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Make or Buy: A Systematic Approach to Department of Defense Sourcing Decisions

30 July 2013

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**Defense-Industrial Initiatives Group
Center for Strategic and International Studies**

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Abstract

Over the last decade, Department of Defense (DoD) spending on service contracts more than doubled in constant terms, from \$90 billion in 2000 to \$183 billion in 2012. Policy-makers have recently attempted to reduce or even reverse this trend, in part by emphasizing instead the “in-sourcing” of work performed under services contracts. Over the last three years, CSIS has worked to develop a more systematic framework for guiding sourcing decisions for services contracts within the DoD, which would have broader implications for the whole universe of budget-based decisions within the DoD. Towards that purpose, this paper analyzes the stated motivations, implementation strategies, and guiding analytical underpinnings for previous outsourcing efforts and for the currently ongoing in-sourcing initiative. It then assesses current and previous DoD methodologies for guiding sourcing decisions, highlighting the individual strengths and shortcomings of these methodologies. The third section of this paper presents an analysis of public sector sourcing decisions in the wider context of economics and business management, to provide broader conceptual insights for more informed determinations on these sourcing decisions. The final section analyzes recently updated DoD cost estimating guidance and discusses drawing on object class code data as a potential data source for cost estimation.

Keywords: in-sourcing, outsourcing, service contracts, sourcing, cost estimation



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Dedicated to the memory of Guy Ben-Ari, our friend and colleague, without whom this research effort would not have been possible.

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Make or Buy: A Systematic Approach to Department of Defense Sourcing Decisions

Introduction

Over the last decade, Department of Defense (DoD) spending on service contracts more than doubled in constant terms, from \$90 billion in 2000 to \$183 billion in 2012.¹ Policy-makers have recently attempted to reduce or even reverse this trend, in part by emphasizing instead the “in-sourcing” of services contracts. In the past, conversions from government civilians to contractors have been done for reasons of policy or projected cost savings. More recently, conversions from contractors to government civilians, as well as other actions to expand the federal workforce, have been undertaken for a similar combination of policy reasons and projected cost savings. Weaknesses in the methodology used by the DoD to justify or budget for in-sourcing decisions call into question whether the DoD is using accurate data on the cost implications of its sourcing decisions.

Over the last three years, CSIS has worked to develop a more systematic framework for guiding sourcing decisions for services contracts within the DoD. This framework also has broader implications for all budget-based decisions within the DoD. Towards that purpose, this paper first presents an analysis of the stated motivations, implementation strategies, and guiding analytical underpinnings for previous outsourcing efforts and for the currently ongoing in-sourcing initiative. It then assesses current and previous DoD methodologies for guiding sourcing decisions, highlighting the individual strengths and shortcomings of these methodologies. The third section of this paper analyzes public sector sourcing decisions in the wider context of economics and business management, to provide broader conceptual insights for more informed sourcing decisions. The final section analyzes recently updated DoD cost estimating guidance and discusses drawing on object class code data as a potential data source for cost estimation.

Department of Defense Sourcing Policy

Office of Management and Budget (OMB) Circular A-76

OMB Circular A-76 was the result of over three decades of policy deliberation to help ensure that the government did not improperly compete with private enterprise. Starting in the 1930s, a series of commissions and reports grappled with the problem of what tasks should (or must) be performed by government employees

¹ Federal Procurement Data System (FPDS.gov) data with CSIS analysis



and what tasks are better left to the private sector. These debates culminated during the 1950s and 1960s in the issuing of guidance documents that ultimately became Circular A-76 (hereafter referred to as “A-76”), which sought to lay out uniform guidance on sourcing policy across the federal government.² (Halchin, pp. 3–4)

A-76 has been revised several times since its issuance, but the core of the guidance has always been the competitive process, better known as public–private competition. A-76 has never mandated competition for any particular function (though two administrations, those of Presidents Ronald Reagan and George W. Bush, issued policies setting targets for numbers of positions to be competed); rather, A-76 laid out procedures for how such public–private competitions were to be conducted. (Halchin, p. 6) The competitive process included three broad steps, once a function had been identified for competition:

1. Issuance of a Performance Work Statement, to lay out clearly the tasks to be performed and ensure that competitors were “bidding” for the same work;
2. Formation of a Most Efficient Organization (MEO) within the government to serve as the government’s offeror;
3. Selection of a private competitor from the field of bidders, to compare against the government option.

After adjustments to compensate for differences in projected performance levels, to ensure balanced and fair cost comparisons, if the private bid were 10 percent or \$10 million less than the government option, the function would be outsourced. (Commercial Activities Panel [CAP], p. 19)

OMB Circular A-76 Within the DoD

From the start, the DoD has been the most active agency in performing A-76 cost comparisons. After increasing sharply in the late 1970s and early 1980s, A-76 competitions within the DoD declined by over half in the latter half of the 1980s, a trend which continued into the early-to-mid–1990s, when very few competitions were started. (Keating, p. 4) Competitions started to increase in the late 1990s and early 2000s, but between 1997 and 2001, there were fewer cost comparisons performed combined than in any individual year in the early 1980s. (CAP, p. 21) In the late 1990s and early 2000s, A-76 was one part of DoD’s comprehensive “strategic sourcing” initiatives, designed to cover the whole range of DoD activities. (GAO, 2000, p. 3) Historically, the Navy (which has conducted the most competitions) and

² The most recent revision of Circular A-76, issued in 2003, can be viewed here: http://www.whitehouse.gov/sites/default/files/omb/assets/omb/circulars/a076/a76_incl_tech_correction.pdf



Air Force have had the most active A-76 cost-comparison programs, with the Army conducting about a third fewer competitions than the Navy, and the USMC and various DoD agencies each accounting for less than a sixth of the total number of competitions started by the Navy. (Keating, p. 7)

Numerous studies have shown that the A-76 competitions have produced significant savings, more as a result of competitive pressures than any inherent advantage of public or private providers. (Tighe et al., p. 11) The government MEOs and industry each won approximately half of the competitions, on average. (Keating, p. 18) A review of several studies on savings produced through A-76 competitions showed an average savings of around 30 percent across a number of different functions and tasks, though that number was highly variable (ranging from 15 to 45 percent). One study noted that the highest savings were achieved when military billets were converted, though there are limits to what military functions can be classified as “commercial” or not inherently governmental.

Criticisms and Problems with A-76 Implementation

In reviewing the literature, the majority of technical criticisms of the A-76 process focus not on the policy itself but rather on the implementation of the competitions. One particularly troubling figure is seen in a RAND review of DoD A-76 cost comparisons: For every thirteen cost comparisons started in the period reviewed, five were canceled. (Keating, p. 9) These cancellations happened for a number of reasons, though large delays in soliciting and preparing bids seemed to be a common cause, and studies of large functions were at greater risk of being canceled before completion. A provision in the FY1991 DoD Appropriations Act imposing a 24-month limit on single-function cost comparisons going forward also influenced the rate of cancellations. (Keating, p. x) The length of time for competitions to be completed was a recurring problem cited in the literature; according to the aforementioned RAND study, the median time for completion was 664 days, with a mean of 810 days. (Keating, p. 35) In discussions with stakeholders, the long delays were seen as troublesome by both industry and government sources, due to morale issues caused by uncertainty regarding job security (on the government side) and the inability to plan revenues and workload (on the industry side.)

The lack of post-decision follow-up on A-76 competitions was another major source of criticism. Despite some mechanisms in place, there was no consistent effort within the DoD to track whether A-76 competitions produced projected savings or met promised performance levels. (GAO, 2002, p. 4) Another major area of criticism was with how A-76 was being used. The 2002 Commercial Activities Panel report evaluating government sourcing policy noted that, while A-76 functioned reasonably well as a way to compare the cost of government and private



performance, it was being stretched to include evaluations of other factors it was never designed to weigh: “quality, innovation, flexibility, and reliability.” (CAP, pp. 10 & 41–43)

Moratorium

In January 2008, Congress passed legislation suspending A-76 cost competitions within the DoD (and throughout the rest of the government in March 2009), a prohibition which has been consistently renewed in the years since then. Attached to legislation continuing the prohibitions in 2010 and 2011 were calls for studies of A-76 to be completed by various stakeholders, including the DoD Inspector General (DoDIG) and the Government Accountability Office (GAO), which would be used to determine whether A-76 competitions would be allowed to resume. Although all required studies have been delivered to Congress, and many of them recommend resuming A-76 competitions, neither Congress nor the current administration have acted to revive A-76. In fact, the President’s FY2013 budget request includes a provision explicitly prohibiting funds from being used for any outsourcing-related study or competition. (Bailey Grasso, pp. 5–8)

DoD’s In-Sourcing Initiative

On April 6, 2009, Secretary of Defense Robert M. Gates announced a plan to reduce the DoD’s reliance on contractors and expand its use of federal civilians to provide services. (Gates, 2009) This in-sourcing initiative projected the replacement of more than 30,000 contractors with DoD civilians between 2010 and 2015. According to Gates’ announcement, this would “restore balance” to the workforce by returning the ratio of contractors to DoD civilians to its 2001 level. A plain reading of contemporaneous budget documents indicates that the plan was also based on an assumption that federal civilians would be significantly less costly than the contractors they replaced. As a result, the 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. (Gates, 2010) Neither figure appears justifiable—research has shown that the approximately 65 percent savings achieved through public–private competitions derive from the competition itself, not from any intrinsic advantage on either the public or private side.³ The FY2010 DoD budget reflected those savings, as have subsequent DoD budget proposals to Congress.

³ See, for example, Snyder, C., R. Trost, and D. Trunkey. (1998) Bidding Behavior in DoD’s Commercial Activities Competitions. Alexandria, VA: Center for Naval Analyses, and Trunkey, D., R. Trost, and C. Snyder. (1996) Analysis of DoD’s Commercial Activities Program. Alexandria VA: Center for Naval Analyses.



