

GAO

Report to the Chairman, Subcommittee
on Federal Services, Post Office and
Civil Service, Committee on
Governmental Affairs, U.S. Senate

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GOVERNMENT CONTRACTORS

Measuring Costs of Service Contractors Versus Federal Employees



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The Honorable David H. Pryor
Chairman, Subcommittee on Federal Services,
Post Office and Civil Service
Committee on Governmental Affairs
United States Senate

Dear Mr. Chairman:

This report responds to your request that we review various reports and testimonies¹ that have been made over the past few years comparing the cost of using contractors versus federal employees to perform services. Your request identified several of these reports and testimonies and asked us to determine whether any others existed. As agreed, we commented on the methodologies used in these documents and identified many of their strengths and weaknesses, and summarized the results.

Background

The federal government spent almost \$12 billion in fiscal year 1992 for advisory and assistance service contracts. These contracts include professional, administrative, and management support services and special studies and analyses. The contractors who provide these services can play a valuable role in government, supplying expertise that agencies may not have in-house or may not need on a permanent basis. In addition, these contractors can enable agencies to obtain up-to-date expertise in rapidly changing fields and explore a wide range of knowledgeable viewpoints on controversial issues. Agencies may also find using contractors to be more economical than using federal employees to perform certain services.

Until December 1993, advisory and assistance services were subject to Office of Management and Budget (OMB) guidance under Circular A-120, Guidelines for the Use of Advisory and Assistance Services. This circular established policy, assigned responsibilities, and set guidelines to be followed for determining and controlling the appropriate use of advisory and assistance services. In November 1993, OMB issued Policy Letter No. 93-1, which rescinded Circular A-120. The requirements of A-120 were incorporated into the new policy letter and other policy documents. The policy letter became effective 30 days after issuance.

¹Throughout this letter we refer to the identified reports and testimonies generically as "studies."

The new policy letter provides more detailed guidance on managing and controlling the use of service contracts including advisory and assistance contracts. The guidance includes issues for responsible management officials to address in analyzing contract requirements. For example, agency officials must ensure that agency requirements are met in the most cost effective manner, considering quality and other relevant factors. While the policy letter emphasizes the cost effectiveness of service contracts, it does not require agencies to develop a cost comparison between contractor and in-house performance.

Federal policy regarding the performance of commercial activities—as opposed to advisory and assistance activities—was established by Circular A-76. This circular requires that cost comparisons be made to determine whether agencies should use contractors or government employees to perform commercial activities, such as automatic data processing, guard and protection services, and maintenance and repair services. An A-76 cost study involves comparing estimated contract and in-house costs for the specific work to be performed to determine the more cost effective approach.

OMB's Cost Comparison Handbook, a supplement to the circular, furnishes the guidance for computing cost comparison amounts. The agency is to prepare a document containing the government's estimate of the lowest number and types of employees required to do the work described. From these data and other estimated costs, the agency is to prepare a total estimated cost for in-house performance. To estimate contractor performance costs, the selected bid or offer is added to other estimated costs, such as contract administration, to develop a total projected cost for contracting out. The circular requires comparisons of the two estimates for the agency to determine which alternative is more cost effective.

Results in Brief

In contrast to the A-76 requirements covering commercial activities, which require cost comparisons, agencies are not currently required to conduct cost comparisons in determining whether to contract for advisory and assistance services. However, our analysis of studies made by GAO, the Department of Energy (DOE), and the Department of Defense (DOD) suggest that cost comparisons can be a useful management tool for assisting government agencies in deciding how to acquire needed services in the most cost effective manner.

In addition to the five studies identified in the Chairman's request, we identified four more. We reviewed all nine. Although the nine studies indicated that savings may be available in certain situations if services were performed by federal employees rather than by contractors, all of the studies had limitations. For example, none were sufficiently large or comprehensive to permit generalization to other situations in the government as a whole, or even within the agencies in question.

The studies also varied in the extent to which they incorporated all possible cost factors. Because Circular A-76 contains an extensive list of items to consider—most of which, we believe, would be equally applicable to advisory and assistance services—we believe it could serve as a useful source of criteria for studies such as these. One study of seven headquarters' administrative, management, and technical support contracts used substantially all of the extensive cost elements contained in OMB Circular A-76. Four additional studies used some, but not all, of these cost elements. The remaining four studies limited their methodologies to determining or estimating direct labor costs and comparing them to contract labor costs.

In addition to cost, we believe agencies would also need to consider other factors in deciding whether to contract out for advisory services. For example, if the advisory services sought were short-term and nonrecurring in nature, it might make sense for an agency to contract out even if it might be less expensive to hire staff to do the work in-house. An agency would also need to consider quality and timeliness of the services required. This would involve determining whether available federal employees had the necessary technical skills or knowledge.

OMB is considering revising its A-76 guidance. This could include extending the cost comparison requirement to include advisory and assistance services. In this regard, we believe OMB should also consider the additional noncost factors discussed in this report.

OMB should also consider the proposals of the National Performance Review (NPR) to encourage competition between the public and private sector in obtaining needed services for the government. However, as it considers revisions to its cost comparison guidance, OMB will need to resolve a potential conflict between the NPR's objective of providing agencies greater flexibility in accomplishing their missions and the current efforts to downsize the government. On one hand, the NPR has advocated (1) giving managers the flexibility to obtain needed services from the best

possible source and (2) eliminating personnel ceilings and permitting managers to manage to budget. On the other hand, the administration has also stated its commitment to reducing the federal workforce by 252,000 employees. Such downsizing could, in effect, create new personnel ceilings rather than eliminate them, with agencies finding themselves in a position of having to contract out to meet the downsizing goal regardless of what cost comparison studies show. The administration and Congress will need to address this apparent contradiction to avoid sending conflicting messages to federal agencies.

