SERVICE CONTRACTS

Agencies Should Take Steps to More Effectively Use Independent Government Cost Estimates
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Agencies Should Take Steps to More Effectively Use Independent Government Cost Estimates

Why GAO Did This Study

IGCEs are the government’s best estimate of a contract’s potential costs—an important tool for both program and contracting officials to provide information when planning for and awarding contracts. IGCEs are particularly critical for service contracts—accounting for more than $270 billion in government contract spending in fiscal year 2015—to ensure the costs associated with labor are fully understood.

GAO was asked to review federal agencies’ use of IGCEs. This report examines the extent to which (1) selected departments developed IGCEs for service contracts and (2) selected departments’ IGCEs were useful in supporting the acquisition planning process.

To conduct this work, GAO selected six departments that in fiscal year 2015, the most current data available, were among the top spenders on services or had a high percentage of spending on services. GAO reviewed a random non-generalizable sample of 76 service contracts, and compared IGCEs and related documentation with GAO’s cost estimating guide. GAO also conducted interviews with contracting and program officials.

What GAO Recommends

To improve the usefulness of IGCEs, GAO is making five recommendations, including that departments revise or clarify guidance or provide more training to help ensure IGCEs are prepared when required and are well-documented with clearly-stated data sources and methodologies. All six departments agreed with GAO’s recommendations.

View GAO-17-398. For more information, contact Marie Mak at (202) 512-4841 or makm@gao.gov.

What GAO Found

Officials at the departments in GAO’s review—Defense, Homeland Security, Health and Human Services, Education, Labor, and Housing and Urban Development—developed independent government cost estimates (IGCE) for 62 of the contracts GAO reviewed. All of the departments in GAO’s review have some guidance on IGCEs available—ranging from regulation to handbooks to checklists—with different emphasis on whether an IGCE is required. GAO found some cases where guidance dictated that an IGCE should have been prepared, but was not. According to officials, one reason for not preparing an IGCE was that the procurement was a task order issued under an existing contract. Federal internal control standards state that agencies should communicate quality information to achieve their objectives, such as including clear guidance for acquisition planning.

In the 62 contracts GAO reviewed with IGCEs, the IGCEs’ use in acquisition planning varied—from determining funding needs to determining price reasonableness. The usefulness of an IGCE to a contracting officer depends in part on its supporting documentation, but most IGCEs did not document data sources and methodologies used.


![Chart: Number of IGCEs by Agency]

<table>
<thead>
<tr>
<th>Agency</th>
<th>Total IGCEs reviewed in contract files</th>
<th>IGCEs considered well-documented</th>
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</thead>
<tbody>
<tr>
<td>Air Force</td>
<td>3</td>
<td></td>
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<tr>
<td>Army</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>DHS</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>DOL</td>
<td>9</td>
<td></td>
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<tr>
<td>ED</td>
<td>9</td>
<td></td>
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<tr>
<td>HHS</td>
<td>15</td>
<td></td>
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<tr>
<td>HUD</td>
<td>3</td>
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</tbody>
</table>

Source: GAO analysis of agency data and documents. | GAO-17-398

Lack of documented data sources and methodologies in an IGCE puts contracting officers at a disadvantage and could lead to additional, inefficient steps to validate IGCEs. Only two of the agencies in GAO’s review had explicit guidance on what details to document in IGCEs, but officials were not always familiar with the available guidance. Instead, according to the officials GAO spoke with, they often follow program office practices and noted that training did not address how to develop and document an IGCE. GAO’s cost estimating guidance and federal internal control standards emphasize the need for documentation, with GAO’s guidance stating that well-documented cost estimates should describe the data sources used, underlying assumptions, and the estimating methodologies used to derive costs. Without clear guidance or more training on documentation of data sources and methodologies, departments may not be taking full advantage of this important acquisition tool.
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Abbreviations

CAM  Contracts & Acquisitions Management
COR  Contracting Officer’s Representative
DOD  Department of Defense
DHS  Department of Homeland Security
FAR  Federal Acquisition Regulation
FPDS-NG  Federal Procurement Data System – Next Generation
GSA  General Services Administration
HHS  Department of Health and Human Services
HUD  Department of Housing and Urban Development
IDIQ  indefinite delivery indefinite quantity
IGCE  independent government cost estimate

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May 17, 2017

The Honorable Claire McCaskill
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

Dear Senator McCaskill:

In fiscal year 2015, federal agencies obligated more than $270 billion, or 62 percent, of the government’s contract spending on service contracts to help achieve their missions. Independent government cost estimates (IGCE)—the government’s best estimate of a contract’s potential costs—are an important tool throughout the process of planning and awarding service contracts. The IGCE supports efforts to ensure that the cost of meeting the government’s requirements for the good or service being acquired are known. IGCEs are also used by contracting officials to compare offerors’ proposed prices, determine whether proposed contract prices are reasonable, and to support contract price negotiations.

You asked us to review agencies’ policies and use of IGCEs in service contracts. This report examines the extent to which (1) selected departments developed IGCEs for service contracts, and (2) selected departments’ IGCEs were useful in supporting the acquisition planning process.