This initiative was 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 the DoD to consider greater use of federal civilians. (NDA 2006 & 2008) A March 4, 2009, Presidential memorandum on government contracting required the Office of Management and Budget (OMB) to review policies for contracting for services. (Obama) Numerous GAO and DoDIG reports have cited the DoD's over-reliance on contractors.⁴

A DoD report to Congress in December 2009 indicated that 17,000 additional civilian positions would be established in 2010 as the result of new in-sourcing efforts. (McGinn, p. 6) 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 the 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." (McGinn, p. 5) The remaining eight percent is for work that the DoD has determined is inherently governmental. The reliance on cost analysis for half of the in-sourcing goals clearly puts a burden on the DoD to use proper taxonomies and methodologies to compare the cost of government employees and contractors. (McGinn, pp. 4–5)

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 in-sourcing, including activities such as laundry services, installation maintenance, and transportation. Targeting these expanded activities for in-sourcing is only consistent with previous policy directives if cost savings can be realized. CSIS concluded at the time that the process was insufficient to validate those savings and that there were sound reasons to suspect they would not be achieved. (Berteau, pp. 5–7)

In an August 9, 2010, statement, Secretary of Defense Robert Gates himself de-emphasized in-sourcing, signaling that expected savings were not materializing. (Gates, 2010) Subsequent statements from DoD officials have stated that existing in-sourcing initiatives by the Military Departments remain in full force, however. (Brotsky) In the course of this research effort, discussions with DoD officials have indicated that the expected savings from in-sourcing are still built into budgets, and

⁴ See, for example, Government Accountability Office, (2006) Contract Management: DoD Vulnerabilities to Fraud, Waste and Abuse, Washington, DC: Government Accountability Office; Department of Defense Inspector General, (2009) Semiannual Report to the Congress—October 1, 2008 to March 31, 2009, Washington, DC: Department of Defense Inspector General.



some within the DoD still believe that in-sourcing, in and of itself, will lead directly to large savings. 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.” (NDAA 2010)

Recent legislative action and statements from the DoD do show a weakening of support for in-sourcing. Secretary of the Army John McHugh suspended all of the Army’s in-sourcing activities through a February 1, 2011, memorandum on “Reservation of In-Sourcing Approval Authority.” More recently, section 937 of H.R. 1540, the House version of the FY2012 National Defense Authorization Act, called for an end to the temporary moratorium on public–private competitions that was established in the FY2010 National Defense Authorization Act. Though this provision did not make it into the final bill, it does signal a shift in Congressional support away from in-sourcing.

The release of the Office of Federal Procurement Policy’s (OFPP) Policy Letter 11-01, released on September 12, 2011, marks the most recent major policy development relating to the broader issue of sourcing decisions. This guidance provides a much-needed framework for sourcing decisions based on three categories of work: inherently governmental, closely associated, and critical classifications. While this guidance represents a welcome step in the right direction towards clarifying the standards for declaring positions or functions inherently governmental or closely associated, various stakeholders have expressed a desire for more specific guidance going forward to help eliminate uncertainty regarding the boundaries of those categories, and the guidance for “critical classifications” has also been called ambiguous and imprecise.

DoD Cost Estimation Methodologies

Given that the focus of DoD sourcing policy has been on issues of cost, the soundness of the cost estimation methodologies at the heart of those policies is crucial. As CSIS has noted in previous work on the subject, however, having a repeatable, verifiable, data-driven cost estimation methodology for calculating the cost of government performance is critical even outside the realm of sourcing policy. Particularly in times of budgetary strain such as exist today, the DoD will be making decisions about the future of programs and functions based on perceived potential cost savings. Without a rigorous cost-estimating methodology to determine the fully burdened cost of a particular function to the government as a whole (or even simply to the department), the DoD lacks a process to gather, verify, and use the data it



needs to make such decisions, without which it will not know the true cost implications of the decisions it makes.

Since 2009, the cost estimating methodology of DTM 09-007 has replaced the methodology from A-76 as the standard for use within the DoD. As has been explored in previous work by CSIS on the subject, this change did not represent an improvement. (Berteau, pp. 9–11)

Directive-Type Memorandum 09-007

In-sourcing decisions made on the basis of cost depend on the ability to project accurately the relative costs of the governmental and private options. Further, even if in-sourcing is done for policy reasons (such as rebuilding the DoD acquisition workforce), the 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.” This DTM constitutes current DoD guidance for in-sourcing 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.” (NDAA 2010)

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. Among other shortfalls, the DTM

- Lacks the ability to calculate fully burdened government-wide costs. The DTM states 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 not to the DoD but to other federal agencies.
- Creates a gap by failing to account for the full cost of DoD-owned capital while requiring the inclusion of 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 present 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 backwards from the costing approach used under OMB Circular A-76 (see the 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.

- Fails to account for taxes forgone by the federal treasury or state or local governments. This is another step back from OMB Circular A-76, whose costing methodology included forgone federal taxes as a cost element for in-house producers.
- Fails to account for the inherent risk of cost growth among public producers. The available empirical evidence indicates that, for competed workloads, subsequent 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 the absence of competition will cause cost to increase over time.
- Overlooks the cumulative cost effect of multiple in-sourcing decisions. Indirect costs such as the cost of payroll processing or of day-care centers do not increase as the result of any single in-sourcing decision, but those costs will likely rise as the result of the cumulative effect of a systematic in-sourcing initiative.
- 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 there is no mechanism in the DTM that attributes such costs to public producers.⁵
- Fails to account for 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

⁵ 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.



when workload is variable, and the lack of flexibility in the government means there is a cost to maintaining an unneeded workforce in that case.

- Should require a detailed scope of work as a better basis for cost estimation. Such a detailed scope of work was required as a basis for cost estimation by the A-76 process, which referred to that scope of work as a Performance Work Statement. Without a scope 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.

If the true cost of public performance of commercial services cannot be determined, any budget-driven decision becomes immediately suspect, whether the decision is to in-source work currently done by a contractor or simply to change the size of a specific part of the government workforce. Such a situation gives rise to questions like “How can the DoD claim it is saving 40 percent, or 25 percent, or any specific amount via in-sourcing private-sector positions if it doesn’t know how much the newly in-sourced function will cost?” and “How can the OMB approve a new government activity if it does not know the full cost impact on current and future budgets?” The DoD and the federal government should understand the full budgetary implications of every personnel decision so that it can properly weigh the benefit gained (such as improving in-house capabilities) against the budgetary impact.

OMB Circular A-76

OMB Circular A-76 provided the previous cost comparison methodology used by the DoD. Given the flaws of the DTM, it is worth considering how well the A-76 provides a basis for addressing those flaws and performing better cost estimates of government performance. As previously discussed, there were numerous problems with the implementation of A-76 cost competitions. In discussions with experts, however, there was broad agreement that, aside from the two specific problems discussed below, the A-76 costing methodology did a reasonably good job of accurately capturing the major cost elements of government performance.⁶ Based on CSIS analysis, the A-76 performs better than the DTM in the following respects:

- Provides greater specificity on major cost components

⁶ It should be noted that, while the experts CSIS spoke to for this study agreed that the A-76 cost-estimating methodology captured most of the major cost elements, there was also broad agreement that there were serious weaknesses in the quality of the data the DoD used to calculate the totals for those cost elements.



- Includes the cost of in-house production at a private sector rate of return on new investments
- Includes forgone federal taxes as a cost element for in-house producers
- Requires that in-house producers take into account what it would cost if they were required to purchase casualty and liability insurance
- 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, thus 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 of how to calculate many major cost elements (aside from direct labor costs).

At the same time, A-76 still exhibits flaws which must be recognized and corrected. In reviewing the literature regarding A-76, the majority of criticism relates to the competition process itself or to 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:

- A-76 utilizes a blanket 12 percent overhead rate for all government functions. In discussion with stakeholders on both sides of the sourcing policy debate, as well as with former policy-makers involved in A-76 drafting and implementation, there was agreement that the 12 percent overhead rate lacks any sound methodological basis, and that it was wholly inappropriate to have one overhead rate to cover all the disparate activities performed by the government. Industry representatives noted that private sector functions with extremely minimal overhead requirements had overhead rates two-to-three times higher. GAO has stated that the 12 percent figure came not as the result of a rigorous study of government overhead costs but as a compromise between the government and the private sector. (GAO, 1998, p. 5)
- 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.



Current Policy

Within the DoD, until July 3, 2013, DoD 09-007 was still the relevant guidance methodology for sourcing policy and cost-estimation. In discussions with policy-makers, however, CSIS was unable to identify a single office or function that was utilizing the DTM cost estimation methodology. Rather, each office and function uses whatever cost-estimation system they see fit, which has led to situations where more than one function was assuming zero percent overhead rates in calculating its own costs. The DTM was supposed to have been replaced with a more permanent DoD Instruction by September 2011, but that deadline has long since passed, and the revised deadline of April 1, 2013, was extended. DoD Instruction 7041.04 was finally issued on July 3, 2013. (See the section starting on page 18 for analysis of DoD Instruction 7041.04.) In addition, the model that the DoD developed to aid in implementing the DTM will soon be available for use throughout the DoD.

In addition, the GAO is preparing a report for Congress on DoD guidance and compliance. The release date for this GAO report is not yet publicly available.

Government-wide action on workforce costing also is continuing. On March 1, 2013, the Office of Federal Procurement Policy (OFPP) held a public hearing to gather information from stakeholders regarding sourcing and cost estimation policy. According to the OFPP officials at the event, there is no impending rulemaking from OFPP on either issue; rather, OFPP recognizes that these are issues of concern to various stakeholders, and they are trying to “get smarter” on the issue in advance of any specific policy endeavor.