Scope and Methodology

To identify the universe of recent cost comparison studies, we conducted an extensive literature search covering the period from fiscal years 1988 to 1993 and made inquiries of OMB, Congressional Research Service (CRS), National Academy of Public Administration (NAPA), DOD, DOE, American Federation of Government Employees (AFGE), a service contractor, Dan Gutman (author of *The Shadow Government*), and the Professional Services Council (an organization representing the interests of advisory and assistance service contractors). We identified nine reports and testimonies—one report prepared by the DOE's Inspector General (IG), three prepared by the DOD's IG, and two we prepared; two testimonies presented by DOE and DOD officials; and one review we made of our own use of contractors. The reports and testimonies identified are listed in appendix I.

To review the studies' methodologies, we used OMB's A-76 cost elements plus other noncost factors we deemed critical, such as quality and timeliness of services, the availability of federal employees, and whether the work was short-term and nonrecurring or longer term and recurring. We chose the A-76 cost factors because they are comprehensive, reflect the fully allocated cost to the government, and generally include a broad range of cost factors, such as personnel costs, materials and supplies, overhead, contract price, and contract administration. Our study did not include a determination of the accuracy of the agency cost data used. We were concerned primarily with the extent to which the studies' methodologies incorporated the cost elements suggested by OMB.

To review the status of current efforts to improve the way federal agencies obtain needed services, we (1) held discussions with congressional staff with responsibilities related to government contracting activities and OMB officials and (2) reviewed OMB documentation, White House news releases, and newspaper articles. In addition, we reviewed the NPR report, since it

addressed how federal agencies obtain needed services to accomplish their missions.

As requested by the Subcommittee, we did not obtain official agency comments. However, we discussed the results of our work with knowledgeable officials from OMB, DOE, and DOD. Their comments are summarized on pages 12 and 13. We did our review in Washington, D.C., between April 1993 and January 1994 in accordance with generally accepted government auditing standards.

Several Studies Followed A-76 Cost Comparison Principles

Circular A-76 and its Cost Comparison Handbook provide instructions for agencies to consider in developing fair and equitable costs of both government and contract performance. Five of the studies included some of the relevant cost elements in A-76 (see app. III).

The other four studies limited their methodologies to determining or estimating direct agency labor costs and comparing them to contract labor costs. In our view, the five studies that included some of the A-76 cost elements represent a more comprehensive cost comparison methodology. Although the studies illustrate that the A-76 methodology can be used and serve as a useful management tool in deciding how best to obtain needed services, it should be noted that all of the studies have limitations. For example, none was designed to be sufficiently large or comprehensive to permit generalizing to other situations in the government as a whole, or even to the agencies in question.

Appendix II lists the suggested A-76 elements for agencies to consider in developing these costs. For government performance, such costs include direct labor costs, indirect labor costs (such as health and retirement benefits), supplies, and overhead. Contract costs include the contract price and the cost to the government for contract administration.

To illustrate how a study could incorporate such cost elements, we have summarized the study done by DOE's IG. Discussions of each of the nine studies we reviewed are included in appendix IV.

The DOE IG looked at seven headquarters support service contracts that were active as of November 1989, each with an annual cost of over \$1 million or required the services of at least 10 full-time equivalents. The seven contracts selected for detailed review were taken from a universe of 54 contracts with an average cost of over \$1 million each. The IG

considered all of the cost elements suggested by OMB and used actual contract costs. The IG used the contractor's organizational structure in developing an in-house labor cost estimate. Specifically, with the assistance of a personnel classifier, the IG identified comparable federal positions requiring the same personnel skill levels as the contractor staff. Other in-house expenditures were based on costs stipulated in OMB Circular A-76 or actual agency cost experience.

In addition to personnel costs, the IG's report considered other in-house performance costs suggested by OMB. It included material and supply costs, overhead costs, and one-time costs such as employee recruitment and/or relocation expenses necessary to convert a contract function to government performance. For contract performance, the IG report considered contract costs suggested by OMB, such as the contract price and the cost of contract administration by the government. The contract costs were reduced by the estimated amount of federal income tax the contractors would pay since that amount would be returned to the federal Treasury.

Before approving a conversion from contract to in-house performance on the basis of costs, OMB Circular No. A-76 has established cost margins that must be exceeded. The cost margin is equal to 10 percent of the government personnel-related cost and 25 percent of the acquisition cost of new capital assets—i.e., assets not currently owned by the government and used solely by the in-house operation. DOE's study included this requirement and added these costs to the cost of in-house performance. (See p. 19).

In our view, the DOE IG report illustrates that the A-76 guidance can be applied to support service contracts such as advisory and assistance services and that such a cost comparison can serve as a useful management tool to assist agencies in deciding how to acquire needed services. Among other things, the cost elements contained in A-76 are extensive; by considering all those relevant to support service contracts, agencies should be able to develop comprehensive cost estimates.

With one exception, we have not noted major concerns or criticism of the cost elements contained in A-76. The one concern was raised by the Professional Services Council, which represents the interests of advisory and assistance service contractors. It believes the A-76 guidance is defective in that it does not include all possible costs in the agency overhead cost category.

Currently, OMB Circular A-76 considers overhead to include two major categories of cost—operations overhead and general and administrative overhead. Operations overhead is defined in the Circular as those costs incurred by the first supervisory work center one element above and in support of the function under study. General and administrative overhead is defined as all support costs, other than operations overhead, incurred in support of the function under study.

According to the Circular, a portion of the support costs incurred above the installation level would be theoretically attributable to the function under study. However, for purposes of a cost comparison, the Circular requires the inclusion of only those government support costs that would be eliminated in the event that the function is contracted. This decision is based on the conclusion that costs involved in funding, policymaking, long-range planning and direction would continue and be equally applicable to both in-house or contractor performance.

We agree with OMB's conclusion, and we question (1) the practicality of allocating all possible overhead costs to specific support services under consideration and (2) whether the inclusion of these costs would markedly affect the outcome of a cost comparison analysis. However, we recognize that differences of opinion can occur. As we discuss on page 9, OMB is considering revisions of A-76 and extending the cost comparison requirement to advisory and assistance services. When it proceeds, OMB, in accordance with its normal practice, will likely provide an opportunity for public comment on its intentions, which would provide the Professional Services Council and others an opportunity to voice any concerns they might have.