To assess the extent to which IGCEs were developed for selected service contracts and were useful in supporting the acquisition planning process, we reviewed a random, non-generalizable sample of 76 contracts from six federal departments—the Departments of Defense, Education, Health and Human Services, Homeland Security, Housing and Urban Development, and Labor—that obligated money for service contracts in fiscal year 2015, the most current data available at the time of our review. Specifically, the six departments selected either had among the highest total obligations for service contracts, or spent a large percentage of their obligations for services during that time frame, according to data from the Federal Procurement Data System-Next Generation (FPDS-NG).

1The Federal Procurement Data System–Next Generation (FPDS-NG) is a system for collecting, developing, and disseminating procurement data. Agency reporting requirements for FPDS-NG are in Federal Acquisition Regulation (FAR) subpart 4.6.
determined that FPDS-NG was sufficiently reliable for the purpose of selecting departments based on their fiscal year 2015 obligations for service contracts. Within the departments, we also used FPDS-NG to select contracts from the agencies or contracting components that accounted for a large share of service contracting obligations, which include the Army and Air Force within the Department of Defense. Overall, we selected 76 contracts and task orders in total—between 10 and 16 from each department—as shown in table 1. Of the 76, 37 were task orders under indefinite delivery indefinite quantity (IDIQ) contracts—which are contracts that do not specify a precise amount of services to be provided, but allow for issuing specific tasks to be performed by issuing orders, as needed.\(^2\)

<table>
<thead>
<tr>
<th>Department</th>
<th>Contracting component</th>
<th>Contracts selected</th>
<th>Task orders selected</th>
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<tr>
<td>Defense</td>
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<td>Health and Human Services</td>
<td>National Institutes of Health</td>
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<td>Homeland Security</td>
<td>Office of Procurement Operations</td>
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<tr>
<td></td>
<td>Customs and Border Protection</td>
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<td>4</td>
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<tr>
<td>Housing and Urban Development</td>
<td></td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Labor</td>
<td>Employment and Training Administration</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>39</strong></td>
<td><strong>37</strong></td>
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Source: GAO analysis of agency documents. I GAO-17-398

The 76 contracts and task orders were selected from randomly-generated lists for each agency or component, which included all service awards with obligations greater than the simplified acquisition threshold—

\(^2\)Federal Acquisition Regulation (FAR) 16.504 provides more information on indefinite delivery indefinite quantity contracts.
$150,000—in fiscal year 2015. We chose a mix of competed (39) and non-competed (37) awards, as well as different contract types and services. We also selected at least one award at each agency with more than $10 million in obligations in fiscal year 2015.

For each contract and task order selected, we requested and reviewed available contract file documentation, including the IGCE, the statement of work, and acquisition planning documents to understand how the IGCE was developed. We also interviewed program and contracting officials for each contract to determine how the IGCEs were developed and used, and reviewed available guidance on IGCEs. We compared the IGCEs to standards in GAO’s cost estimating guide and the departments’ guidance on IGCEs to federal internal control standards.

We conducted this performance audit from December 2015 to May 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

An IGCE is an estimate of the expected cost of a contract or task order. IGCEs are developed by government personnel before soliciting contractor proposals or making contract awards. A quality IGCE can support both program and contracting officials throughout the phases of the acquisition planning and award process. As shown in figure 1, in the pre-solicitation phase of a procurement, IGCEs help program offices—which for the purposes of this report refer to the offices or requiring activity that need the service—confirm that their estimated costs align with the contract requirements for the service being acquired. Further, IGCEs help establish contract cost goals to ensure funding is available to

3Agencies may use simplified acquisition procedures to purchase goods and services where the aggregate amount does not exceed $150,000. FAR 2.101 and 13.000.


5The IGCE can be part of a broader cost estimating process for programs, which sums individual cost elements to establish future program costs. See GAO-09-3SP.
meet expected contract costs. Moreover, although not required by the Federal Acquisition Regulation (FAR) for most service contracts, IGCEs can support contracting officials in establishing cost or price objectives if they enter into contract negotiations. The FAR identifies the IGCE as one of several tools available to establish that the contractor’s cost or price is reasonable, and while determining price reasonableness by comparing proposed prices in a competition to one another or by comparing proposed prices to historical prices paid for the same or similar items is preferred, the FAR provides the contracting officer discretion on when to use what tools appropriate to the acquisition.

6The Federal Acquisition Regulation requires independent government estimates of construction costs for contracts exceeding the simplified acquisition threshold. FAR 36.203.

7FAR 15.404-1(b)(2)-(3). FAR Subpart 15.4 defines price as cost plus fee or profit applicable to the contract type.
Figure 1: Independent Government Cost Estimates (IGCE) in the Acquisition Planning and Contracting Process

**Pre-solicitation**
Acquisition planning activities generally begin with the program office identifying a needed service, and developing a procurement request.