Lessons from Business Literature on Sourcing Policy

This section examines some of the relevant literature from the fields of economics and business management for insights that could help the DoD determine which services to produce in-house and which to purchase under contract or grant. The factors that private firms consider in making sourcing decisions have withstood the test of competition and may provide useful guidance. The section also considers findings from the literature on public bureaucratic behavior, as the intrinsic differences between governmental and private organizations may determine the ability to transfer findings from the private sector experience to the government realm. Finally, it examines empirical studies that—without any theoretical preconceptions—compare the costs of in-house and contractor services or examine



the outcome of competitions between DoD in-house providers and private sector contractors.⁷

One central and very clear finding that emerges is the correlation between competition and lower costs. For many DoD commercial activities, the cost reduction associated with competition is on the order of 20 to 40 percent.⁸ Both the business and economics literature indicate that competition provides stronger incentives for cost reduction than do managerial initiatives that monitor performance or exhort efficiency.

The Make or Buy Decision in the Private Sector

Sourcing Decisions from an Economist's Perspective

Firms are sized and organized to maximize the value of output less both the costs of production *and the costs of the transactions* that must occur between the different players involved.⁹ The literature identifies the costs of transactions and of information as important determinants of the extent to which firms will vertically integrate—and produce their own intermediate goods and services—as opposed to contracting for those goods and services from outside producers. (Williamson) Transactions costs occur whenever goods or services transfer between a provider (the agent) and a user (the principal). The transactions costs associated with purchases of intermediate goods from outside suppliers include the costs of source selection, contract management, and monitoring. Those associated with in-house production include the costs of managing labor and the process of obtaining other needed inputs. Transactions between principals and the agents on whom they rely depend on governance mechanisms—including different types of contracts as well as incentives and performance monitoring. These mechanisms encourage the agents to pursue the goals of the principal.

The transactions costs associated with the use of outside providers are generally low for commercially available goods that can be purchased off the shelf and for generic commercial services that can be performed off-site—such as large scale data entry. Accordingly, these are the kinds of goods and services that firms

⁷ The focus of this section is on sourcing decisions for activities or functions, rather than on in-sourcing or outsourcing individual positions within activities. Because changes in sourcing typically change the quantity of labor used, a comparison of costs position by position is usually not relevant. The special situations which lead the DoD to contract for individual positions—including some that could be inherently governmental—are set aside for purposes of this section.

⁸ The term “commercial” as used here does not mean a good or product that is readily available in the commercial sector; it means only that the activity is not inherently governmental and is similar to goods or services that are available in the private sector.

⁹ See Simon, H., (Spring 1991) Organizations and Markets, Journal of Economic Perspectives, Vol. 5, No. 2, pp. 25–44. For a nontechnical summary of the current literature, see Williamson, O.E., and S.G. Winter (eds), (1993) The Nature of the Firm: Origins, Evolution and Development, New York, NY: Oxford University Press.



often choose to purchase rather than produce internally. The transactions costs associated with using outside producers are greater if the outside producer must invest in transaction-specific assets or skills that have few if any alternative uses (although long-term relationships between buyers and sellers—which in effect brings the workload closer to in-house—can help to alleviate this problem).

The basic findings of this literature are that, in the private sector, firms find that it can be cost effective to perform work in-house, rather than by contract, if

- Flexibility is required to meet rapidly changing demands
- The quality or quantity of output is difficult to measure objectively
- In-house workloads are large and steady enough to provide economies of scale
- The work requires highly specialized human or capital assets
- The market is not large enough to support competition among providers
- The work requires personnel or facilities to be co-located with those of the buyer (site specificity)¹⁰

These factors explain, in part, why it can be more difficult to contract for services than for goods. Services must often be performed at the buyer's site to meet the unique requirements of his specific production process. They cannot be produced in advance and then sold to any willing buyer, and their quality and quantity may not lend themselves to a physical examination.¹¹

Sourcing Decisions from a Business Management Perspective

The business management literature on sourcing decisions, although consistent with the economics literature, identifies some additional factors that influence the make or buy decisions of private firms:¹² Since the 1990s, this literature has emphasized that a firm's competitive advantage often rests on excellence in a few (perhaps only two or three) "core competencies." Core competencies are defined as "the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of techniques." (Prahalad, p.

¹⁰ See Pint, E., and L. Baldwin, (1997) *Strategic Sourcing: Theory and Evidence from Economics and Business Management*, Santa Monica, CA: RAND; see also Congressional Budget Office, (1995) *Public and Private Roles in Maintaining Military Equipment at the Depot Level*, Washington, DC: Congressional Budget Office.

¹¹ Many IT services may lend themselves to contracting because they do not need to be performed on site.

¹² This discussion of the business management literature draws on the work of Pint, E., and L. Baldwin, (1997) *Strategic Sourcing: Theory and Evidence from Economics and Business Management*, Santa Monica, CA: RAND.



82) In effective organizations, core competencies are closely tied to the values of an organization and the identities of its managers and employees—identities which those values can help shape.¹³ (This relationship is not limited to business. For example, in the military, the values of teamwork, loyalty, and honor reinforce the core competencies of combat units.)

The time and effort that senior managers can expend on non-core activities is limited. The support functions common to most producers, such as human resource management and inventory control, although essential to production, are often not among a firm's core competencies. They may not be closely monitored or controlled by the most senior managers and—if produced in-house—are not directly subject to market forces. In the absence of direct competition, in-house providers may fail to keep up with the standards—for quality and innovation as well as cost—that outside providers must meet. This literature suggests that non-core activities should be considered for outsourcing. In addition to any short-term reduction in the costs of obtaining the non-core good or service, outsourcing can

- Free up management to focus on the core-activities that drive the firm's competitive advantage
- Ensure access to the most cutting-edge, world-class capabilities that could not be kept in-house cost-effectively
- Shift risk to outside providers
- Gain control over what could otherwise be an in-house monopoly

The business literature gives less emphasis to the problems that firms encounter if their outsourcing decisions are poorly conceived or implemented. One author notes that strategic decisions to outsource can be misapplied by line managers who focus narrowly on short-run cost savings:

While outsourcing may seem attractive at the strategic management level, serious pitfalls are often encountered as the strategy is pushed downward into operations. At the operational level, the strategic intent tends to be lost ... [I]mplementation is in the hands of semiautonomous teams that are often tightly focused on measureable objectives—most often, cost reduction. Outsourcing at the operational level can easily lead to the development of dependencies that create unforeseen strategic vulnerabilities. (Insinga, p. 58)

Although the DoD has adopted some of the language of the business literature, it has not always adopted the spirit. For example, within the DoD, the need

¹³The importance of identity in motivating performance has recently been introduced into the economics literature. See Akerlof, G. and R. Kranton, (2005) Identity and the Economics of Organizations, *Journal of Economic Perspectives*, Vol. 19, No.1.



for direct command and control is often cited as a reason why specific support services should be kept in house. This is consistent with military culture in which direct authority is very powerful. Yet the business literature indicates that senior managers in the private sector can often extract more control over an outside provider of non-core goods or services, who operates competitively, than they do over an in-house monopolistic provider (a provider over whom they have, at least nominally, direct authority). (Stiglitz, p. 15–24)

Another problem in applying the core concept is that it is difficult to distinguish core from non-core competencies. The DoD's core competencies would presumably include the application of military force in support of national security objectives as well as other inherently governmental functions—including the control of public funds and decision-making that commits the Department to an action. What else it might include is unclear. For example, the DoD uses the phrase “core workloads” to explain why some depot maintenance must be kept in-house. Yet this literature suggests that specialized workloads that cannot support competition or the need to maintain the expertise to be a successful buyer might be better justifications for some in-house capabilities.

Making Sourcing Decisions in the Private Sector

Both the economics and the business literature indicate that workloads can exhibit characteristics that make them appropriate for in-house production, while at the same time other features might apparently qualify them for outsourcing. Firms must consequently balance the different characteristics of a workload when making sourcing decisions. This balancing process is not very transparent. The 2002 final report of the Commercial Activities Panel, a group chaired by David Walker of the GAO, notes that private sector managers typically review the merits of in-house as opposed to purchased goods and services at a strategic level inside the organization. (CAP, p. 108) One of the panel's witnesses indicated that cost is the primary consideration in only a third of private sector sourcing decisions.

Direct bidding competitions between in-house and outside providers are very rare in the private sector; the Commercial Activities Panel was unable to identify any such competition. In contrast, it is not uncommon for private firms to maintain both in-house and outside providers for non-core goods or services. The in-house operations provide a base of expertise for evaluating the performance of the specialist providers and, if the market is thin, an alternative source of supply and a form of implicit competition. (Pint, p. 9)



The Nature of Governmental Organizations and the Make or Buy Decision

Since the DoD is a governmental organization, and not a private firm that is focused on maximizing profits in part by minimizing costs, its decisions on outsourcing will be driven at least in part by factors not considered in the business and economics literature. Indeed, the business literature fails to explain major features of the DoD's sourcing policies. For example, a key factor shaping a private firm's decision to choose in-house production for a good or service that is the proximity to its core competencies and the competitiveness, or lack thereof, of the market. Yet a recent industrial review presented to the Defense Business Board concluded that the market for the services used by the DoD was generally highly competitive, while there was no competition for the production of aircraft carriers, tanks, and ICBMs. For many decades, the DoD has contracted for the production of weapons systems while sourcing policy has focused on contracting for services, therefore acting in direct contrast to practices in the private sector. While the lack of competition for major weapon systems has many causes, a look at the literature dealing with governmental agencies and bureaucratic behavior provides some additional insight into this sourcing practice.

Constraints and Objectives of Public Managers

Both the classical economics literature and the more recent work on the behavior of bureaucracies suggest that public producers might, in theory, be both less anxious and less able to minimize the costs of production than their private counterparts.