Noncost Factors That Also Need to Be Considered

For a cost comparison of contracting out versus using federal employees to be a useful management tool for agency decisionmakers, OMB also needs to consider other noncost factors. These include the difference between the quality of services offered by federal versus contractor employees; the timeliness of services available; the availability of federal employees to do the work; the value of flexibility in responding to variable work requirements; and whether the services needed are short-term, nonrecurring in nature, or of a longer term and recurring.

Of the nine cost comparison studies we reviewed, only one addressed noncost factors in the actual analysis. Some of the other studies referred to the factors, but did not include them in the analysis. In the former case,

the agency evaluated the quality and the timeliness of services provided by the contractor on a short-term, "test" contract to determine the feasibility of future reliance on contracting out for certain tasks. The agency used three methods to evaluate the quality of contractor work—peer review of contracted work; external expert ratings of comparable tasks done by agency and contracted staff; and in the case of one type of work, the correction of control errors by the contractor. The contractor's performance was considered to be acceptable in terms of quality. However, in terms of timeliness, the contractor was not able to deliver the needed services as quickly as agency personnel.

In commenting on the DOE IG's study, a DOE official also raised the issue that noncost factors need to be considered. The Director of DOE's Office of Administration and Human Resource Management pointed out management's belief that a process for review and approval of agency requests for support services should also document, as appropriate, factors other than cost that create mitigating circumstances for permitting contracting when a cost comparison shows savings projected for in-house operation. Such factors included the mix of technical skills of required employees, the duration of the work to be done, and the availability of funding. The Director pointed out that without considering these factors, the agency may not be able to contract out work even when it is in its best interests to do so.

An OMB official held similar views. He suggested that under certain circumstances, such as where the work requirements were short-term and nonrecurring, the results of a cost comparison may be a secondary issue. He believed that under these conditions a cost comparison may not be needed.

We agree that such noncost factors should enter into the decisionmaking process. For example, unlike many commercial services currently subject to A-76 guidance that are generally long-term and recurring in nature, advisory and assistance service needs can also be time-critical, nonrecurring, or intermittent in nature. If an agency were faced with such circumstances and did not have federal employees with the necessary technical knowledge and skills, the relative cost of contracting out or hiring additional employees might not be of overriding importance. In our view, however, such decisions would need to be made on a case-by-case basis and properly justified and documented.

OMB Is Considering Requiring Cost Comparisons for Advisory Services

OMB recognizes the importance of obtaining needed federal services at the most reasonable cost to the taxpayers and has emphasized this need in its November 19, 1993, Policy Letter No. 93-1, Management Oversight of Service Contracting. In addition, OMB is considering expanding A-76 cost comparison requirements to include advisory and assistance services as part of an ongoing effort to revise its governmentwide cost comparison guidance and consider the recommendations of the NPR.

OMB's reconsideration of its A-76 guidance is due in part to past criticisms of the program. For example, in December 1989 we testified that in more than 100 reviews, we and other agencies had found that managers generally agreed with the A-76 concept of government/private sector competition, but said that the program was time-consuming, difficult to implement, disruptive, and perceived as threatening to the jobs of federal managers and employees.² In revising its A-76 guidance, OMB is considering addressing these issues. It will also consider the results of a comprehensive governmentwide study of contracting policies it conducted. The resulting report entitled Summary Report of Agencies Contracting Practices was issued in January 1994.

Although OMB's observations did not specifically address the issue of performing cost comparisons between in-house and contractor performance, it addressed some related issues. For example, the report said that many agencies do not routinely perform independent cost analyses of the market reasonableness of contractor bids before the renewal, extension, or re-competition of existing contracts. In some cases, cost analyses are not prepared before entering into new contracts.

The report concluded that agencies often assume that additional government personnel will not be authorized and, therefore, the only alternative is to contract for needed services. The report indicated that several agencies requested that they be given more budget flexibility with respect to determining whether work should be performed by agency or contractor staff.

OMB's intention to address these problems when reconsidering its guidance is timely in that it is in accord with many of the concepts advocated in the NPR. Among other things, the NPR has advocated the following:

- Individual agencies should compete with other agencies and private companies to provide support services.

²A-76 Program Issues (GAO/T-GGD-90-12)

- Agency managers should have flexibility to obtain services from the best possible source.
- Personnel ceilings should be eliminated and federal managers should be permitted to manage to budget using ceilings on operating costs to control spending. The report recognized that personnel ceilings could cause agencies to contract out work that could be done better and cheaper in-house.

The NPR findings corresponded with our previous observations that federal managers should have the authority and flexibility to obtain services for the government in the most cost effective manner. For example, in our Transition Series Report, The Public Service (GAO/OCG-93-7TR, Dec. 1992), we reported that federal managers have often not had sufficient flexibility to choose between hiring employees or contractors because of restrictive personnel ceilings imposed by OMB or Congress. As a result, agencies frequently used contractors even when they believed it might be more appropriate to use federal employees because of the nature of the work involved or because it would be less costly.

Providing agencies with the needed flexibility to choose between using employees or contractors, however, will be a particularly sensitive issue in light of the administration's overall goal of downsizing the federal workforce by approximately 252,000 positions. Unless agencies are specifically authorized to hire needed federal employees in circumstances where a meaningful cost comparison indicates that in-house performance is desirable, agencies could be in a position of having to contract for services regardless of what a cost comparison study shows. OMB and Congress will need to reconcile this potential conflict as they implement the NPR recommendations.

Conclusions

Although agencies have not been required to make cost comparisons for advisory and assistance services, studies made by us, DOD's IG, and DOE's IG have indicated that cost comparisons can be a useful management tool.

OMB is considering revising its A-76 guidance to address many of the procedural problems and concerns we and other agencies have identified over the past several years. It also plans to consider extending the cost comparison requirement to include advisory and assistance services. OMB's consideration of extending Circular A-76 requirements to include advisory and assistance services is both timely and in harmony with the objectives of the administration's NPR to provide quality service to the public at the

most reasonable cost. Applying a cost comparison requirement to advisory and assistance service would be another step forward in a disciplined approach to ensuring that the government gets the most for its money.

