack the detailed information required to implement those objectives from the bottom up. That absence of clarity appears to be the case with DoD insourcing to date.

A key question is: can DoD’s current approach produce the desired results without serious side effects? Anecdotal evidence suggests that rapid implementation and unrealistic savings goals are having unintended consequences. One such consequence is to limit the ability of the insourcing initiative to achieve its objectives.

### **Problems of Insourcing and Budgetary Savings**

In preparing their 2010 and 2011 budgets, the services and defense agencies received guidance from OSD, not only on the number of additional civilian positions they were authorized, but also on the savings they would achieve by substituting those civilians for contractors. In 2010, OSD correspondingly deducted projected savings of 40 percent per in-sourced position from the components’ budgets.<sup>18</sup> Moreover, according to a February 15, 2011, statement by DoD comptroller Robert Hale, projected out-year “savings” resulting from the insourcing initiative are still factored into the budget and will need to be accounted for.

Most DoD civilians and many contractor services are paid out of the Operation and Maintenance (O&M) accounts. Historically, DoD budgets have underfunded O&M accounts by 1.5 percent, compared to eventual expenditures from those accounts. Payroll costs and contractor invoices must be paid—they are obligations of the federal government. A clear distinction is needed between budgetary adjustments—the dollars that are taken out of O&M based on the initiative’s goals—and the expected reduction in actual costs calculated from the bottom up based on the individual contracts being converted. What that means for insourcing is that, to the extent that these accounts are currently well funded, a gap due to unrealistic top-line savings estimates will not necessarily cause serious problems, but historical funding shortfalls will be exacerbated by improperly budgeted insourcing savings.

To date, the military departments have not had a consistent or transparent methodology for calculating the expected savings from the conversions. There is therefore no basis for analyzing their success in meeting goals. If dollars are taken out of the budget, savings are technically “achieved”—but costs may be incurred anyway. Such costs obviate the “savings,” but it is not yet possible to tell the extent to which this is the case for DoD.

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<sup>18</sup> Steven Butler, “Air Force Materiel Command (AFMC) Resource Management Decision (RMD) 802 In-Sourcing Implementation Guidance,” Air Force Materiel Command, Wright-Patterson Air Force Base, OH, 2010.

DoD has provided guidance to the services on how to compare the costs of contractors and in-house service providers, but that guidance—which, as explained below, purposely excludes many of the costs of in-house production—has not yet become widely available as a useable model. The insourcing initiative is well underway, and while cost is reportedly the rationale for half of the insourcing decisions, there is not enough public information to estimate even the likely range of overall real, achieved savings.

Anecdotal evidence regarding savings is unsatisfactory. Those concerned about the growing role of contractors cite examples in which insourcing leads to very large savings. Industry groups opposing the initiative point to other examples with opposite outcomes.<sup>19</sup>

Given differences in accounting systems between public and private service providers, as well as the problems inherent in allocating joint overhead costs and estimating the cost of risk, it may often be impossible for even the most expert and objective observer to compare in-house and contractor costs with any useful degree of accuracy. Rather than rely on DoD estimates to gauge the likely impact of this initiative on federal costs, Congress might consider the nature of the positions and contracts that are being insourced for cost. Is there some logical reason why the government might be more cost-effective than the private sector? For example, were the contracts competed or sole source? If a contract was indefinite demand/indefinite quantity (ID/IQ), was there only one qualified provider? Were the contractors free to determine the numbers and types of workers as long as performance targets were met? Were the contracts for functions that private businesses often choose to outsource, such as building maintenance, laundry and food services, routine payroll functions?

## Unintended Consequences in the Defense Sector

Sourcing decisions—whether outsourcing or insourcing—based exclusively on anticipated short-term cost savings can have unintended consequences. In discussions with CSIS, representatives of several small firms that provide temporary staffing services indicated that DoD is not merely shifting positions in-house. Instead, DoD managers are targeting individual employees from those firms for the newly insourced positions. According to the report of one staffing firm, the U.S. Army tried, as part of an insourcing initiative, to hire away individuals who had been recruited and deployed by the firm for one-year tours at forward operating bases overseas. When the Army's hiring effort failed, the insourcing decision was reversed.