From a narrow perspective, the only intrinsic difference between a public producer and a private producer is that one is owned by the government and the other by private individuals. Accordingly, the economics literature asks whether a government-owned firm, operating in a competitive market without either constraints or subsidies (such as implicit loan guarantees), would be at an advantage or disadvantage relative to a private firm. The literature concludes that public production is at a disadvantage. The owners of the private firm can more readily sell their firm on the market at a price that reflects its future net earnings. The fact that the value of the investment can be immediately realized gives the private firm better investment incentives. (Alchian, pp. 777–795)

The literature on government agencies and public bureaucracies approaches this question from a much broader perspective.¹⁴ It emphasizes the fact that government agencies are embedded in a political process. A federal agency serves

¹⁴ For a clear introduction, see Wilson, J.Q., (1991) *Bureaucracy: What Government Agencies Do and Why They Do It*, New York, NY: Basic Books.



and depends on the support of multiple principals—including public interest groups, the administration, specific regulators, the Congress as a whole, and specific committees within the Congress. The agency will have ambiguous and sometimes conflicting goals as the result of compromises among the principals.

Decisions made by government agencies must take into account fairness and accountability in addition to efficiency.¹⁵ Accountability can mean making decisions in a transparent manner, using standard operating procedures, even if allowing managers greater discretion might lead to more efficient outcomes. It can also mean that decisions to commit the government to actions must be taken by a principal—an elected or appointed official, or a government employee—whose objectives are assumed to be aligned with the public interest, rather than by an agent seeking merely to meet the terms of a contract. Accountability takes on great importance whenever public funds are being expended. Not only must the process for expending funds be followed, but the agency must be able to demonstrate this clearly.

Fairness is of particular concern in the area of labor relations. Here the government's need to demonstrate fairness by strict adherence to standard operating procedures is further reinforced by the desire of public unions and employee groups to use similar procedures to protect workers. One result is a civil service system with its strengths—an ability to withstand demands for patronage—as well as weaknesses in terms of the limits on managers' discretion to hire, fire, promote, and pay.¹⁶ It is not possible for an agency to satisfy all of the conflicting objectives of its multiple principals. Yet as long as agencies actions are seen as fair, as long as standard procedures are followed, its actions may still be accepted and criticism deflected.

In addition to broad public goals of fairness, accountability, and efficiency, the literature identifies the following as common objectives for public managers:

- Providing the highest quality of output
- Getting the highest budget
- Obtaining the most modern technologies
- Being fair to suppliers, workers, and customers
- Offering continuity of employment to workers

¹⁵ Efficiency would entail an output produced at the least cost as well as a budget set so that the benefits to society from additional output would just be worth the additional cost.

¹⁶ See Wilson, J.Q., (1991) *Bureaucracy: What Government Agencies Do and Why They Do It*, New York, NY: Basic Books; chapters 16 and 18 discuss how rules and standard operating procedures protect agencies from criticism.



- Supporting suppliers who may be small or disadvantaged¹⁷

In some cases, these reflect the goals of principals—either what they desire or what they perceive to be in the public interest. In other cases, they reflect the goals of the agency’s own managers. For example, in addition to pursuing their principals’ goals, managers may seek larger budgets or staffs as signal of higher prestige.¹⁸ Controlling their own level of effort is also a concern. The difficulty is not so much with these objectives (many if not all of which would be shared by private managers) but that public managers may be less constrained by market forces in pursuing them. In the public sector, budget shortfalls due to inefficiency can lead to an increase in appropriated resources. The discretion of a public manager to pursue his own objectives is particularly great when he is responsible to many principals with conflicting goals. (Dixit, pp. 378–382)

Principals can use incentives in an effort to align their agents’ actions with their goals. Alternatively, they can impose external constraints. For example, in the past, Congress has placed ceilings on DoD civilian employment levels and on the size of headquarters activities. Principals can also set performance goals (such as the percentage of commercial activities that must be contracted out or the number of positions that must be in-sourced) and monitor performance. Because the principals do not have access to much of the information held by the agents, such top down constraints and goals will often appear (and possibly be) arbitrary. The constraints reduce the discretion of the public managers while performance rewards can distort activities; without them, however, managers may not always focus on the goals that the principals feel are most important.¹⁹

Overall, the literature on the behavior of public bureaucracies rejects the notion that a federal agency in the U.S. could mimic a competitive firm—that it could (or should) completely isolate itself from concerns about fairness, accountability, and public welfare that make it distinctly governmental.

Given the environment in which government agencies work, it would not be surprising if the DoD’s sourcing decisions for goods and services simply reflect political realities. A reliance on in-house production for services may reflect—in addition to the site-specific and perishable nature of many services—the political strength of the civil service and the fact that the business service industry and its labor force have historically been less concentrated and powerful. For example, from

¹⁷ Many of these goals are discussed in Wolf, C., Jr., (1988) *Markets or Governments: Choosing Between Imperfect Alternatives*, Cambridge, MA: MIT Press, pp. 70–77.

¹⁸ See William Niskanen’s “budget-maximizing” model.

¹⁹ For an understanding of how performance measures can distort incentives, see Heckman, J., C. Heinrich, and J. Smith, (May 1997) *Assessing the Performance of Performance Standards in Public Bureaucracies*, *American Economic Review*, Vol. 87, No. 2, pp. 389–395.



an efficiency perspective, there is no reason for 14,000 civil servants to be employed selling groceries to military personnel. Although most evidence is anecdotal, one study of the outsourcing decisions of 3,000 county governments between 1987 and 1992 found quantitative evidence of the effect of politics—counties with highly unionized public employees chose to outsource less. (Lopez-de-Silanes)

Is It Efficient for Public Producers to Outsource More than Private Producers?

It is worth asking whether government producers—to the extent that they do seek efficiency—would find outsourcing even more attractive than do private producers. In the case of labor intensive services, limitations in the ability of federal managers to hire, fire, promote, and pay would—even by itself—seem to dictate this. Two factors, however, may at least partially offset these motivations.

One is the need for the government, operating with public funds in the public interest, to keep fraud and conflicts of interest to a minimum. A private firm might, in some situations, outsource some of its financial management or decision-making and treat any loss due to contractor fraud or conflicts of interest as a simple cost of doing business. For a government agency, however, such losses are tied to functions that would be considered inherently governmental—something for which the agency must be directly accountable to the public.

A second reason is that the same factors that make the government less efficient as a producer of goods and services also make it less efficient as a buyer.²⁰ The literature relating to the need for reform of the civil service system is matched by that citing the need for acquisition reform. The need to demonstrate fairness and transparency, for example, can make it hard for contracts to be awarded to any but the lowest cost bidder, irrespective of more subjective concerns about performance. The balancing of competing objectives that private sector managers appear to use in making sourcing decisions, however effective over the long run, would not readily stand up to scrutiny by the GAO or an Inspector General concerned with transparency and accountability.

Public and Private Production: The Evidence from Outside the DoD

DoD outsourcing decisions would—in theory—be simplified if there was strong evidence that government production under competition was, empirically as well as conceptually, more costly than private production. Some commercial activities would be kept in-house because of acknowledged non-cost benefits of in-house, rather than private production. How many and which ones would remain a

²⁰ For a discussion that links government problems as a buyer with the nature of public bureaucracies, see Kelman, S., (1990) *Procurement and Public Management*, Washington, DC: AEI Press.



source of controversy, but the remaining commercial workloads—current as well as future ones—could be shifted to the private sector without the need for questionable cost analyses or disruptive direct competitions.

Economists may be willing to conclude on conceptual grounds that—in markets with strong competition and no market failure—the public sector has at least no intrinsic advantage over private production. Yet the DoD, faced with the concerns of public employees and the imperfections of real (and often defense-specific), as opposed to idealized, markets, might need somewhat more concrete arguments to make the case for advantages over the private sector for commercial-type activities. What does the empirical evidence, including that from the public–private competitions conducted within the DoD, indicate about the relative costs of public and private production?

In developed economies, public and private producers are not often found side by side in competitive markets, and analytical evidence about the relative performance of public and private enterprises under competition is limited. Nonetheless, there have been hundreds of studies comparing public and private productions, as well as numerous reviews of that literature.²¹

The findings of studies often depend on the type of data used. Comparisons between the performance of public and private enterprises in Europe have focused on industries such as steel or transportation in which economies of scale or public regulation limit competition. Many of these studies have found that public provision is less costly. In contrast, studies that focus on more competitive activities—such as waste collection, street cleaning, or routine building maintenance—that can either be performed or purchased by local governments generally find that private provision is less costly. (Borcherding, pp. 127–156) In these studies, however, the cost differential—which is often on the order of 20 to 30 percent—often reflects not only any intrinsic advantage of private production but also the effects of introducing competition.

Overall, the studies that most strongly assert the efficiency of private over public production are often those that rely on the weakest evidence, and some careful reviewers doubt that there is credible evidence that private production has any intrinsic advantage in relation to public production. (Stiglitz, pp. 15–24)

Overall, this literature leads to the following conclusions:

- Public production might be less efficient than private production
- If public production is less efficient, the difference may be insignificant

21 See, for example, Tighe, C.E. et al., (1997) *A Privatization Primer: Issues and Evidence*. Alexandria, VA: Center for Naval Analyses.



- Competition seems to drive efficiency more than does the form of ownership

How is this empirical literature to be reconciled with what is known about bureaucratic behavior and the costs that government agencies incur in managing labor and other resources so as to both demonstrate and provide fairness and accountability?

One answer is that any public enterprise that survives in competition with the private sector on a level playing field is only public in the sense that it is a business owned by the government. If the playing field is truly level, it cannot rely on public funds or the political process for its survival and is thus by definition less of a government agency in the bureaucratic sense. Some authors suggest that, under these peculiar circumstances, its form of ownership has, in practice, changed from “public” to “private.” (Boardman, pp. 205–239) The fact that the residual value of the enterprise accrues to the government rather than to private individuals may not greatly affect its efficiency.