OMB will need to be sensitive to, and allow for, such noncost factors as quality, timeliness, the technical skills of federal employees, and the duration of the work to be done. In addition, OMB and Congress need to be aware that a potential conflict exists between the administration's objectives of (1) giving federal managers the flexibility to obtain needed services from the best possible source and (2) downsizing the federal workforce.

Matter for Consideration by Congress

Congress may want to explore with OMB the best way to reconcile the administration's objective of downsizing the government with the objective of providing federal agencies the flexibility to accomplish the government's work in the most cost effective manner including, where needed, increased competition between the public and private sectors.

Recommendations

We recommend that the Director, OMB, take the following actions:

- As part of its overall effort to improve the procurement of services, OMB should extend a cost comparison requirement to advisory and assistance services. As part of its guidance to agencies in preparing cost comparisons for advisory and assistance services, OMB should recognize that noncost factors also need to be considered and specify any circumstances that might exempt an agency from the cost comparison requirement. However, if a decision is made not to conduct a cost comparison, such a decision should be adequately justified and documented.
- OMB should work with Congress to explore ways to meet the administration's workforce reduction objective and provide agencies with sufficient authority and flexibility to accomplish the government's work in the most efficient and effective manner—either by using government employees or by contract, or some combination of both.

Agency Comments

As requested by the Subcommittee, we did not obtain official agency comments. However, we discussed the results of our work with knowledgeable officials from DOE, DOD, and OMB.³

DOE and DOD officials commented on our summaries of their respective agency's cost comparison studies. They generally agreed with our presentation of the studies and provided several suggestions for greater clarity. We have incorporated their suggestions where appropriate.

OMB officials commented on and were in general agreement with the preliminary findings and conclusions in the draft report. They reiterated their intent to consider extending the cost comparison requirement to include advisory and assistance services.

The officials noted that it may not be necessary or practicable to require cost comparisons for all types of advisory and assistance services. In particular, they suggested that in certain circumstances, such as those involving activities where the work requirements are of a short-term and nonrecurring nature, cost comparisons would not be necessary. They suggested that these and other noncost factors be considered before a decision is made to conduct a cost comparison.

We agree that it would be reasonable to first require consideration of noncost factors before making a cost comparison for advisory and assistance services. As we stated earlier in this report, such noncost factors need to be considered and specifically included in OMB guidance. We believe, however, that OMB should require agencies to adequately justify and document decisions not to conduct cost comparisons and not allow agencies to use these factors solely as a basis for avoiding the comparisons.

OMB officials offered the opinion that consideration of the comparative costs of contracting versus in-house performance should relate not only to those activities that may be performed by contractors but to those activities already being performed by the government as well. The officials also expressed concern that to be fully reliable, contractor cost estimates should reflect the best prices available in the market place—obtainable

³We discussed the draft with the Director, Management Systems, DOE, and two other DOE officials. We met with a Procurement Analyst from the Office of the Secretary of Defense, DOD, and twelve other DOD officials. We also met with an OMB Policy Analyst from the Federal Services Branch and two other OMB officials. The Analyst said that although the matters discussed in the draft report were under the Analyst's area of responsibility, the Analyst was not able to speak officially for OMB without having the draft report submitted to the agency for formal comment.

through the competitive process. They said that existing advisory and assistance contracts may not have always incorporated the most efficient practices and, as a result, may not reflect the best price of contract services available to the government. We believe OMB's comments have merit and expect that OMB will consider these matters as part of its reconsideration of the A-76 process.

The OMB officials provided other comments of a technical nature that have been incorporated where appropriate.

We are sending copies of this report to the Director of the Office of Management and Budget and the Secretaries of the Departments of Defense and Energy. We are also providing copies to the ranking minority member of the Subcommittee on Federal Services, Post Office and Civil Service, Committee on Governmental Affairs, and other appropriate congressional committees. Copies will be made available to other interested parties upon request.

The major contributors to this report are listed in appendix V. If you have any questions about this report, please call me on (202) 512-5074.

Sincerely yours,



Nancy Kingsbury
Director
Federal Human Resource Management
Issues

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Abbreviations

AFGE	American Federation of Government Employees
CRS	Congressional Research Service
DOD	Department of Defense
DOE	Department of Energy
EPA	Environmental Protection Agency
IG	Inspector General
NAPA	National Academy of Public Administration
NPR	National Performance Review
OMB	Office of Management and Budget

Reports and Testimonies Reviewed by GAO

1. Department of Energy Office of Inspector General: Audit of the Cost-Effectiveness of Contracting for Headquarters Support Services (DOE/IG-0297, Aug. 30, 1991).

2. Department of Defense Office of the Inspector General: Audit Report on Contracted Advisory and Assistance Services Contracts (No. 91-041, Feb. 1, 1991).

3. GAO: Energy Management: Using DOE Employees Can Reduce Costs for Some Support Services (GAO/RCED-91-186, Aug. 16, 1991).

4. Testimony of Donna R. Fitzpatrick, Assistant Secretary for Management and Administration, DOE, before the Subcommittee on Federal Services, Post Office and Civil Service, Senate Committee on Governmental Affairs, September 6, 1989.

5. Testimony of Ambassador Henry F. Cooper, Director, Strategic Defense Initiative Organization, DOD, before the Senate Committee on Governmental Affairs, July 24, 1992.

6. GAO: Letter from the Comptroller General to the Chairman, Legislative Subcommittee, House Committee on Appropriations, on the expanded use of contractors to help with GAO's audit and evaluation work, February 28, 1991.

7. GAO: Government Contractors: Are Service Contractors Performing Inherently Governmental Functions? (GAO/GGD-92-11, Nov. 18, 1991).

8. Department of Defense Office of the Inspector General: Audit Report on Consulting Services Contracts for Operational Test and Evaluation (No. 91-115, Aug. 22, 1991).

9. Department of Defense Office of the Inspector General: Audit Report on Selected Services Contracts at Wright-Patterson Air Force Base (No. 92-128, Aug. 17, 1992).