Many of these firms are small businesses that have made a significant investment in recruiting and supplying high-quality personnel with valuable skills to DoD. They were able to bid for one-year contracts with option years in the expectation that, if their performance was good, the options would be exercised. Although converting these workers to temporary or permanent DoD employees may yield short-term savings, it is something that can only be done once. In the future, there will be fewer firms willing to recruit on DoD's behalf, and those that do will require a stronger

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<sup>19</sup> Stephen Losey, "Contractors: Quotes Drive Insourcing at Defense," *Federal Times*, March 9, 2010.

commitment on the part of their employees not to take DoD positions. Consequently, DoD will pay a higher price for such services due to the perceived business risk.

## **Need for Strategic Planning**

DoD reports that half of the positions being insourced are for reasons other than cost: 8 percent because they are inherently governmental and another 42 percent for reasons of institutional capabilities (readiness) or workforce management. Given that one-third of the total positions identified for insourcing are in the acquisition workforce, much of that 42 percent should be expected in acquisitions. This is an area in which insourcing is likely to achieve some of its desired effects: DoD has a strategic workforce plan; there is a demonstrated need for additional in-house personnel; and many tasks approach inherently governmental functions.

Clear strategic plans for other types of personnel and functions could prove similarly useful. For example, the Defense Commissary Agency, which employs 14,000 DoD civilians, has taken this opportunity to insource—based on cost—some stock shelving and janitorial positions. This insourcing shifts the risks associated with potential future downsizing from private contractors, with their flexible workforces, to DoD and the civil service system. Another approach might consider whether selling groceries to military families is a core function that should be kept in-house, whether it could be subjected to competitive contracting, or whether it might be abandoned in favor of cash benefits.

Slowing the insourcing initiative and viewing it as a good-government initiative, rather than a budget drill, might give managers a better chance to identify and recruit for those specific functions and positions that should be moved in-house. Insourcing might then run parallel to another initiative that would identify an equal or greater number of DoD personnel in functions that should be competitively outsourced or privatized. Unless this is done, the ratio of civilian to military personnel will, under the 2011 budget plan, approach an historic high. This is of concern given the likelihood of future cuts in defense budgets and the associated business risks and may be inconsistent with efforts to reduce overhead costs.

## **Section II: The Directive-Type Memorandum**

Insourcing decisions made on the basis of cost depend on the ability to accurately project the relative costs of the governmental and private options. Further, even if insourcing is done for policy reasons (such as rebuilding the DoD acquisition workforce), DoD still needs to know the cost impact of these actions. Without these data, any cost comparison is no more than guesswork. In part to meet those objectives, on January 29, 2010, the director of the Cost Analysis and Program Evaluation (CAPE) signed Directive-Type Memorandum (DTM) 09-007, “Estimating and

Comparing the Full Costs of Civilian and Military Manpower and Contract Support.”<sup>20</sup> This DTM constitutes current DoD guidance for insourcing decisions, and the National Defense Authorization Act for Fiscal Year 2011 mandates that the “Secretary of Defense shall use the costing methodology outlined in the Directive-Type Memorandum 09–007 (Estimating and Comparing the Full Costs of Civilian and Military Manpower and Contractor Support) or any successor guidance for the determination of costs when costs are the sole basis for the decision.”<sup>21</sup> The DTM is expected to be converted to a new DoD Instruction by September 1, 2011.

Yet the procedures laid out in the DTM for calculating the government’s costs for performing a service have several significant gaps. These gaps raise questions about the validity of any analysis generated on the basis of DTM guidance. The DTM is written to encourage analysts to “carefully consider” all possible costs associated with contracts, but the guidance itself overlooks many cost aspects for the government side.