**Key activities**
- Define the requirements in documents such as a statement of work
- Conduct market research
- Develop an IGCE
- Prepare an acquisition plan

**Program office use of IGCEs**
- Develop IGCE in conjunction with requirements documents, including statement of work, to identify all costs associated with a requirement
- Compare IGCE to program budget to request funding and potentially determine the level of review and approval needed

**Pre-award**
Contracting officials issue a solicitation and evaluate proposals received to determine price reasonableness

**Contracting office use of IGCEs**
- If applicable:
  - Compare IGCE to offers received
  - Use IGCE to support contract negotiations
  - Use IGCE to support the determination that the price is reasonable

**Post-award**
Contract administration and, if needed, modifications

**Contracting office use of IGCEs**
If using to determine price reasonableness, revise IGCE as needed if contract scope is revised

Source: GAO analysis of agencies' IGCE uses. | GAO-17-398
Service contracts involve the time and effort of the contractor to perform an identifiable task, such as test and evaluation or facilities management, rather than furnish a good or product. Service contract IGCEs may be based on unit pricing—such as prices based per square foot like janitorial services—or individual cost elements. IGCEs for cost elements may be based on projected direct labor costs. Direct labor costs take into account the categories of labor—for example, a senior program manager or an entry-level research assistant—needed to meet the requirements of the service acquired, as well as the number of hours required from each labor category and the associated rates. IGCEs for service contracts may also include additional cost elements, such as:

- Indirect costs, which can include contractor overhead and fringe benefits, such as employee health insurance costs, if not incorporated into labor rates, and contract fee, if applicable; and
- Other direct costs, which may include materials required or travel.

IGCEs can be developed for individual task orders under IDIQ contracts as well as the base IDIQ contract. When IGCEs based on cost elements are developed for task orders, some elements of the estimate, such as labor rates associated with certain labor categories, may be established in the base IDIQ contract. Depending on the estimating method used, the task order’s IGCE may still need to estimate the level of effort—such as number of people or hours expected—across the different labor categories to perform the required tasks.

For the majority of the service contracts and orders we reviewed, an IGCE was prepared. In cases where no IGCE was prepared, agency officials generally told us that an IGCE was not necessary for task orders under an IDIQ contract, or that the contract work was for research and development, for which it was too difficult to predict the costs. However, we found cases where agency officials prepared IGCEs for task orders and for research and development contracts and found them useful. IGCEs are often developed by the program office’s contracting officer representative—who is assigned to support contracting officers in managing contractor performance—with varying levels of input and review from program office staff. All of the departments in our review have some guidance on IGCEs available—ranging from regulation to handbooks to checklists—with different emphasis on whether an IGCE is required. We found some cases where guidance dictated that an IGCE should have been prepared, but was not.
Although the FAR does not require IGCEs for most service contracts, 62 of the 76 service contract files we reviewed included them, as shown in figure 2. These include awards ranging from a $600,000 task order for information technology services to a $163 million contract to support vaccine research and development.

Agency officials cited various reasons to explain why 14—half of which were not competed—of the 76 contracts and task orders did not have IGCEs. Officials generally could not find the IGCE, or stated that they did not develop IGCEs for task order awards from IDIQ contracts or did not develop IGCEs for research and development services because the requirements are too difficult to estimate. Specifically we found:

- DHS  Department of Homeland Security
- DOL  Department of Labor
- ED  Department of Education
- HHS  Department of Health and Human Services
- HUD  Department of Housing and Urban Development

Source: GAO analysis of agency data and documents. | GAO-17-398
Task orders: For six task orders under IDIQ contracts within the Departments of Education, Defense (DOD), and Housing and Urban Development (HUD), officials noted that they did not develop IGCEs at the task order level. For two from the Department of Education, officials explained that the task orders—one valued at $32.5 million and the other at $433,000—were for volume-based loan services, where pricing was established with the contractors when the base IDIQ contract was awarded. According to senior Department of Education officials, the contracting officer determined that creating IGCEs at the task order level was not an efficient use of time and resources because pricing per loan was fixed at the base contract level. In another example, an Air Force contracting official, referring to a $1.8 million task order from a noncompetitive IDIQ contract for engineering and technical services, indicated that IGCEs for related task orders were not needed because the Air Force has been contracting for the services for more than 20 years and the task orders are routine at this point.

Research and development: One competed contract and one noncompetitive task order we reviewed without IGCEs were DOD awards for research and development services. Officials explained that since requirements are not always fully understood before the proposals are received and analyzed—even in a noncompetitive procurement—it is difficult to develop useful IGCEs. For example, for a competed Air Force award, officials told us they relied on the contractors’ innovation to address requirements and the program office reviewed the proposals to ensure approaches were technically sound and achievable.

However, in other instances, we found that agencies awarding task orders and research and development contracts that had developed IGCEs and found them to be useful. For example:

Task orders: We reviewed 27 task orders from IDIQ contracts where IGCEs were developed. Army officials said they develop task order IGCEs even when the labor rates are pre-negotiated in the base IDIQ contract, in part because the IGCEs include other estimated costs, such as travel expenses and other direct costs, which help contracting officials understand the services the program office expects to receive. Officials for several task orders we reviewed cautioned that it is important for them to develop separate IGCEs specific to each task order because the base IDIQ contract may not contain the level of detail necessary to estimate requirements at the task order level. For example, an IGCE for a $5.3 million DHS task order for information technology included estimates for task-specific costs, such as labor
for equipment set-up, installation, and operation costs. The program official noted that these costs were not detailed in the base IDIQ contract.