OMB Circular No. A-76 Cost Comparison Criteria

OMB's Circular No. A-76, Cost Comparison Handbook provides detailed instructions for developing a comprehensive comparison of the estimated cost to the government of acquiring a service by contract and of providing the service with in-house government resources. The specific cost elements that agencies need to consider are illustrated in table II.1.

Table II.1: OMB Circular A-76 Cost Comparison Criteria—Expansions, New Requirements, and Conversions to In-House Performance

In-house performance costs
Personnel costs ^a
Material & supply cost
Other specifically attributable costs ^b
Overhead cost ^c
Cost of capital ^d
One-time conversion cost ^e
Additional costs ^f
Total in-house costs
Contract performance costs
Contract price
Contract administration ^g
Additional costs ^h
One-time contract conversion costs ⁱ
Gain or loss on disposal/transfer of assets ^j
Federal income tax deduction ^k
Total contract costs
Decision
Conversion differential ^l
Total
Cost comparison
Cost comparison decision (check block)
// Accomplish in-house
// Accomplish by contract

(Table notes on next page)

Appendix II
OMB Circular No. A-76 Cost Comparison
Criteria

GAO Notes:

^aPersonnel costs include 29.55 percent for retirement, life insurance, health insurance, and miscellaneous benefits.

^bInclude depreciation, rent, maintenance and repair, utilities, and insurance (the government is self-insured and must pay for each loss incurred).

^cOperations overhead and general and administrative overhead.

^dNew investment in facilities and equipment.

^eOffice and plant rearrangements; employee recruitment, training, and relocation; and expenses resulting from discontinuing an existing contract or expanding the in-house operations.

^fAny government costs not classified by other cost elements resulting from unusual or special circumstances.

^gCosts incurred by government to ensure execution of contract.

^hCosts for unusual or special circumstances such as transportation or purchased services.

ⁱBased on government discontinuing an existing activity and obtaining a service by contracting.

^jBased on reduction in government assets.

^kRevenue from contractor that reduces net contract costs.

^lTotal in-house costs must be increased by certain differential costs for personnel and overhead before they are compared to the total contract costs.

Source: OMB Circular No. A-76, Cost Comparison Handbook

Extent to Which DOE IG, DOD IG, and GAO Studies Used OMB Circular A-76 Cost Comparison Criteria^a

OMB A-76	DOE/IG-0297	DOD/IG-91-041	GAO/RCED-91-186	DOD/IG-91-115	DOD/IG-91-128
In-house performance costs					
Personnel costs	x	x	x	x ^g	x ^g
Material & supply	x				
Other specifically attributable costs	x			x ^e	
Overhead costs	x				
Cost of capital	x				
One time conversion cost	x		x		
Additional costs	x		x		
Total in-house costs	x		x	x ^e	
Contract performance costs					
Contract price	x ^b	x ^c	x ^{bd}	x ^f	x ^c
Contract administration	x				
Additional costs	x				
One-time contract conversion costs	x				
Gain or loss on disposal/transfer of assets	x				
Federal income tax deduction	x				
Total contract costs	x				
Decision					
Conversion differential	x				
Total	x	x	x	x	x
Cost comparison	x	x	x	x	x

Legend

x equals the criteria that were met

Notes:

^aThis analysis is based on the five studies that used all or some of the A-76 cost elements.

^bBased on actual expenditures for contractor's work.

^cBased on contract labor rates and hours.

^dCertain items, such as federal income tax, were considered but not included.

^eBased on hourly costs, including salary, fringe benefits, office space, and miscellaneous costs.

^fBased on hourly costs, including labor, overhead, general and administrative expenses, and profit.

^gBased on hourly costs, consisting of hours times the rate per hour.

Summary of Reports and Testimonies Reviewed

We reviewed nine reports and testimonies that compared costs of performing advisory and assistance type support services with contractor and in-house resources. Five used some of the cost elements suggested in OMB's Circular No. A-76. The remaining four limited their discussion to actual or estimated labor costs. We have summarized all nine.

The five studies that most closely followed the A-76 cost comparison criteria were done by the Inspectors General at DOE and DOD, and by us.

Audit of the Cost Effectiveness of Contracting for Headquarters Support Services (DOE/IG-0297)

This report to the Secretary of Energy contained the results of an audit of contractor costs for support services at DOE Headquarters by the Department IG. It most closely followed OMB's A-76 criteria and used all of the prescribed OMB cost comparison elements.

The study was based on cost comparisons for seven headquarters' support service contracts dealing with management, technical, and administrative assistance that were active in November 1989. Overall, it cited estimated average savings of 40 percent through government performance of these activities, ranging from 26 to 53 percent.

An example of the cost comparison made for one of the contracts in the study is shown in Table IV.1.

**Appendix IV
Summary of Reports and Testimonies
Reviewed**

Table IV.1: Example of Cost Comparison Used in DOE IG Report (DOE/IG-0297)

In-house performance costs	
Personnel costs	\$231,045.51
Material & supply	2,062.50
Other specifically attributable costs	10,463.09
Overhead costs	
Personnel	45,515.96
Operations	0.00
Cost of capital	21.00
One-time conversion cost	6,875.00
Additional costs	0.00
Total in-house costs	\$295,983.06
Contract performance costs	
Contract price	\$460,200.30
Contract administration	26,608.30
Additional costs	0.00
One-time contract conversion costs	0.00
Gain or loss on disposal of assets (expansion)	0.00
Federal income tax (deduct)	(8,283.60)
Total contract costs	\$478,525.00
Decision	
Conversion differential	\$ 27,661.40
Total	\$323,644.46
Cost comparison	\$154,880.54 32.366%
Cost comparison decision (check block)	
/x/ Accomplish In-House	
// Accomplish by Contract	

Source: DOE IG workpapers for audit report, DOE/IG 0297.

Audit Report: Contracted Advisory and Assistance Service Contracts, DOD IG Report, (No. 91-041)

This report to DOD officials contained the results of an audit of contracted advisory and assistance services. The primary objective of the audit was to determine the adequacy of management controls. The IG also considered, however, the cost effectiveness of contracting for services.