Following is a list of key shortcomings in the DTM. The DTM:

1. Lacks the ability to calculate fully burdened government wide costs. Indicates that “manpower cost estimates normally address costs to the Department of Defense,” and that “the costs of service contracts are variable costs in the short run paid by the Department of Defense.” Analysts have interpreted the lack of consistent focus on fully burdened government-wide costs to mean they could leave out costs or savings that accrue to other federal agencies.
2. Fails to account for the full cost of DoD-owned capital but includes those costs for contractors. This ignores the fact that the real economic costs of capital devoted to risky commercial activities—including forgone interest and a risk premium as well as depreciation—are the same regardless of whether the activity is performed by a public or private producer. The failure to consider any capital costs for government workers is a step backward from the costing approach used under OMB Circular A-76 (see following section), which included the cost of in-house production at a private-sector rate of return on new investments. It is difficult to determine the federal cost of capital, but there is universal agreement that the cost is not zero.
3. Fails to account for taxes forgone by the U.S. Treasury or state or local governments. This is another step backward, as the OMB Circular A-76 costing methodology included forgone federal taxes as a cost element for in-house producers. These can be important; forgone taxes provide DoD’s system of in-house retail activities with an annual subsidy equal to one-third of their total operating costs. As with cost of capital, these costs are included for contractors but not for government employees.

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<sup>20</sup> Office of the Secretary of Defense, Directive-Type Memorandum (DTM) 09-007, “Estimating and Comparing the Full Costs of Civilian and Military Manpower and Contract Support,” <http://www.dtic.mil/whs/directives/corres/pdf/DTM-09-007.pdf>.

<sup>21</sup> Ike Skelton National Defense Authorization Act for Fiscal Year 2011, Section 323.

4. Fails to account for the inherent risk of cost growth among public producers. The available empirical evidence indicates that, for competed workloads, cost growth depends on changes in the size and scope of work, not on which sector wins. The DTM approach effectively eliminates competition, and history says that will cause cost to increase over time.
5. Overlooks the cumulative effect of multiple insourcing decisions. Costs such as day-care centers and the cost of payroll processing do not increase as the result of any single insourcing decision, but those costs will likely rise as the result of the cumulative effect of a systematic insourcing initiative.
6. Overlooks the imputed costs of insuring and indemnifying in-house producers. OMB Circular A-76 methodology correctly required that in-house producers take into account what it would cost if they were required to purchase casualty and liability insurance. In contrast, the DTM recognizes the costs of insurance and indemnification to private producers, but no such costs are attributed to public ones.<sup>22</sup>
7. Fails to account for non-cost factors, such as varying workload stability. Some tasks require a rather constant allocation of human resources, while others experience high levels of volatility. While this is not a cost factor per se, the flexibility of contractors can provide an advantage to the government when workload is variable, and there is a cost to maintaining an unneeded workforce in that case.
8. Fails to utilize a detailed statement of work as a basis for cost estimation, which was required in the A-76 process via a performance work statement. Without a statement of work that accurately lays out the requirements of the task to be performed, it is impossible to ensure that the full costs of performance are captured in any cost estimate.

Of these shortcomings, the first is the most important. If the true cost of public performance of commercial services cannot be determined, any budget-driven insourcing decision becomes immediately suspect. How can DoD claim it is saving 40 percent, or 25 percent, or any amount via insourcing private-sector positions if it doesn't know how much the newly insourced function will cost? Moreover, even for insourcing decisions conducted on the basis of inherently governmental considerations, DoD should still understand the full budgetary implications of the decision so it can properly weigh the benefit gained from boosting in-house capabilities against the budgetary impact.

### Section III: The OMB Circular A-76

OMB Circular A-76<sup>23</sup> provided the previous cost comparison methodology used by DoD. Given the flaws of the DTM, it is worth considering whether the A-76 provides a better basis for performing

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<sup>22</sup> Note that although the government does not buy insurance, it implicitly insures its in-house producers. The cost of purchasing insurance reflects the expected amount of these costs.

<sup>23</sup> Office of Management and Budget (OMB), "OMB Circular No. A-76," <http://www.pps.noaa.gov/CircularNoA76.pdf>, D-7.



cost estimates of government performance. Based on our analysis, the A-76 performs better than the DTM in the following respects:

1. Provides greater specificity on major cost components
2. Includes the cost of in-house production at a private-sector rate of return on new investments
3. Includes forgone federal taxes as a cost element for in-house producers
4. Requires that in-house producers take into account what it would cost if they were required to purchase casualty and liability insurance
5. Requires a performance work statement

Of these, the most important is the fact that the A-76 provides far greater specificity on major cost components, providing better guidance for cost estimators on how to compute more of the range of the fully burdened cost. In contrast, the DTM provides only general explanations (aside from direct labor costs).