- **Research and development:** Eight of the research and development contract files we reviewed had IGCEs. Officials from HHS said that even when requirements are not fully understood, some labor categories and related elements can be estimated in advance to give officials points of comparison when reviewing proposals. According to DHS officials, they used the IGCE as the primary government estimate for the price analysis to determine price reasonableness once contract proposals were submitted.

For most of the remaining contract awards where IGCEs were not available, officials told us that IGCEs had been developed but could not be located in the contract or task order files. In some cases, the contracts were more than 6 years old and staff turnover and file transfers made it difficult for us to obtain contract file documents. In a couple of cases, officials said they did not create IGCEs, but used other resources—such as audited rates—to examine costs and prices.

**Program Offices Are Generally Responsible for Developing IGCEs**

Program and contracting officials share responsibility for many acquisition planning activities, but in the contracts we reviewed, staff in the program office were primarily responsible for developing IGCEs. Officials from the six departments we met with said that the contracting officer’s representative (COR)—usually a person within the program office—most often develops IGCEs. In some cases, CORs said they developed IGCEs autonomously, using their experience with prior efforts to estimate the level of effort necessary to meet requirements needed for the service being acquired. For example, for a Department of Education contract worth approximately $807,000, the COR explained that the program had worked with the contractor on a similar effort in the past and as a result, the COR had a thorough understanding of the labor categories and labor hours necessary to meet requirements, so did not need input from other sources to determine the level of work necessary. However in many cases, CORs received input from other program office officials, such as program managers or subject matter experts, during the IGCE development.

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8Contractor oversight personnel are known by many names, including contracting officer's representative and contracting officer's technical representative, but their duties are essentially the same. For the purposes of this report, we refer to these personnel generally as contracting officer’s representatives (COR).
In at least four of the contracts we reviewed, officials said their IGCEs were developed with input from sources outside the program office.\(^9\) For example,

- The Army's Prototype Integration Facility—which supports DOD program offices with design and development projects requiring a rapid response—assists in the development of contracts by assigning technical advisors to serve as CORs. An official from the facility told us the technical advisors primarily draw on experience from other efforts to help the program offices develop acquisition planning documents, including the IGCE.

- In at least two of the contracts we reviewed, the IGCEs were developed by officials who have professional cost estimating experience.\(^10\) For example, a $40 million contract from Army's Fixed Wing Program—which provides life-cycle management for the Army's fleet of fixed wing aircraft—had cost estimators imbedded in the program to assist with development of cost estimates, including IGCEs. According to an Army official, because the cost estimators developed IGCEs for the various fixed wing projects, they were able to identify similar efforts and access data to use in the development of estimates. Similarly, the Office of Biometric Identity Management at DHS has cost and budget specialists who helped develop the IGCE for a $5 million engineering support contract.

- In a $158 million sole-source HUD contract for information technology services, the contracting officer used a third-party contractor with cost estimating expertise who was familiar with the program to develop an IGCE. According to HUD officials, the program office developed an initial IGCE; however, the contracting officer did not think it was adequate to support her determination of price reasonableness.

\(^9\)We could not determine how many contracts in our review definitively used outside sources for input into the IGCE because officials offered it on an ad-hoc basis and had varying levels of familiarity with how the IGCEs were developed.

\(^10\)The acquisition workforce established under the Defense Acquisition Workforce Improvement Act includes 14 acquisition career fields, including cost estimating.
because it did not include an analysis of how the estimated costs were developed. The resulting IGCE produced by the third-party contractor included more detailed analysis and information that mapped to program requirements, and helped her conduct negotiations with the offeror.

**Department-level Guidance Varies on When to Prepare IGCEs**

All of the departments in our review have some type of guidance on IGCEs available—ranging from regulation to COR handbooks to checklists—with different emphasis on whether an IGCE is required. Table 2 outlines the different types of guidance available at the departments we reviewed.

<table>
<thead>
<tr>
<th>Department</th>
<th>Guidance Available for IGCEs</th>
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<tbody>
<tr>
<td>Defense (DOD)</td>
<td>• DOD Contracting Officer’s Representative (COR) Handbook</td>
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<tr>
<td></td>
<td>• DOD Instruction 5000.74 for Defense Acquisition of Services</td>
</tr>
<tr>
<td>Army</td>
<td>• Army Federal Acquisition Regulation Supplement part 5107</td>
</tr>
<tr>
<td>Air Force</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>• Contracts and Acquisitions Management Procurement Package Checklist&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Health and Human Services (HHS)</td>
<td>• HHS Directive for Acquisition Planning</td>
</tr>
<tr>
<td>Homeland Security (DHS)</td>
<td>• DHS Acquisition Manual</td>
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<tr>
<td></td>
<td>• DHS COR Essential Element Guidebook</td>
</tr>
<tr>
<td>Housing and Urban Development</td>
<td>• Acquisition Instruction 15-04 and Matrix for Requisition Packages</td>
</tr>
<tr>
<td></td>
<td>• Office of the Chief Procurement Officer, 15-04 – Acquisition Best Practices, Cost Realism Analysis</td>
</tr>
<tr>
<td>Labor</td>
<td>• Independent Government Cost Estimate (IGCE) Guidance</td>
</tr>
</tbody>
</table>