This study was based partially on OMB A-76 criteria and examined four long-term work requirements for contract obligations in fiscal year 1987. Work performed under each contract had continued for more than 5 years. According to the IG, the cost comparisons did not include facilities and

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additional administrative costs that might be required if the services were performed in-house.

Contract costs consisted of actual contract labor, travel, and miscellaneous costs. Other OMB-specified costs, such as government contract administration, conversion costs, and gain or loss on disposal of assets, were not included. Also, a deduction for federal income tax was not made. The government costs were limited to labor plus fringe benefits and did not include material and supply costs, other specifically attributable costs, overhead, capital costs, and one-time conversion costs. The work did not require specialized skills and, as a result, the IG said it was possible to identify the Civil Service equivalent of the contractor employees.

The IG cited a range of 37 percent to 51 percent in estimated savings for the four work requirements reviewed through in-house performance.

An example of the cost comparison for one of the contracts involving administrative and technical support services is shown in table IV.2.

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Table IV.2: Example of Cost Comparison Used in DOD IG Report (No. 91-041)

Government GS/contractor equivalents	GS-9/5 Engineer Assistant	GS-10/5 Junior Engineer	GS-12/5 Senior Engineer	GS-13/5 Project Engineer
Government GS base salary (1987)	\$25,454.00	\$28,028.00	\$36,911.00	\$43,891.00
Hourly rate	\$14.60	\$16.07	\$21.16	\$25.17
OMB A-76 benefit cost factors				
Retirement at 21.70 percent	3.17	3.49	4.59	5.46
Medicare at 1.45 percent	.21	.23	.31	.36
Life & health insurance at 4.70 percent	.69	.76	.99	1.18
Miscellaneous fringe at 1.80 percent	.26	.28	.38	.45
Government rates with benefit costs	\$18.93	\$20.83	\$27.43	\$32.62

Contract labor categories	Contract rate	Contract hours	Total contract costs	Government rates x contract hours	Government cost	Savings - in-house
Project engineer	\$48.44	3,180	\$154,039.20	32.62 x 3,180	\$103,731.60	\$ 50,307.60
Senior engineer	41.75	17,810	743,567.50	27.43 x 17,810	488,528.30	255,039.20
Junior engineer	35.68	19,995	713,421.60	20.83 x 19,995	416,495.85	296,925.75
Engineer assistant	30.50	14,410	439,505.00	18.93 x 14,410	272,781.30	166,723.70
Travel, miscellaneous			24,711.54		22,824.00	1,887.70
Total cost			\$2,075,244.84		\$1,304,361.05	\$770,883.79*

*Percentage of savings if performed in-house is 37 percent.

Energy Management: Using DOE Employees Can Reduce Costs for Some Support Services (GAO/RCED-91-186, Aug. 1991)

This report to Senator David H. Pryor contained the results of cost comparisons made at his request of twelve support service contracts.

The study was based partially on OMB A-76 criteria and considered twelve contracts that were active in fiscal year 1990. Overall, our methodology tended to overstate the cost of federal performance so the comparison would not be biased in favor of the federal sector.

We compared contract performance costs to in-house performance costs that consisted of labor costs, fringe benefits, one-time costs to convert activities to in-house performance, and training costs. For the most part,

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contractors were using government space and equipment. Therefore, these costs were not added to either side of the equation.

In the interest of conservatism, in estimating labor costs for in-house performance, we used the top salary level for each position, rather than the middle level specified in the OMB guidance. We also did not add the cost of DOE's contract administration to the contract costs. This tended to understate the cost of contractor performance so there would not be a bias in favor of the government.

We did not subtract the contractor's potential income tax payment from the contractor's cost because we believed the amount would be minimal for the contracts reviewed.

Overall, we estimated that DOE could have achieved savings for 11 of the contracts we reviewed, ranging from 3.1 to 55.4 percent, with an average of 25.4 percent if the work were done in-house.

The study results were not generalizable because the selection methodology favored contracts that agency officials suggested could be performed less expensively by federal personnel.

For one of the contracts we reviewed, the in-house performance costs were estimated to be 9 percent higher than the contract performance costs. An example of our analysis for one contract we reviewed is shown in table IV.3.

Table IV.3: Example of Cost Comparison Used in GAO Report (GAO/RCED-91-186)

Contract performance costs	\$5,398,000
In-house performance costs	
Labor costs	\$3,000,449
Fringe benefits	886,633
One-time costs to convert to in-house performance	231,200
Training costs	32,500
Total in-house performance costs	\$4,150,782
Difference	\$1,247,218 ^a

^aEstimated percentage of difference to in-house performance costs is 30 percent.

**Audit Report: Consulting
Services Contracts for
Operational Test and
Evaluation, DOD IG
Report, (No. 91-115)**

This report to DOD officials summarized the results of an audit requested by Congresswoman Barbara Boxer. The report addressed advisory and assistance services contractors that participated in the development, production, testing, and evaluation of major defense systems. One objective of the study was to determine whether using services contractors to provide support for operational tests was more cost effective than developing a capability to perform the work in-house.

The report stated that the military departments' operational test agencies used repeated and extended service contracts that were not as cost effective as developing an in-house capability to perform the work. The report estimated that the agencies could save about \$26 million from fiscal years 1992 to 1996, by gradually reducing their service contracts by 60 percent. The report further estimated that contracting costs were between 21 and 40 percent higher than in-house performance.

The report compared contractor total hourly costs with estimated hourly costs for various levels of civilian government personnel. Total contractor hourly costs included such factors as hourly labor costs, overhead, general and administrative expenses, and profit. Government hourly costs included salary, retirement, medicare, life and health insurance, fringe benefits, office space, and other miscellaneous costs.

An example of the cost comparison for one of the contracts is shown in table IV.4.