At the same time, A-76 still exhibits flaws that must be recognized and corrected. In reviewing the literature regarding A-76, the majority of criticism relates to the competition process itself and the lack of follow-up after a public-sector victory to ensure performance, rather than flaws in the cost estimation methodology. Two major criticisms of the cost estimation system itself do merit discussion, however:

1. A-76 utilizes a blanket 12 percent overhead rate for all government functions. CSIS judges this comprehensive overhead figure to be methodologically unsupportable and discusses the reasons why, along with an alternative system for estimating overhead, in Section IV.
2. A-76 fails to account sufficiently for the true cost of capital on the public side. A-76 is better in this respect than the DTM, which includes no accounting for cost of capital while forcing contractors to account for it in their pricing, but further research is needed to generate a methodology for fully capturing public-sector cost of capital.

## Section IV: The CSIS Cost Estimation Methodology

The key objective for creating a CSIS Cost Estimation Methodology is to account for the fully burdened costs to government. This will create a level playing field between the public and the private sector, removing any inherent competitive advantages for both sides, and enabling DoD to harness the cost saving power of competition. For this purpose, the methodology draws on the cost comparison guidelines developed in the most updated version of the OMB Circular A-76 and the DTM. Using these as its foundation, the CSIS methodology modifies and enhances specific elements in them to correct for the above-mentioned shortcomings. Specifically, the CSIS Cost Estimation Methodology:

- Introduces a statement of work (SOW) as a common starting point for public-private competitions with uniform, clearly defined performance parameters upon which proposals will be evaluated
- Clarifies that the total, fully burdened costs to the federal government constitute the basis of the public sector's cost estimate rather than only costs accrued for DoD
- Accounts for the inherent risk of cost growth for both the public and private sector
- Incorporates expected transition costs in both directions, public to private and vice versa
- Accounts for oversight and administration cost for both the public and private sector
- Mandates more frequent updates for calculating personnel cost elements such as health care and retirement benefits to ensure as accurate a cost estimate for military and civilian employees as possible
- Accounts for the full cost of DoD-owned capital
- Accounts for tax revenue generated by the private sector following the OMB Circular A-76 model
- Accounts for varying workload stability within a commercial activity
- Accounts for the cumulative effects of multiple insourcing and outsourcing decisions on indirect cost structures within the public and private sector
- Takes into account the hypothetical costs for insuring and indemnifying the public sector following the OMB Circular A-76 model

## Statement of Work

Conducting meaningful public-private competitions requires a common starting ground with uniform, clearly defined performance parameters. Issuing a binding SOW at the beginning of each competition would help create such a level playing field for both sides and would ensure that both private and public bids would be evaluated based on identical criteria. Such a SOW should at a minimum include the following components:

- A clear description of the scope of work associated with the activity
- Historical workload data, including workload stability from which quantitative and qualitative staffing requirements can be deduced
- Clearly defined performance parameters with minimum requirements and, if applicable, evaluation criteria for performance in excess of these requirements
- Period of performance
- Availability of government-furnished equipment, materials, and services
- Quality and oversight requirements for performance

Public- and private-sector costs will be subsequently assessed based on this SOW by impartial proposal evaluators without any personal interest in the outcome of the public-private competition to avoid conflicts of interest. The performance parameters established in the SOW should also form the basis for any post-award evaluation of the winning bidder's performance.

## The Overhead Challenge

Overhead is the most significant area in which the CSIS methodology improves upon the existing systems, because the greatest shortcoming of both the A-76 and the DTM cost comparison methodologies is arguably the calculation of overhead costs for the public sector. A-76 accounts for overhead costs at a fixed rate of 12 percent of agency personnel costs. The DTM fails to provide any concrete overhead cost rate at all.