Source: GAO analysis of department documents. | GAO-17-398

<sup>a</sup>Contracts & Acquisitions Management (CAM), in the Office of the Chief Financial Officer, is one of the two contracting activities within the Department of Education.

Three of the departments we reviewed—HHS, DHS, and the Department of Labor—expressly address IGCEs in documents such as directives, acquisition manuals, or guidebooks. For example, the HHS Directive for Acquisition Planning states that IGCEs are required as part of the acquisition plan, which is required for acquisitions greater than $150,000. The DHS Acquisition Manual requires IGCEs for most proposed negotiated acquisitions although it allows for several exemptions, such as for acquisitions of commercial items and modifications to resolve cost overruns. The Department of Labor developed a guidebook specific to IGCEs, which states that cost or price estimates are required for awards.
above the simplified acquisition threshold. The contracts and task orders we reviewed from these departments all included IGCEs.

At the Department of Education, the guidance regarding IGCEs is less clear and our review found that IGCEs were not always developed. The Department does not have department-level guidance, but the Contracts and Acquisitions Management (CAM) group—which is one of two contracting activities at the Department—has a checklist for procurement packages that references IGCEs. Education officials told us the CAM guidance is available for use by the other contracting activity (Federal Student Aid), but it is not required. Five of the 16 Education task orders and contracts in our review—all of which were from Federal Student Aid—did not have IGCEs.

Within HUD, we found two contracts without IGCEs, and department-level guidance varied. Specifically, HUD’s acquisition best practices for cost-realism analysis notes the importance of the IGCE in acquisition planning but does not state under what conditions they are required. More recently, HUD developed a procurement request checklist listing IGCEs as one of several required documents when program offices initiate new procurements.

DOD—including Army and Air Force—has different levels of guidance with respect to IGCEs, but it was not always followed. For example, the Army FAR supplement is clear that an IGCE is required for every procurement action over the simplified acquisition threshold, but 3 of the 10 Army awards we reviewed did not have IGCEs. Although the Air Force does not have its own guidance for IGCEs, the DOD COR handbook is applicable to Air Force procurements and requires IGCEs over the simplified acquisition threshold, but only 2 of the 6 task orders we reviewed had an IGCE. Further, DOD Instruction 5000.74 references the use of IGCEs in service contracts, but does not clearly require them. Federal internal control standards state that agencies should

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11 Cost realism analysis is the process of independently reviewing and evaluating specific elements of each offeror’s proposed cost estimate (such as labor hours and materials) to determine whether the estimated proposed cost elements are realistic for the work to be performed, reflect a clear understanding of the requirements, and are consistent with the unique methods of performance and materials described in the offeror’s technical proposal. Cost realism analysis is required on cost-reimbursement contracts.

12 A DOD official told us that they are in the process of updating the DOD Instruction on Services, and plan to update requirements for IGCEs.
communicate quality information to achieve their objectives. When existing guidance is not followed or is not clear when it should be followed, agency officials may not be taking advantage of this valuable acquisition planning tool.

The Usefulness of IGCEs in Acquisition Planning Varied, and Most Did Not Include Supporting Documentation

In the 62 contracts we reviewed with IGCEs, the usefulness of IGCEs in acquisition planning varied and most did not include supporting documentation with details, such as the information sources and methodologies used, that could help contracting officers more effectively use IGCEs. Most of the IGCEs in GAO’s review—49 of 62—were not well-documented, which in some cases limited their usefulness to contracting officers; these officers had to perform additional, inefficient steps to validate IGCEs so they could be used. Only two of the agencies in our review (Army and DHS) had department-level guidance on what details to document in the IGCEs.

Multiple Uses for IGCEs in the Acquisition Planning Process

Program and contracting officials identified multiple uses of the IGCE throughout the acquisition planning process, such as helping program offices determine the funding needed and supporting contracting officials to help determine the reasonableness of an offeror’s proposal.

Understand funding needs. Officials from the six departments we reviewed noted that IGCEs help programs understand their funding needs for acquiring a service, and hence are an important tool to help ensure the funding is available. Some officials said that the total value of the IGCE ultimately has to be within the program’s available budget. But as one HUD program official explained, if the contractor proposals exceed the IGCEs, they may be able to request additional funding. Officials also said that the IGCE helps determine the work they can afford and make trade-offs before the contract is awarded.