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Table IV.4: Example of Cost Comparison Used in DOD IG Report (No. 91-115)

Labor category	Hourly cost of contractor services	Equivalent government grade	Hourly cost of government employees	Difference between in-house costs and contracted services	Percentage difference between in-house costs and contracted services
Management	\$ 82.19	GM-15/5	\$ 51.01	\$31.18	37.94
Research staff member	62.63	GS-14/5	42.77	19.86	31.71
Editors and miscellaneous	39.50	GS-13/5	35.88	3.62	9.16
Graduate students, research assistants, and program analyst	34.62	GS-09/5	21.61	13.01	37.58
Support staff	22.78	GS-05/5	14.91	7.87	34.55
Total	\$241.72		\$166.18	\$75.54	31.25

Calculation of hourly costs for contractor services

Labor category	Hourly rate	Overhead rate at 48 percent	Fringe benefits of 42 percent	General and administrative at 6.8 percent	Profit at 4.25 percent	Total hourly cost
Management	\$38.85	\$18.65	\$16.32	\$5.02	\$3.35	\$82.19
Research staff member	29.61	14.21	12.43	3.83	2.55	62.63
Editors and miscellaneous	18.68	8.96	7.84	2.41	1.61	39.50
Graduate students, research assistants, and program analysts	16.37	7.86	6.87	2.11	1.41	34.62
Support staff	\$10.77	\$5.17	\$4.52	\$1.39	\$0.93	\$22.78

Audit Report: Selected Service Contracts at Wright-Patterson Air Force Base, DOD IG Report (No. 92-128)

This report to DOD officials, concerning eight specific support service contracts at Wright-Patterson Air Force Base valued at about \$132 million that were active during fiscal years 1986 to 1991, summarized the results of an audit requested by Senator David H. Pryor. One issue covered in the audit was to determine whether the cost of contracting was greater than the cost of in-house performance.

The report concluded that the Air Force paid \$4.7 million in additional costs for certain contractor work in fiscal year 1990 and could save up to \$6.2 million if the work to be performed under the optional years of the contracts reviewed were performed in-house. The report recommended that the Air Force eliminate personnel ceilings, require managers to justify the most cost-effective mix of in-house or contractor personnel, evaluate

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support service contracts for cost effectiveness, and make budget adjustments to shift funds from contracts to civilian manpower.

The audit report identified Air Force civilian job categories that were comparable to the skill and experience levels of contract employees. The study compared the contractor amounts billed with the total hourly costs for government civilian employees.

An example of the comparison made for one of the contracts is shown in table IV.5.

Table IV.5: Example of Cost Comparison Used in DOD IG Report (No. 92-128)

Labor category	Hours	Rate	Amount billed	GS equivalent grade level	GS equivalent category	GS total rate per hour	GS total hourly annual cost ^a	Excess cost ^b
A	50	\$19.79	\$ 990	04/03	A-1	\$11.48	\$ 574.00	\$ 416.00
B	247	25.43	6,281	04/10	B-1	15.24	3,764.28	2,516.72
C	162	37.05	6,002	06/10	C-1	18.53	3,001.86	3,000.14
D	140	73.33	10,266	13/10	D-1	40.88	5,723.20	4,542.80
E	50	60.25	3,013	13/10	E-1	39.52	1,976.00	1,037.00
F	320	64.46	20,627	12/10	F-1	34.68	11,097.60	9,529.40
G	725	54.59	39,578	12/10	G-1	33.32	24,157.00	15,421.00
H	315	49.18	15,492	12/03	H-1	28.80	9,072.00	6,420.00
I	295	53.46	15,771	13/03	I-1	33.88	9,994.60	5,776.40
J	200	34.88	6,976	07/01	J-1	16.11	3,222.00	3,754.00
K	73	55.59	4,058	07/10	K-1	20.38	1,487.74	2,570.26
L	450	70.88	31,896	13/10	L-1	40.88	18,396.00	13,500.00
Total^c			\$160,950	Total^d			\$92,466.28	\$68,483.72

^aGS total hourly annual cost equals hours times the GS total rate per hour.

^bExcess cost equals amount billed minus GS total hourly annual cost.

^cLabor dollars per contractor.

^dGS cost comparison and cost differential.

Other Testimonies and Reports

The following four testimonies and studies also addressed contractor versus in-house costs, but in a less detailed manner.

DOE Testimony: Use of
Consultants and
Contractors by the
Environmental Protection
Agency and the
Department of Energy

In testimony on September 6, 1989, before the Subcommittee on Federal Services, Post Office and Civil Service, Senate Committee on Governmental Affairs, the Assistant Secretary for Management and Administration, DOE, cited estimated savings through in-house performance versus contractor performance of 20 to 25 percent for support services.

According to DOE officials, no specific study was conducted to support this estimate. The Assistant Secretary was responding to a question raised at the hearing. The Assistant Secretary also said, however, in responding to questions that were based solely on direct salary costs, excluding benefits and overhead, DOE would pay a GS-15 government employee about \$67,000. The comparable private sector employee would be paid between \$77,000 and \$100,000. (The mid-point between these amounts would be about \$89,000. The difference between \$89,000 and \$67,000 is \$22,000, equal to about 33 percent higher than the federal salary.)

DOD Testimony: The Star
Wars Program and the Role
of Contractors

In testimony on July 24, 1992, before the Senate Committee on Governmental Affairs, the Director of the Strategic Defense Initiative Organization, in discussing the role of contractors, cited estimated savings through in-house performance versus contractor performance for certain agency work of about 33 percent or \$15 million.

We were advised by an official of the Ballistic Missile Defense Organization (the organization that replaced the Strategic Defense Initiative Organization) that the Director's testimony was based on information being developed for a study on the agency's manpower requirements.

The study, Strategic Defense Initiative Organization: Manpower Requirements Proposal for FY 93-95 was issued in October 1992. The study did not discuss specific savings estimates for in-house performance, however, the study discussed the reallocation of funded resources from contractor support services to government personnel. The study stated that additional government personnel would result in a more efficient and effective management program and ensure that inherently governmental functions and suitable program oversight were always performed by government personnel. The study proposed increasing government staff by 453 positions from fiscal year 1993 to 1995. We were advised by responsible agency officials that 100 additional positions were authorized

for fiscal year 1994, and that 100 additional positions were being requested in the President's Budget for fiscal year 1995.