Another answer is that the playing field may be tilted by hidden subsidies, such as forgone taxes and import duties. Some authors suggest that the apparent success of government enterprises in capital intensive industries is due in part to a hidden capital subsidy. (Ayab, pp. 79–101) The government’s borrowing rate—which reflects its ability to raise taxes to cover its borrowing—will typically be lower than that faced by a private firm. Yet capital devoted to a risky commercial activity is not, in any real economic sense, less costly if it is undertaken by the government rather than a private entity.

Each of these issues offers the potential for additional research. However, whether that research addresses the specific issues of the level playing field or the broader question of capital budgeting for asset amortization and depreciation, it will be years before the results are available. In the meantime, public policy needs to use available data to make the best decisions available.

Recent Developments in DoD Sourcing Policy—DoD Instruction 7041.04

On July 3, 2013, the Department of Defense Office of Cost Assessment and Program Evaluation (CAPE) issued DoD Instruction (DoDI) 7041.04, entitled *Estimating and Comparing the Full Costs of Civilian and Active Duty Military Manpower and Contract Support*. This document “incorporates and cancels Directive-Type Memorandum 09-007,” the prior DoD sourcing and cost-estimation guidance. Given the significant flaws in DTM 09-007 identified in this study and in previous work by the research team, it is necessary to evaluate whether DoDI



7041.04 adequately addresses those critiques. The following section summarizes the critiques listed on pages 6–7 of this study, and discusses how (if at all) the DoDI addresses those weaknesses in the DTM.

1. **Critique: The DTM lacks the ability to calculate fully burdened government-wide costs.**

The guidance partially addresses this critique in that it directs recognition of costs outside the budget of the individual office or function under analysis. In the section discussing Indirect Non-Labor Costs—General & Administrative (G&A) and Overhead Costs, the DoDI specifically instructs users to consider “fair shares” of the costs of DoD-wide services such as accounting, legal services, HR, and data processing. (p. 14) The DoDI also specifically instructs users to include consideration of such costs in any public/private cost comparison (pp. 17–18), which represents a clear improvement from the DTM. At the same time, the DoDI specifically instructs that “no indirect labor costs considerations are required.” (p. 13) The research team is unsure whether this is intended to instruct users only to consider the non-labor portion of G&A and overhead elements, but that is the plain reading of those two sections and would likely be the way end users would interpret it. This represents a step back not just from A-76, but from the DTM.

The guidance also partially addresses this critique in that it specifically calls on analysts to consider costs incurred by the broader federal government. “Manpower cost estimates normally address costs to the DoD. However, in certain cases, analysts may be asked to report full manpower costs to the Federal Government.” (p. 8) At the same time, while recognizing the existence of costs to the broader federal government, ***the guidance specifically does not require users conducting public/private cost comparisons to consider those costs***, though it does require inclusion of those costs in military/civilian comparisons. (pp. 17–18) The research team can see no methodologically sound basis for recognizing the existence and importance of calculating the fully burdened cost to the federal government for military/civilian cost comparisons but then ignoring those broader costs to the federal government for public/private cost comparisons.

2. **Critique: The DTM creates a gap by failing to account for the full cost of DoD-owned capital while requiring the inclusion of those costs for contractors.**

The list of “Goods, Services and Benefits” in Enclosure 5 includes “Costs of capital assets, to include property, plant and equipment, valued at \$25,000 or more, plus the costs of depreciation, maintenance, and repair,” which is similar to the limited discussion of capital costs in both the DTM and A-76. (p. 29) As with both A-76 and



the DTM, while it is good that these costs are mentioned, the DoDI provides no guidance on how to calculate these costs. Given that the federal government does not do capital budgeting, determining capital costs such as depreciation will be a significant burden for end users. In addition, it is unlikely that the different end users would use a common approach absent guidelines to do so. It is possible that the DoD model addresses this question, but the late issuance of the DoDI did not permit time to determine that. The research team calls on the DoD to provide more specific guidance to allow end users to calculate, at the very least, a methodologically sound estimate of their capital costs.

3. Critique: The DTM fails to account for taxes forgone by the federal treasury or state or local governments.

Unlike the DTM, the DoDI calls on users to consider tax revenue generated by contractor performance in calculating cost to the federal government. (p. 19) Given that only cost to the DoD, and not cost to the federal government, is considered when performing public/private cost comparisons, as described above, this represents no improvement over the DTM.

4. Critique: The DTM fails to account for the inherent risk of cost growth among public producers.

The DTM called upon users to consider the inherent risk of cost growth post-award on the contractor side, but not on the government side. The DoDI does not include mention of the inherent risk of cost growth on either side. While this is admittedly fairer, it is not a methodologically sound way to address the issue. It may be difficult to quantify the relative risk of cost growth between contractor and government performance, and it may be thus necessary to exclude consideration of such costs on both sides, but if that is the case, the DoDI should explicitly make that argument, rather than not discussing the issue at all.

5. Critique: The DTM overlooks the cumulative cost effect of multiple in-sourcing decisions.

Later iterations of the DTM added language discussing direct labor costs “that are fixed in the short run,” but can add additional costs as the result of multiple sourcing decisions, such as the need for additional child care facilities. This language has been incorporated into the DoDI. (p. 11)

6. Critique: The DTM 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 recognized the costs of insurance and indemnification to private



producers, but there is no mechanism in the DTM that attributes such costs to public producers. The DoDI seems to address this critique by including “Insurance, including (but not limited to) the costs of casualty and liability insurance” on the Enclosure 5 list of “Goods, Services and Benefits” that should be calculated for both government and contractor performance. However, given that the DoD does not purchase insurance, but rather self-indemnifies, a reasonable end user might conclude that this cost for the DoD is zero. It is possible that the DoD model addresses this question, but the late issuance of the DoDI did not permit time to determine that.

If the DoD intends for the government cost estimate to reflect the value of self-indemnification, as it did under A-76, then that intention should be more explicitly stated. If the DoD thinks that it should not have to consider such costs because it believes self-indemnification is a cost benefit the government enjoys and should not have to balance, then that argument should be made explicitly.

7. Critique: The DTM fails to account for varying workload stability.

The DoDI includes no discussion of calculating the value of the private sector’s greater ability to adapt to varying workload requirements.

8. Critique: The DTM should require a detailed scope of work as a better basis for cost estimation.

The DoDI includes no requirement for a detailed scope of work as a basis for cost estimation.

The DoDI also does not address two broader problems with the DTM identified by the research team:

- The DoDI does not provide line-item specificity for non-labor cost elements. The list of non-labor cost elements provided in Enclosure 5 is neither exhaustive nor detailed and does not provide sufficient guidance as to either what exactly falls under those elements listed or how to calculate them. Without specific guidance to end users on the cost elements to be included, there is no way to guarantee that government cost elements will accurately capture fully burdened cost.
- The DoDI continues to allow for the use of the 12 percent overhead rate, if G&A and overhead costs cannot be precisely calculated. Since no guidance is provided as to the specific cost elements to be considered as part of G&A and overhead, or as to how to calculate a particular office or function’s “fair shares” of those costs, it is likely that most end users will default to using the 12 percent rate. As discussed earlier in this study, the 12 percent overhead rate has no



methodological basis and is significantly lower than observed overhead rates for even the leanest private-sector units. However, an overhead rate of 12 percent is an improvement over the figure of zero percent in the DTM.

- Overall, the research team concluded that DoDI 7041.04 cannot be considered a significant improvement on DTM 09-007. Although the DoDI recognizes fully burdened cost to the federal government, it does not call for consideration of costs to the broader federal government in public/private cost comparisons. As written, it permits users to ignore indirect labor costs and the value of government indemnification, and fails to provide line-item specificity of cost elements. The DoDI relies upon the widely discredited 12 percent overhead figure, and it does not call for a detailed scope of work, which is a necessary basis for accurate cost comparisons between private and government performance. The research team urges the DoD to improve upon this guidance, in order to provide end-users with a repeatable, verifiable, data-driven methodology for comparing the costs of government and private performance.

Building on the CSIS Cost-Estimation Taxonomy

In previous CSIS work on the subject of DoD sourcing policy and cost-estimating, the research team developed a cost taxonomy for government performance, based on the principle of line-item specificity of cost elements. Line-item specificity is critical to a repeatable, verifiable, data-driven cost-estimation methodology, as it is the only way to ensure that government cost estimates are capturing the fully burdened cost to the federal government. 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)

Figure 1 displays the complete CSIS taxonomy for estimating the fully burdened cost of government performance. The six cost categories are described following the figure.

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
Material & Supply	Legal Support	Maintenance & Repair	Nonrecurring Workloads
General	Accounting	Utilities	Minor Items
Inflation	Payroll	Capital Improvements	Medical Exams
Insurance	Headquarters Management	Capital	Training
Maintenance & Repair	Miscellaneous	Cost of Capital	Cost Growth
		Depreciation	Conversion Costs
			Administration & Oversight Costs

Figure 1. The CSIS Public Cost Estimation Taxonomy

(Berteau et al., 2011, p. 16)

Personnel

Personnel costs capture the full, government-wide costs of manpower required to fulfill the activity outlined in the Performance Work Statement (PWS). Establishing workload requirements and corresponding staffing requirements constitutes 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 & Civilian)
- Fringe



Material & 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 PWS. 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 PWS 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 on materials and supplies required for undertaking the commercial activity being competed. This determination has to directly derive from the requirements defined in the PWS.

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

- General
- Inflation
- Insurance
- Maintenance & Repair

Facilities

Facility costs capture the full, government-wide costs associated with the upgrading or expanding of existing facilities or the construction of new facilities as required by the performance parameters outlined in the PWS. 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 PWS 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 PWS.