Communicate information about requirements and contracting approaches. IGCEs also communicate additional information about program office requirements to contracting staff, providing information helpful to supporting contracting officials’ work in awarding the contract, often in conjunction with the statement of work and other requirements documents. For example, a COR for a $3.8 million Department of Education information technology contract told us that the IGCEs help communicate expectations for procured services, including the labor mix required to perform tasks and levels of expertise in each labor category, to contracting officials. A DHS contracting officer for a research and
development contract also noted that the program staff ultimately have the best idea of the mix of labor categories and hours needed to meet their requirements, which they share through the IGCE.

Additionally, program officials described IGCEs as a key piece of the acquisition planning phase that helps contribute to decisions about contracting approaches. For example, a DHS program official for a $1.8 million contract for professional services said he discussed the IGCE’s proposed labor mix with contracting officials, who recommended reducing the number of labor categories to make it easier for small businesses to compete for the work.

**Evaluate against contractor’s proposed prices.** Contracting officials at all six departments explained that IGCEs provide a baseline for evaluating offerors’ proposed costs and can be used to help determine the reasonableness of offerors’ proposed costs. They also help contracting officers identify potential areas for negotiation. For example, an HHS contracting officer explained that she compares costs identified in the IGCE with those in the contractors’ proposals to identify areas where she can negotiate a better price.

Some officials noted that IGCEs are particularly important in sole source contracting, as they rely more on IGCEs to determine price reasonableness when they do not have multiple contractor proposals to compare prices. Some officials emphasized that IGCEs can still be used in a competitive environment to identify unreasonably low bids and to determine whether vendors understand requirements. However, other officials noted that in a competitive procurement, comparing proposed prices against the IGCE is not the predominant method used to determine price reasonableness. For example, a contracting officer from the Army said she determines price reasonableness predominately from the cost analysis of proposals developed by cost and pricing specialists rather than the IGCE.
Although usually developed by program offices, IGCEs are one of several tools available to help contracting officers in the award process, which ultimately requires that they determine the price of the contract to be fair and reasonable. The usefulness of this tool—when used to determine price reasonableness—depends in part on the quality of the estimate, which can differ from the contract value at award for a variety of reasons. As shown in figure 3, the 62 IGCEs we reviewed varied widely in how close they were to the estimated value of the contract action when it was awarded. More than half of the IGCEs—32 out of 62—were within 10 percent of the estimated value of the contract or task order at award, and 12 of these IGCEs were within 1 percent of the estimated value at award. At the other end of the spectrum, among the 30 IGCEs that differed from the contract value at award by more than 10 percent, 14 were more than 25 percent over or under the award value, with the IGCEs tending to be higher than the awarded contract values.13

13For context, we have indicated the -25% to -10% underestimate and 10% to 25% overestimate ranges.
Figure 3: Contracts' Independent Government Cost Estimates (IGCE) Compared to Estimated Values at Award

Range of contract/order estimated value at award (in millions)

A difference or similarity between the estimate and the final contract price in and of itself is not problematic; however, if the differences or similarities are not explained in the contract files, it can sometimes raise questions.

Source: GAO analysis of agency data and documents.

A difference or similarity between the estimate and the final contract price in and of itself is not problematic; however, if the differences or similarities are not explained in the contract files, it can sometimes raise questions.
Officials explained that IGCEs can be close to the price at award for various reasons. For example, there were several non-competed contracts for existing requirements, such as follow-on contracts or short-term bridge contracts to an incumbent contractor, so that the expected costs were well known.\(^{14}\) One IGCE for a $1.9 million Department of Labor task order used the same labor mix as the existing award, with rates that had already been established in an IDIQ, so the IGCE was identical to the final task order award. In another case, the contractor’s initial offer was higher than the IGCE, but the DHS contracting officer used the IGCE as a basis to negotiate with the contractor, ultimately negotiating the contract price down to almost the exact estimate in the IGCE.

Differences, particularly significant ones, are also understandable in certain instances when explained. For example, for a $30 million Air Force contract for logistics support services, which was competed and received multiple proposals, the source selection document explains that the IGCE was higher than all of the proposals—39 percent higher than the final contract value—because it did not account for cost savings measures and management innovations offered by the contractors. Additionally, the file notes that competition played a part in reducing the prices offered. Of the 14 cases where the IGCE and the estimated value at award differed by more than 25 percent, the IGCE values were higher in 9 of the contract awards. Almost all of these contracts and task orders were competed awards with multiple offers. Several contracting officers credited competition with reducing the contracts’ estimated cost at award compared to the IGCEs.