The 12 percent overhead rate under A-76 was by far the greatest source of controversy in terms of the A-76 cost estimation methodology. The rate was not the result of an empirical study of public-sector overhead rates, but rather the result of negotiations. It is several times lower than generally acknowledged private-sector overhead rates, which directly contradicts the accepted wisdom that the private sector is more efficient. Furthermore, given that overhead rates vary significantly across sectors, any single overhead rate covering the vast universe of government functions will be analytically suspect.

The challenge for determining an adequate overhead rate starts with the definitional question of what constitutes overhead. There does not exist a universally accepted definition of what costs are subsumed under overhead. For instance, it is not unusual in the private sector for different businesses within the same company to follow different accounting standards for calculating overhead. A-76 provides the following definition for overhead:

Overhead includes two major categories of cost, operations overhead and general and administrative overhead. Operations overhead includes costs that are not 100 percent attributable to the activity being competed but are generally associated with the recurring management or support of the activity. General and administrative overhead includes salaries, equipment, space, and other tasks related to headquarters management, accounting, personnel, legal support, data processing management, and similar common services performed external to the activity, but in support of the activity being competed. A standard twelve percent overhead factor is an estimated federal agency overhead factor that is calculated in agency and public reimbursable cost estimates for streamlined and standard competitions.<sup>24</sup>

In the case of the DTM, overhead costs are lumped together with general and administrative (G&A) costs into the indirect cost category. Per the DTM:

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<sup>24</sup> OMB Circular No. A-76.

Indirect costs for military and DoD civilian manpower are the costs of goods, services, and benefits that support more than one organization and thus are allocated across the organizations drawing on them rather than being borne by a single organization.<sup>25</sup>

However, the DTM fails to provide a clear line of distinction between G&A and overhead costs, which makes it impossible to determine the exact composition of the overhead category.

A further definitional challenge is the determination of what cost basis the overhead rate should refer to. A common practice in the service industry, for instance, is to refer overhead rates exclusively to direct labor costs to capture indirect costs to contracts. An alternative methodology is to include fringe benefits associated with direct labor as part of the base used for calculating overhead rates. This alteration in calculating overhead results in a lower overhead rate, while the total indirect costs remain the same, often mistakenly leading to the impression of lower overhead costs.

The discussion above illustrates how important a common definitional starting point for the determination of an adequate overhead rate is. Any number discussed for calculating overhead is largely meaningless without an exact understanding of the reference framework it is operating under.

The foundation of the CSIS approach to dealing with public-sector overhead costs is to explicitly define, to the greatest degree possible, what is included in overhead. To that end, CSIS recommends line-item specificity for estimating overhead similar to the discrete, line-item elements, of the major A-76 cost components (other than overhead).

The following line items should be used to generate an estimate of public-sector overhead for a specific function:<sup>26</sup>

- Operational overhead—management and oversight
- Information technology
- Human resources (HR)/personnel
- Legal support
- Accounting
- Payroll
- Headquarters management
- Miscellaneous

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<sup>25</sup> DTM 09-007, p. 9.

<sup>26</sup> As with A-76, facilities costs are broken out separate from overhead.

While calculating the costs for specific elements under overhead will in some cases be difficult, doing this work is the only way to have repeatable, verifiable, and data-driven estimates for the overhead costs of the wide variety of government functions.

## The CSIS Public Cost Estimation Taxonomy

This same focus on line-item granularity in the estimation of cost components guides the overall CSIS public-sector cost estimation methodology. Government performance is broken into six major cost components:

1. Personnel (direct labor and fringe costs for military and civilian personnel, including health insurance and retirement)
2. Material and supply (general, inflation, insurance, maintenance and repair)
3. Facilities (cost of facility, rent, insurance, maintenance and repair, capital improvements, utilities)
4. Capital (cost of capital assets and depreciation of existing capital assets)
5. Overhead
6. Additional costs (liability insurance, travel, subcontracts, nonrecurring workloads, minor items, medical exams, training, cost growth, conversion costs, administration and oversight costs)

The figure below displays the complete CSIS taxonomy for estimating the fully burdened cost of government performance.