The line items that make up the facilities cost component are

- Cost of Facility
- Rent
- Insurance
- Maintenance & 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 PWS. 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 PWS 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 PWS, which 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 PWS 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 on requirements for undertaking the commercial activity being competed. This determination has to directly derive from the requirements defined in the PWS.

The line items that make up the additional cost component are

- Liability Insurance
- Travel
- Subcontracts
- Nonrecurring Workloads
- Minor Items
- Medical Exams
- Training
- Cost Growth Factors or Estimates
- Conversion Costs
- Administration & Oversight Costs



This taxonomy represents an important starting point for building a repeatable, verifiable, data-driven methodology for estimating the cost of government performance. Without good data to calculate those individual cost elements (or at least come to reasonable approximations or ranges), the usefulness of this taxonomy to end users within the DoD is limited. The research team has thus endeavored to find existing sources of DoD cost data that could be incorporated into the CSIS Cost-Estimation Taxonomy, to demonstrate that the DoD has data available to it that could be used to produce more accurate cost estimates.

Object class codes are used within the DoD and throughout the federal government to categorize obligations by account as part of President's budget system, as required by federal law (31 U.S.C. 1104(b)). OMB Circular A-11 lays out five broad object classes:

- 10 – Personal compensation and benefits
- 20 – Contractual services and supplies
- 30 – Acquisition of assets
- 40 – Grants and fixed charges
- 90 – Other

OMB Circular A-11 then expands the class codes to the three-digit level for greater specificity and authorizes individual departments and offices to use four-digit codes for even greater specificity, to cover specific obligations particular to them. While it would be preferable to use an outlay-based data source to calculate specific cost elements, the obligations-based object class codes have the advantage of being a widely used and understood data source, both within the DoD and in the broader federal government.

Even if object class data are not sufficient to produce fully accurate estimates for specific cost elements, they provide a basis to show that these costs can be calculated and that they are not zero. If the DoD were only able to estimate ranges of costs for certain difficult-to-track cost elements, that would still represent a significant improvement in the quality of data being used to calculate the cost of government performance.

See the appendix for an example of how object class codes can be used to provide data for calculating specific cost elements, using the DoD Washington Headquarters Service as an example.



Towards a More Methodologically Sound Sourcing Policy

Regardless of the future of the DoD's in-sourcing initiatives, it seems likely that sourcing policy will be a continuing source of debate and concern to policy-makers going forward. In a time of budgetary uncertainty and decline, stakeholders on all sides of the issue will continue to press their cases for how the DoD can best utilize resources to execute the missions it is tasked to perform. CSIS believes that the only way for the DoD and the OMB to make meaningful progress on these issues is to develop methodologies based on the best and most complete data available. As discussed earlier in this paper, this approach will have benefits in any decision the DoD makes that has budgetary implications. Policy-makers should always have the most accurate picture available of the true, fully burdened cost implications of the choices before them.

The research team concluded that the literature on how the private sector approaches sourcing decisions does not appear to offer many lessons for the public sector. The way the private sector defines core competencies and focuses on keeping those in-house may provide some useful lessons learned as OFPP continues to refine its guidance on what functions or positions qualify as inherently governmental or closely associated. But overall, there are too many differences between the way decisions are made and how various costs and benefits are weighted to allow for useful comparisons between how public and private entities approach sourcing decisions.

The recent release of updated guidance for the DoD's cost comparison methodology, in the form of DoD Instruction 7041.04, represented an opportunity to correct the flaws of DTM 09-007. Though DoDI 7041.04 does make some improvements, such as calling for a focus on apportioning fair shares of department-wide G&A and overhead costs, it still shows many of the same weaknesses that weakened DTM 09-007. The research team urges policy-makers within and outside the DoD to improve the guidance contained in DoDI 7041.04 and to work towards a methodology that will accurately capture the fully burdened cost to the federal government of public performance.

Object class codes provide an example of how existing data sources can be used to help calculate specific data elements. While object class codes, which track obligations, are not sufficient for precise cost figures, they are a data source that could be used by the DoD to generate cost ranges for difficult-to-estimate cost elements. Even if calculating precise figures for certain cost elements is a heavy burden, those costs are not zero, and even a data-backed range would represent a useful improvement in the quality of cost estimation.



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Appendix—Example of Use of Object Class Codes to Calculate Cost Elements

Table 1 classifies the object class codes (OCCs) used by the Washington Headquarters Service (WHS).²² The research team sorted them according to the appropriate cost category and cost element from the CSIS Cost-Estimation Taxonomy. While most cost elements are covered, there are not OCCs that correspond to every cost element (such as Overhead—Legal Support/Accounting and Material & Supply—Inflation). In addition, the OCCs that do correspond to particular cost elements do not always cover the entire range of activities that should be captured under this cost element (such as for Cost of Capital). Understanding those limitations, this table shows that an existing, well-understood data source available to the DoD could be used as a starting point to calculate cost elements. If policy-makers develop strong guidance instructing end users on how to calculate their “fair shares” of department-wide services (such as IT and HR), it will also enable the DoD to start to develop a sound methodology for capturing overhead costs, rather than relying on the discredited universal 12 percent overhead rate.

Table 1. Classification of WHS OCCs by CSIS Cost Category and Cost Element

WHS OCC	OCC Description	OMB Circular A-11 Section 83 Classification	CSIS Cost Category	CSIS Cost Element
1111	FT - Senior Executive Service	11.1 Full-time permanent positions	Personnel	Direct Labor
1112	FT - Executive Schedule	11.1 Full-time permanent positions	Personnel	Direct Labor
1113	FT - General Schedule	11.1 Full-time permanent positions	Personnel	Direct Labor
1114	FT - Experts/Consultants	11.1 Full-time permanent positions	Personnel	Direct Labor
1115	FT - General Manager	11.1 Full-time permanent positions	Personnel	Direct Labor
1116	FT - Wage Grade	11.1 Full-time permanent positions	Personnel	Direct Labor
1117	FT - All Other	11.1 Full-time permanent positions	Personnel	Direct Labor

²² The original list of OCCs used by WHS can be found at http://www.whitehouse.gov/sites/default/files/omb/assets/a11_current_year/a_11_2012.pdf



1121	Intermittent - Senior Executive Service	11.2 Intermittent Positions	Personnel	Direct Labor
1122	Intermittent - Executive Service	11.2 Intermittent Positions	Personnel	Direct Labor
1123	Intermittent - General Schedule	11.2 Intermittent Positions	Personnel	Direct Labor
1124	Intermittent - Experts/Consultants	11.2 Intermittent Positions	Personnel	Direct Labor
1125	Intermittent - General Manager	11.2 Intermittent Positions	Personnel	Direct Labor
1126	Intermittent - Wage Grade	11.2 Intermittent Positions	Personnel	Direct Labor
1127	Intermittent - All Other	11.2 Intermittent Positions	Personnel	Direct Labor
1131	PT - Senior Executive Service	11.3 Part Time Position	Personnel	Direct Labor
1132	PT - Executive Service	11.3 Part Time Position	Personnel	Direct Labor
1133	PT - General Schedule	11.3 Part Time Position	Personnel	Direct Labor
1134	PT - Experts/Consultants	11.3 Part Time Position	Personnel	Direct Labor
1135	PT - General Manager	11.3 Part Time Position	Personnel	Direct Labor
1136	PT - Wage Grade	11.3 Part Time Position	Personnel	Direct Labor
1137	PT - All Other	11.3 Part Time Position	Personnel	Direct Labor
1141	Temporary - Senior Executive Service	11.4 Temporary Positions	Personnel	Direct Labor
1142	Temporary - Executive Service	11.4 Temporary Positions	Personnel	Direct Labor
1143	Temporary - General Schedule	11.4 Temporary Positions	Personnel	Direct Labor
1144	Temporary - Experts/Consultants	11.4 Temporary Positions	Personnel	Direct Labor
1145	Temporary - General Manager	11.4 Temporary Positions	Personnel	Direct Labor



1146	Temporary - Wage Grade	11.4 Temporary Positions	Personnel	Direct Labor
1147	Temporary - All Other	11.4 Temporary Positions	Personnel	Direct Labor
1150	Supervisory Differential	11.5 Other personnel compensation	Personnel	Direct Labor
1151	Overtime Pay	11.5 Other personnel compensation	Personnel	Direct Labor
1152	Holiday Pay	11.5 Other personnel compensation	Personnel	Direct Labor
1153	Sunday Pay	11.5 Other personnel compensation	Personnel	Direct Labor
1154	Night work Differential	11.5 Other personnel compensation	Personnel	Direct Labor
1155	Cash Awards - Non SES	11.5 Other personnel compensation	Personnel	Direct Labor
1156	Admin Uncontrollable Overtime	11.5 Other personnel compensation	Personnel	Direct Labor
1157	Cash Awards - SES	11.5 Other personnel compensation	Personnel	Direct Labor
1158	Hazardous/Environmental/Danger Pay	11.5 Other personnel compensation	Personnel	Direct Labor
1159	Staffing Differential	11.5 Other personnel compensation	Personnel	Direct Labor
1162	Staffing Differential	11.5 Other personnel compensation	Personnel	Direct Labor
1169	Other Final Payments	11.5 Other personnel compensation	Personnel	Direct Labor
1175	Performance Awards - Non SES	11.7 Military personnel	Personnel	Direct Labor
1177	Performance Awards - SES	11.7 Military personnel	Personnel	Direct Labor
1181	Reimbursable details from other Government Agencies	11.8 Special personal services payments	Personnel	Direct Labor
1182	Other Special Personal Service Payments	11.8 Special personal services payments	Personnel	Direct Labor