GAO Letter From the
Comptroller General to the
Chairman, Legislative
Subcommittee, House
Committee on
Appropriations
(February 28, 1991)

In response to a request from the Chairman, Legislative Subcommittee, House Committee on Appropriations, we reported on February 28, 1991, on the expanded use of contractors to help with our audit and evaluation work. We discussed the results of a study of 78 tasks, of which 56 were contracted out and 22 were done in-house. In addition to cost, our study also considered the timeliness and quality of the work in question.

We did not make full cost analyses, but we did compare negotiated contract labor charges with estimated in-house labor costs, including fringe benefits, for seven specific tasks. We estimated the average hourly cost to accomplish each type of work. The cost of in-house performance was estimated to be close for four and lower for three of the seven types of work considered—such as mailing, telephone surveys, individual or group interviews, data collection instrument design, statistical analysis, and referencing (checking facts in GAO products). Costs were the same for the seventh type of work considered—database management. We found that contractor costs were estimated to be higher because in virtually all cases, the contractor either assigned more senior staff to the task than GAO did or the contractor paid comparable staff higher salaries.

We also noted that with some variation across the different kinds of work we contracted, contractors' products typically were not delivered at the specified time, and GAO staff reported doing similar work somewhat faster internally. We noted, however, that the quality of contractors' work was generally acceptable, with simpler tasks completed more successfully than more complex tasks.

GAO Report: Government
Contractors: Are Service
Contractors Performing
Inherently Governmental
Functions?
(GAO/GGD-92-11)

We discussed, among other things, a DOE effort to replace certain contract personnel with government personnel. One DOE component—the Western Area Power Administration—estimated it could save about \$4.5 million annually through the conversion of 105 positions that were then held by contractors to federal positions. The services involved included such work as construction inspections, engineering surveys, environmental support, and design and system studies. This work did not involve inherently governmental functions or work so intimately related to the public interest that it must be administered by government employees.

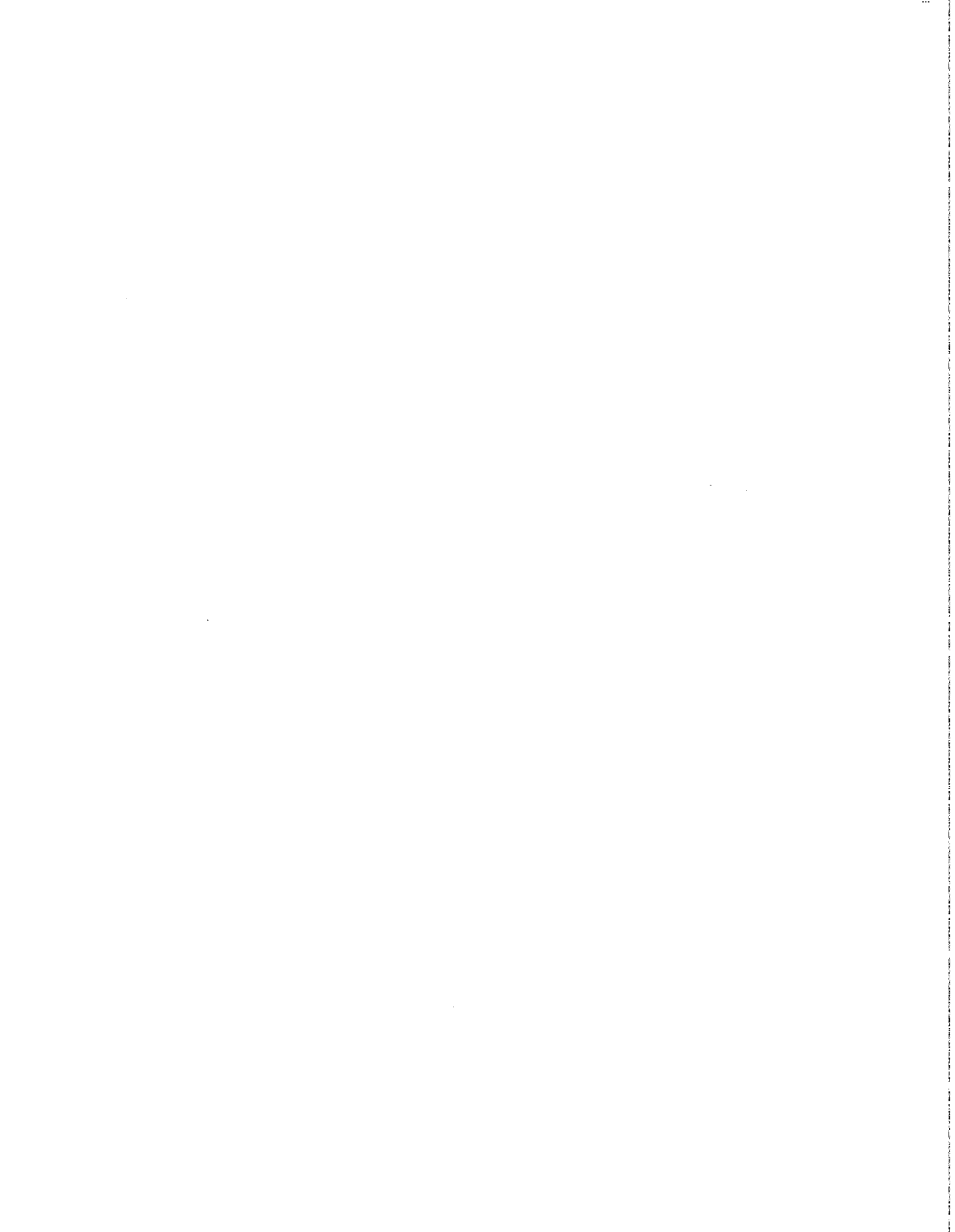
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These estimated savings were based on a comparison of the cost of converting the higher cost contract personnel to lower cost federal staff. The federal costs were based on an estimate that the cost of federal employees at the GS-12 level, plus their applicable fringe benefits, would be substantially less than the cost of a comparable number of contractor personnel. These calculations were made for seven contracts.

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