### The CSIS Public Cost Estimation Taxonomy

Personnel	Overhead	Facilities	Additional Costs
Direct Labor (Military & Civilian)	Operational Overhead - Management & Oversight	Cost of Facility	Liability Insurance
Fringe	Information Technology	Rent	Travel
	HR/Personnel	Insurance	Subcontracts
	Legal Support	Maintenance & Repair	Nonrecurring Workloads
<b>Material &amp; Supply</b>	Accounting	Utilities	Minor Items
General	Payroll	Capital Improvements	Medical Exams
Inflation	Headquarters Management	<b>Capital</b>	Training
Insurance	Miscellaneous	Cost of Capital	Cost Growth
Maintenance & Repair		Depreciation	Conversion Costs
			Administration & Oversight Costs

### *Personnel*

Personnel costs capture the full, government-wide costs of manpower required to fulfill the activity outlined in the SOW. Establishing workload requirements and corresponding staffing requirements constitute the initial step in calculating personnel costs. Personnel costs relate to any cost that can be exclusively attributed to the specific activity. This includes the cost of personnel directly working on the commercial activity being competed, as well as labor inflation cost factors.

The line items that make up the personnel cost component can be broadly summarized as:

- Direct labor (military and civilian)
- Fringe

### *Material and Supply*

Material and supply costs include the full, government-wide costs for goods required for the performance of the commercial activity competed as outlined in the SOW. It also includes maintenance and repair costs for equipment used. Material and supply costs should only be included in the public costs estimate to the extent that the SOW does not specify the provision of government-furnished materials, equipment, and supplies.

The initial step for calculating material and supply costs is to conduct a detailed determination of materials and supplies required for undertaking the commercial activity being competed. This determination has to directly derive from the requirements defined in the SOW.

The line items that make up the material and supply cost component are:

- General
- Inflation
- Insurance
- Maintenance and repair

### *Facilities*

Facility costs capture the full, government-wide costs associated with upgrading or expanding of existing facilities or the construction of new facilities as required by the performance parameters outlined in the SOW. In addition, facility costs also include the maintenance of new and existing facilities. The costs of rent, utilities, and maintenance and repair are also reflected. Facility costs should only be included in the public costs estimates to the extent that the SOW does not specify that required facilities will be provided to all bidders.

The initial step for calculating facilities costs is to conduct a detailed determination on facility requirements for undertaking the commercial activity being competed. This determination has to directly derive from the requirements defined in the SOW.

The line items that make up the facilities cost component are:

- Cost of facility
- Rent
- Insurance
- Maintenance and repair
- Utilities
- Capital improvements

### *Capital*

Capital costs include the full, government-wide costs of capital for capital assets required to be purchased for the performance of the commercial activity as outlined in the SOW. In addition, capital costs also include the depreciation of already existing capital assets. Capital costs should only be included in the public costs estimates to the extent that the SOW does not specify that required capital assets will be provided to all bidders.

The line items that make up the capital cost component are:

- Cost of capital
- Depreciation

### *Additional Costs*

Additional costs capture all remaining full, government-wide costs required by the performance parameters outlined in the SOW that have not been covered in any of the previous five major components. Additional costs should only be included in the public costs estimates to the extent that the SOW does not specify that required services will be provided to all bidders. The initial step for calculating additional costs is to conduct a detailed determination of requirements for undertaking the commercial activity being competed. This determination has to directly derive from the requirements defined in the SOW.

The line items that make up the additional cost component are:

- Liability insurance
- Travel
- Subcontracts
- Nonrecurring workloads
- Minor items
- Medical exams
- Training

- Cost growth
- Conversion costs
- Administration and oversight costs

For the private sector's cost estimate, the base contract price in the bid constitutes the basis and includes most of the above cost components. Income tax adjustments must be accounted for, as private bids must be credited for the additional federal, state, and local taxes that would be forgone with public performance. Costs incurred by the government for contract administration and oversight must also be considered. Lastly, as with the public side, conversion costs for cases where work is shifted from public to private must be reflected in the private bid.



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