1186	Miscellaneous Payroll	11.8 Special personal services payments	Personnel	Direct Labor
1191	Labor Distribution [IAD use only]	11.9 Total personnel compensation	Personnel	Direct Labor
1199	Other Pay	11.9 Total personnel compensation	Personnel	Direct Labor
1118	Terminal Leave	11.1 Full-time permanent positions	Personnel	Fringe
1119	Accrued Unfunded Annual Leave	11.1 Full-time permanent positions	Personnel	Fringe
1168	Terminal Leave	11.5 Other personnel compensation	Personnel	Fringe
1170	School/Education Allowance/Travel	11.7 Military personnel	Personnel	Fringe
1211	FEGLI (FED Employees Group Life Insurance)	12.1 Civilian personnel benefits	Personnel	Fringe
1212	CSRS (Civil Service Retirement System)	12.1 Civilian personnel benefits	Personnel	Fringe
1213	FEHB (FED Employees Health Benefits)	12.1 Civilian personnel benefits	Personnel	Fringe
1214	Old Age Survivors Disability Insurance (OASDI)	12.1 Civilian personnel benefits	Personnel	Fringe
1215	FECA (Federal Employees Compensation Act)	12.1 Civilian personnel benefits	Personnel	Fringe
1217	Medicare	12.1 Civilian personnel benefits	Personnel	Fringe
1219	FERS (Fed Employees Retirement System)	12.1 Civilian personnel benefits	Personnel	Fringe
1220	TSP (Thrift Savings Plan)	12.2 Military personnel benefits	Personnel	Fringe



1221	LQA/TQSA (Living Quarters Allowances)	12.2 Military personnel benefits	Personnel	Fringe
1222	COLA - Non Foreign	12.2 Military personnel benefits	Personnel	Fringe
1223	Uniform Allowance	12.2 Military personnel benefits	Personnel	Fringe
1224	SMA (Separate Maintenance Allowance)	12.2 Military personnel benefits	Personnel	Fringe
1225	Real Estate & Misc. Expenses for Civilian PCS	12.2 Military personnel benefits	Personnel	Fringe
1226	Other Overseas Allowances	12.2 Military personnel benefits	Personnel	Fringe
1227	Transfer Allowance	12.2 Military personnel benefits	Personnel	Fringe
1228	Relocation Services for Civilian PCS	12.2 Military personnel benefits	Personnel	Fringe
1230	Remote Site/Offshore Allowance	12.2 Military personnel benefits	Personnel	Fringe
1231	Retention Allowance	12.2 Military personnel benefits	Personnel	Fringe
1236	Recruitment Bonuses	12.2 Military personnel benefits	Personnel	Fringe
1237	Relocation Bonuses	12.2 Military personnel benefits	Personnel	Fringe
1241	Agency Per Capita Contributions	12.2 Military personnel benefits	Personnel	Fringe
1242	Transit Pass Fringe Benefit	12.2 Military personnel benefits	Personnel	Fringe
1299	Other (Benefits)	12.2 Military personnel benefits	Personnel	Fringe
1302	Severance Pay	13.0 Benefits for former personnel	Personnel	Fringe
1303	Civilian Service Retirement Fund Payments (9%)	13.0 Benefits for former personnel	Personnel	Fringe



1304	Voluntary Separation Incentive Payments	13.0 Benefits for former personnel	Personnel	Fringe
1306	Death Gratuity Payments	13.0 Benefits for former personnel	Personnel	Fringe
1307	Other Final Payments	13.0 Benefits for former personnel	Personnel	Fringe
1308	Continuation of Pay-Post Separation	13.0 Benefits for former personnel	Personnel	Fringe
WHS OCC	OCC Description	OMB Circular A-11 Section 83 Classification	CSIS Cost Category	CSIS Cost Element
2211	Freight and Express Charges	22.0 Transportation of things	Material & Supply	General
2212	Trucking and Other Local Transportation.	22.0 Transportation of things	Material & Supply	General
2213	Transportation of Household Goods Related to PCS Travel.	22.0 Transportation of things	Material & Supply	General
2214	Storage of Household Goods.	22.0 Transportation of things	Material & Supply	General
2217	Military Sealift Command (MSC) Cargo. Includes Charges By The MSC Industrial Fund for Transportation Services Relative to Shipments of Break Bulk, Overseas Containers, Domestic Containers, Coal, or Petroleum.	22.0 Transportation of things	Material & Supply	General
2219	Inland Transportation.	22.0 Transportation of things	Material & Supply	General



2321	Office Equipment Rental	23.2 Rental payments to others (land/structures)	Material & Supply	General
2323	Reproduction Equipment Rental	23.2 Rental payments to others (land/structures)	Material & Supply	General
2325	Other Rentals	23.2 Rental payments to others (land/structures)	Material & Supply	General
2341	Communications - Circuits and Equipment - DECCO	23.3 Communications, Utilities and Misc Charges	Material & Supply	General
2343	CONUS Lines - DECCO	23.3 Communications, Utilities and Misc Charges	Material & Supply	General
2611	Communications Supplies (Cables, Etc.)	23.3 Communications, Utilities and Misc Charges	Material & Supply	General
2621	Reproduction Supplies	26.0 Supplies and Materials	Material & Supply	General
2622	Office Supplies - Stock Fund	26.0 Supplies and Materials	Material & Supply	General
2623	Office Supplies - Non-Stock Fund	26.0 Supplies and Materials	Material & Supply	General
2624	Other Supplies	26.0 Supplies and Materials	Material & Supply	General
2625	RMBCS Credit Card Purchases	26.0 Supplies and Materials	Material & Supply	General
2631	Subscriptions	26.0 Supplies and Materials	Material & Supply	General
2632	Special Clothing	26.0 Supplies and Materials	Material & Supply	General
2633	Posters And Materials	26.0 Supplies and Materials	Material & Supply	General
2634	Printed Materials/Pamphlets	26.0 Supplies and Materials	Material & Supply	General
2641	Photographic Supplies	26.0 Supplies and Materials	Material & Supply	General
2642	Graphics Supplies	26.0 Supplies and Materials	Material & Supply	General
2643	Videotape	26.0 Supplies and Materials	Material & Supply	General



2644	Audio Tape	26.0 Supplies and Materials	Material & Supply	General
2645	Shipping Containers	26.0 Supplies and Materials	Material & Supply	General
2652	Supplies for Ceremonies	25.2 Other Services	Material & Supply	General
2691	Supply Distribution (IAD Use Only)	26.0 Supplies and Materials	Material & Supply	General
3111	Transportation Equipment	31.0 Equipment	Material & Supply	General
3121	Office Furniture, Furnishings, and Fixtures	31.0 Equipment	Material & Supply	General
3122	Office Equipment	31.0 Equipment	Material & Supply	General
3123	Reproduction Equipment	31.0 Equipment	Material & Supply	General
3125	Office Storage Equipment	31.0 Equipment	Material & Supply	General
3126	Graphic Equipment	31.0 Equipment	Material & Supply	General
3138	Prototype System.	31.0 Equipment	Material & Supply	General
3141	Communications Equipment	31.0 Equipment	Material & Supply	General
3151	Audiovisual Equipment	31.0 Equipment	Material & Supply	General
3152	Photographic Equipment	31.0 Equipment	Material & Supply	General
3159	Other Equipment	31.0 Equipment	Material & Supply	General
3131	Equipment Expansions and Enhancements	31.0 Equipment	Material & Supply	Maintenance & Repair
257A	ADP and Word Processing Equipment Maintenance	25.7 Operation and maintenance of equipment	Material & Supply	Maintenance & Repair
257B	Equipment/Network Maintenance (Time & Material)	25.7 Operation and maintenance of equipment	Material & Supply	Maintenance & Repair
257D	Office Equipment Maintenance	25.7 Operation and maintenance of	Material & Supply	Maintenance & Repair



		equipment		
257E	Reproduction Equipment Maintenance	25.7 Operation and maintenance of equipment	Material & Supply	Maintenance & Repair
257F	Transportation Equipment Maintenance	25.7 Operation and maintenance of equipment	Material & Supply	Maintenance & Repair
257G	Other Equipment Maintenance	25.7 Operation and maintenance of equipment	Material & Supply	Maintenance & Repair
257H	Recurring Maintenance	25.7 Operation and maintenance of equipment	Material & Supply	Maintenance & Repair
WHS OCC	OCC Description	OMB Circular A-11 Section 83 Classification	CSIS Cost Category	CSIS Cost Element
251H	Translation and Interpreting Services.	25.1 Advisory and Assistance Services	Overhead	Headquarters Management
252Q	Safety and Occupational Health Services	25.2 Other Services	Overhead	Headquarters Management
252R	Protective Services	25.2 Other Services	Overhead	Headquarters Management
2601	ADP Supplies	26.0 Supplies and Materials	Overhead	Information Technology
2602	COTS Software Purchases. Aggregate Cost Under \$100,000.	26.0 Supplies and Materials	Overhead	Information Technology
2322	IT Equipment Rental/Leases for Special Commissions	23.2 Rental payments to others (land/structures)	Overhead	Information Technology
2331	Telephone Services and Equipment	23.3 Communications, Utilities and Misc Charges	Overhead	Information Technology
2603	Information Services, Subscriptions, IT Equipment	26.0 Supplies and Materials	Overhead	Information Technology



2605	Commercial Off-The-Shelf (COTS) Software Annual License Fees and Maintenance Costs	26.0 Supplies and Materials	Overhead	Information Technology
	COTS Software Annual License Fees and Maintenance Costs	26.0 Supplies and Materials	Overhead	Information Technology
3124	ADP and Word Processing Equipment	31.0 Equipment	Overhead	Information Technology
3133	Local and Wide area Networks and Gateways.	31.0 Equipment	Overhead	Information Technology
3134	Office Automation System Upgrades/Replacements.	31.0 Equipment	Overhead	Information Technology
3135	Mini Computer System Upgrades/Replacements.	31.0 Equipment	Overhead	Information Technology
3137	COTS Software Where Aggregate Cost Is \$50,000 Or More	31.0 Equipment	Overhead	Information Technology
252G	Audiovisual Production and Services.	25.2 Other Services	Overhead	Information Technology
252H	Software Development – New System	25.2 Other Services	Overhead	Information Technology
253B	AFPCA Software Development Support	25.3 Purchase of goods/services from government accounts	Overhead	Information Technology
253D	AFPCA Computer Changes	25.3 Purchase of goods/services from government accounts	Overhead	Information Technology
257C	Application Software Maintenance and Development	25.7 Operation and maintenance of equipment	Overhead	Information Technology