However, the differences between the IGCE and the contract value at award were not always explained in the contract files, including 10 of the 14 cases where the IGCE differed by more than 25 percent. In another example—for a non-competed $208 million HUD contract for financial management support services—the contract value at award exceeded the IGCE by more than $33 million. An analysis in the contract file indicates that the IGCE was one of several sources of information that a contracting official used to negotiate the award. A senior HUD contracting

\(^{14}\)Bridge contracts are typically sole-source contracting arrangements used to prevent a gap in services in cases where a contract is set to expire but a follow-on contract is not ready to be awarded. See GAO, Sole Source Contracting: Defining and Tracking Bridge Contracts Would Help Agencies Manage Their Use, GAO-16-15 (Washington, D.C.: Oct. 14, 2015).
official said that the quantities represented in the IGCE later changed, which was taken into account during the negotiation. However, the analysis does not state why the final contract value at award exceeded the IGCE. Program officials said that they had little contact with the contracting office and did not know why the contract was awarded for more than the original estimate. Under the FAR, in a negotiated acquisition where determination of a fair and reasonable price is based on price analysis, the contracting officer must include in the contract file a summary of the source and type of data used to support the determination and documentation of fair and reasonable pricing including, when used, IGCEs.\textsuperscript{15} When not documented, agencies may lose information on how certain decisions were made during the procurement process. Federal internal control standards say that transactions should be completely and accurately recorded to maintain their relevance for making decisions.

While the contract files we reviewed that had the largest difference between the IGCE and the value of the contract at award generally did not provide information as to why IGCEs differed from the estimated cost at award, officials offered some general observations on what contributes to such differences.

- **Limited data sources.** Several contracting and program officials noted that they rely largely—and sometimes exclusively—on historic data for developing IGCEs, often from a predecessor contract for the same requirement. The GAO cost estimating guidance identifies historical cost information as a valuable resource, but some officials said that reliance on historical data can result in inaccurate estimates because the market can change over time.\textsuperscript{16} For example, an Army contracting officer noted that labor rates for information technology services in her area had decreased in recent years, but that may be reflected in an IGCE based on data from a previously-awarded contract.\textsuperscript{17} Further, for the two HUD contracts in which the IGCEs overestimated the price at award by the greatest amounts, documents

\textsuperscript{15}FAR 15.406-3(a).

\textsuperscript{16}GAO-09-3SP.

\textsuperscript{17}Our prior work has shown that the agencies paid widely varying labor rates for similar information technology services with the same contractors. See GAO, Strategic Sourcing: Opportunities Exist to Better Manage Information Technology Services Spending, GAO-15-549 (Washington, D.C.: Sept. 22, 2015).
in the contract files explained that their reliance on historic data contributed to the difference.

In addition, the GAO cost estimating guidance notes that numerous sources of suitable, relevant and available data represent a basic characteristic of credible cost estimating. While some program officials used a limited number of data sources to support their IGCEs, other officials cited the importance of obtaining multiple sources. This includes getting labor rate information from multiple contractors and ensuring that the information reflects current market value. For example, contracting officials at the Department of Labor explained that they previously used historical data for developing IGCEs for contracts awarded by Job Corps—an education and training program for economically disadvantaged youth—but revised their approach to incorporate other information, such as Bureau of Labor Statistic wage rate data, to ensure that their IGCEs do not solely rely on data for labor rate estimates from previously awarded contracts.

- **Reliance on Federal Supply Schedules.** Officials cited another factor contributing to inaccurate IGCEs is a reliance on the General Services Administration’s (GSA) Federal Supply Schedule contract prices and other resources that post pre-negotiated contractor labor rates as a primary source.\(^{18}\) IGCEs based on these sources may not take into account discounts that are customarily offered by vendors, so may overestimate the contracts’ actual costs. In one example of a task order with a value of $1.8 million at award, a contracting official explained that the discounts applied to GSA schedule rates in the proposals were the primary reason that the IGCE overestimated the cost by 18 percent. In July 2015, we reported that the prices listed on GSA schedule contracts can vary widely, and agencies must remember to ask for discounts from listed prices.\(^{19}\)

- **New or undefined requirements.** The accuracy of an IGCE can also be affected by the level of familiarity with the requirement that the contract action is to support. Contracting and program officials noted that developing estimates is more difficult when the contract is delivering a new requirement or the requirement is difficult to define. For example, the IGCE for an HHS non-competited contract—awarded

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\(^{18}\)The Federal Supply Schedule program provides agencies a simplified method of purchasing commercial products and services. A schedule is a set of contracts awarded to multiple vendors that provide similar products and services.

under the urgency exception to competition—was a new requirement for professional support services and almost 20 percent under the $699,000 expected contract value at award.\textsuperscript{20} Once the requirement has been established through one or more contracts over years, the contracting officer said he can use these data to better estimate the cost for future contracts.

For new requirements, an inaccurate IGCE might not necessarily result in a bad outcome for the government. Contracting and program officials cited examples of contractors providing unexpected efficiencies or additional services that may not necessarily be reflected in an IGCE. A Department of Education contracting officer described a case in which the contractor added additional security testing for an information technology system, which had not been factored into the program office’s IGCE. Although the testing increased the contract’s costs, she considered it worthwhile.