257J	IT Contract Support Services	25.7 Operation and maintenance of equipment	Overhead	Information Technology
251E	ADP Studies and Other Services	25.1 Advisory and Assistance Services	Overhead	Information Technology
253E	ADP Services Purchased from Other Federal Agencies.	25.3 Purchase of goods/services from government accounts	Overhead	Information Technology
2332	Postage Charges (Excluding Parcel Post)	23.3 Communications, Utilities and Misc Charges	Overhead	Miscellaneous
2351	Teletype Services	23.3 Communications, Utilities and Misc Charges	Overhead	Miscellaneous
2353	Other Communications Services	23.3 Communications, Utilities and Misc Charges	Overhead	Miscellaneous
2401	Printing & Reproduction	24.0 Printing and reproduction	Overhead	Miscellaneous
2651	Official Representation Funds.	25.2 Other Services	Overhead	Miscellaneous
4401	Refunds	#N/A	Overhead	Miscellaneous
4500	Civilian Military Programs	25.2 Other Services	Overhead	Miscellaneous
9400	Financial Transfers	#N/A	Overhead	Miscellaneous
251J	Transcript Services.	25.1 Advisory and Assistance Services	Overhead	Miscellaneous
251M	Studies and Analyses for New System Purchase/Development	25.1 Advisory and Assistance Services	Overhead	Miscellaneous
251N	Conferences Administrative Support	25.1 Advisory and Assistance Services	Overhead	Miscellaneous
251P	Honoraria	25.1 Advisory and Assistance Services	Overhead	Miscellaneous



252A	Stenographic Services	25.2 Other Services	Overhead	Miscellaneous
252B	Advertising	25.2 Other Services	Overhead	Miscellaneous
252J	Academy for Educational Development-Admin Support	25.2 Other Services	Overhead	Miscellaneous
252K	Graduate Fellowship Awards	25.2 Other Services	Overhead	Miscellaneous
252L	Institute for International Education-Admin Support	25.2 Other Services	Overhead	Miscellaneous
252M	Undergraduate Scholarship Awards	25.2 Other Services	Overhead	Miscellaneous
252P	NSEP Honorariums for National Merit Panels for Institutional Grants and Other NSEP Programs	25.2 Other Services	Overhead	Miscellaneous
252S	Television News Programs	25.2 Other Services	Overhead	Miscellaneous
252T	Radio and Television Spots	25.2 Other Services	Overhead	Miscellaneous
252Z	Other Miscellaneous Services	25.2 Other Services	Overhead	Miscellaneous
253A	WHS - AD Fees	25.3 Purchase of goods/services from government accounts	Overhead	Miscellaneous
253C	Support Agreements with Other Government Agencies	25.3 Purchase of goods/services from government accounts	Overhead	Miscellaneous



253F	Other Federal Agencies-Other Support Services.	25.3 Purchase of goods/services from government accounts	Overhead	Miscellaneous
253G	AFPCA Training & Support Services, Excluding Software Dev	25.3 Purchase of goods/services from government accounts	Overhead	Miscellaneous
253H	Support from Gov't Personnel/Use of Gov't Facilities, other than AFPCA.	25.3 Purchase of goods/services from government accounts	Overhead	Miscellaneous
253J	Fees (Non WHS - AD)	25.3 Purchase of goods/services from government accounts	Overhead	Miscellaneous
255X	Research& Development within the Government	25.5 Research and development contracts	Overhead	Miscellaneous
255Y	Research& Development Contracts outside of Government	25.5 Research and development contracts	Overhead	Miscellaneous
258A	Contractual services with the public or another Federal Government account for the board, lodging, and care	25.8 Subsistence and support of persons	Overhead	Miscellaneous
251F	Other DoD Agency-Studies and Analyses	25.1 Advisory and Assistance Services	Overhead	Miscellaneous
251G	Other Support Services Provided by on-Site Personnel	25.1 Advisory and Assistance Services	Overhead	Miscellaneous
251A	Contract Management Support Services	25.1 Advisory and Assistance Services	Overhead	Operational Overhead



251B	Contract Studies, Analyses, and Evaluation	25.1 Advisory and Assistance Services	Overhead	Operational Overhead
251C	Contract Engineering and Technical Services	25.1 Advisory and Assistance Services	Overhead	Operational Overhead
253K	Defense Finance and Accounting Service (DFAS) Related Costs	25.3 Purchase of goods/services from government accounts	Overhead	Payroll
WHS OCC	OCC Description	OMB Circular A-11 Section 83 Classification	CSIS Cost Category	CSIS Cost Element
3204	Fixed Equipment	32.0 Lands and structures	Facilities	Capital Improvements
3207	Minor Construction (MILCON Beginning In FY 1993)	32.0 Lands and structures	Facilities	Capital Improvements
3208	Major Construction and Alterations	32.0 Lands and structures	Facilities	Capital Improvements
3209	Construction Planning and Design	25.4 Operation and maintenance of facilities	Facilities	Capital Improvements
3201	Lands	32.0 Lands and structures	Facilities	Cost of Facility
3202	Buildings	32.0 Lands and structures	Facilities	Cost of Facility
3206	Modular Buildings	32.0 Lands and structures	Facilities	Cost of Facility
3205	Site Preparation of Work Areas Required To Support	32.0 Lands and structures	Facilities	Maintenance & Repair
252N	Waste Disposal	25.2 Other Services	Facilities	Maintenance & Repair



254A	Cleaning Services	25.4 Operation and maintenance of facilities	Facilities	Maintenance & Repair
254B	Building Maintenance and Repair	25.4 Operation and maintenance of facilities	Facilities	Maintenance & Repair
2311	GSA Rent	23.1 Rental Payments to GSA	Facilities	Rent
2312	Other Space Rental	23.2 Rental payments to others (land/structures)	Facilities	Rent
2313	DoD Rent (PRMRF)	23.2 Rental payments to others (land/structures)	Facilities	Rent
2361	Purchased Utilities [General]	23.3 Communications, Utilities and Misc Charges	Facilities	Utilities
2362	Purchased Utilities - Gas	23.3 Communications, Utilities and Misc Charges	Facilities	Utilities
2363	Purchased Utilities - Electric	23.3 Communications, Utilities and Misc Charges	Facilities	Utilities
2364	Purchased Utilities - Water & Sewage	23.3 Communications, Utilities and Misc Charges	Facilities	Utilities
2365	Purchased Utilities - Steam	23.3 Communications, Utilities and Misc Charges	Facilities	Utilities
2367	Purchased Utilities - Oil	23.3 Communications, Utilities and Misc Charges	Facilities	Utilities
2391	HVAC/Utilities Distribution [IAD Use Only]	23.3 Communications, Utilities and Misc Charges	Facilities	Utilities
WHS OCC	OCC Description	OMB Circular A-11 Section 83 Classification	CSIS Cost Category	CSIS Cost Element
3301	Investments and Loans	#N/A	Capital	Cost of Capital
4301	Interest and Dividends	43.0 Interest and dividends	Capital	Cost of Capital



WHS OCC	OCC Description	OMB Circular A-11 Section 83 Classification	CSIS Cost Category	CSIS Cost Element
1238	Professional Liability Insurance	12.2 Military personnel benefits	Additional Costs	Liability Insurance
4201	Insurance Claims and Indemnities	42.0 Insurance Claims and indemnities	Additional Costs	Liability Insurance
4622	Vendor Debt	#N/A	Additional Costs	Subcontracts
251D	Federally Funded Research and Development Center (FFRDC) Studies and Analysis	25.1 Advisory and Assistance Services	Additional Costs	Subcontracts
251K	Federally Funded Research and Development Center (FFRDC) Management & Professional Support Services	25.1 Advisory and Assistance Services	Additional Costs	Subcontracts
251L	Federally Funded Research and Development Center (FFRDC) Engineering & Technical Services	25.1 Advisory and Assistance Services	Additional Costs	Subcontracts
2131	Per Diem - Training	21.0 Travel and transportation of persons	Additional Costs	Training
2132	Travel Costs - Training	21.0 Travel and transportation of persons	Additional Costs	Training
252C	Training. Include Hiring Instructors to Teach OSD Personnel	25.2 Other Services	Additional Costs	Training



252D	Training - Civilian Executive	25.2 Other Services	Additional Costs	Training
252E	Training - Civilian Personnel	25.2 Other Services	Additional Costs	Training
252F	Training - Military Personnel	25.2 Other Services	Additional Costs	Training
2100	Per Diem and Transportation Costs	21.0 Travel and transportation of persons	Additional Costs	Travel
2101	Per Diem. Includes Costs Associated with TDY and PCS	21.0 Travel and transportation of persons	Additional Costs	Travel
2102	Local Payments of Airlines. (Costs Associated with TDY/PCS)	21.0 Travel and transportation of persons	Additional Costs	Travel
2105	Local Travel. (Rental Car, Taxi, Local Bus, etc)	21.0 Travel and transportation of persons	Additional Costs	Travel
2106	Incidental travel expenses directly related to Official Travel	21.0 Travel and transportation of persons	Additional Costs	Travel
2107	Transportation Cost in Support of Mass Transit Program	21.0 Travel and transportation of persons	Additional Costs	Travel



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