- **IGCEs dictated by budget.** Contracting officers and program officials said that budgets can influence the development of an IGCE so that it may not fully reflect the actual cost of a contract but be dictated by their actual budgets. Program officials from three agencies said that it is more acceptable for IGCEs to overestimate contract costs or that the IGCE will often function as a “ceiling” price to represent the budget limit. For example, contracting officials for a $5.4 million Department of Education award observed that when an IGCE is high, it is often because the program office built it to match their budget, because they would rather have a high estimate than have to request additional funds.\textsuperscript{21} Additionally, a HUD contracting officer noted that sometimes the programs may not recognize that the IGCE is supposed to represent the actual cost of the contract, rather than the amount of funding they have available. One DHS IGCE we reviewed specifically included a line item identified as “additional funding”, indicating that additional funds were expected to be available to purchase more services. The contracting and program officials indicated that the estimate was driven at least partially by funding availability. Further, a DHS official for this contract said that the IGCE did not necessarily reflect the specific cost of the $82.4 million task.

\textsuperscript{20}Agencies can award a noncompetitive contract on the basis of unusual and compelling urgency when circumstances dictate. See GAO, Federal Contracting: Noncompetitive Contracts Based on Urgency Need Additional Oversight, GAO-14-304 (Washington, D.C.: Mar. 26, 2014) for more information on this exception to competition.

\textsuperscript{21}Education officials indicated that the practice of overestimating IGCEs to match budget limits is not endorsed by the department.
order awarded off the information technology support contract because the amount of services it planned to purchase was not known at the time of award. Instead, the award, which was priced as a cost-plus-fixed-fee order, covered information technology needs as funding for services became available—so the IGCE reflected the funding available for the contract.22

Most IGCEs Lacked Supporting Documentation

GAO cost estimating guidance and federal internal control standards emphasize the need for documentation, with GAO’s cost estimating guidance stating that well-documented cost estimates describe the data sources used, underlying assumptions, and the estimating methodologies used to derive costs.23 To maximize the use of the IGCE as a high-quality tool, having information about how it was developed, including sources of data and methodology used, is important. In addition, we previously found that documenting an IGCE’s methodology and data source in the contract file helped inform future contracting and program officials about the current contract when staff changed.24 As shown in figure 4, of the 62 IGCEs we reviewed, only 13 included such documentation. In one such case—for a $45 million Army engineering support contract—the IGCE included a statement that the estimate is based on costs from an existing contract and an analysis of labor hours for similar programs. In contrast, the IGCE for another engineering support contract, a $2.8 million award from DHS, lists the number of hours and rates for different labor categories but does not state the source of the information or how it was compiled. In other cases, the IGCEs that were not documented well included some details about their development and methodology in other contract file documents, such as the acquisition plan or price analysis, but this information was generally vague and did not include enough information to provide support for the estimates. Figure 4 shows the contract awards we considered well-documented at each department.

22 A cost-plus fixed fee contract is a cost-reimbursable contract that provides payment to the contractor of a negotiated fee that is established at the inception of a contract. FAR 16.306.

23 GAO-09-3SP; GAO-14-704G

Several contracting officials we met with said that they need to understand the assumptions and methodology of the IGCE, as well as the data sources, to have confidence in the IGCE and to use it as a tool. For example, the contracting officer for a $38 million HUD contract said she did not use the IGCE to determine price reasonableness because she ultimately questioned the validity of the IGCE’s data sources, which were based on historical contracts although market conditions had changed. When information supporting the IGCE is not readily available, some contracting officers said they must take additional steps to obtain source information and understand how the estimate was created—factors of a credible estimate based on GAO’s cost estimating guidance—in order to support their price reasonableness decisions.25 However, this may create

25GAO-09-3SP.
avoidable inefficiencies. In several cases, contracting officials said that when they have questions about the IGCE, they reach out to the program office, but many said they could skip this step if the IGCEs were well-documented to begin with.

In other cases, the contracting officials said they created their own cost estimates because they did not have confidence in the IGCE. For example, a contracting official for one of the task orders we reviewed said that she developed her own cost estimates because the program office’s IGCE was not sufficiently detailed for her purposes. Another contracting official for a $179 million contract award for financial management support at the Department of Education said he found that the IGCEs prepared by the program office are routinely too high, so he does his own analysis. In yet another example, a DHS contracting officer showed us how an IGCE she received mistakenly included costs that are covered under a different task order and did not include needed travel estimates, so the contracting officer had to do her own analysis to develop an accurate estimate. Contracting officials at additional departments also said they do not find IGCEs useful because, in their experience, program offices do not always have the expertise available to put together a credible estimate. Without supporting documentation, the effectiveness of the IGCE is weakened, as contracting officers either cannot use it or must spend time gathering information they can use.

Federal internal control standards state that agencies should internally communicate quality information to achieve their objectives, which can include developing guidance for IGCEs, following existing IGCE guidance, or providing training to support guidance. Without clear guidance or training on how to develop and document IGCEs, agency officials may not be in the best position to create useful, complete estimates that will provide the most value in the acquisition planning process. DOD (Army) and DHS provide sufficient, specific, department-level guidance regarding documentation needed for IGCEs, while other departments’ guidance address this to varying degrees and are not sufficient.

- The DOD COR handbook says the IGCE should include a brief narrative, including how the costs were developed and what reference materials were used. The Air Force has no guidance. The Army’s acquisition regulation supplement requires that IGCEs include a narrative summary detailing how costs were developed and supporting information (see sidebar).
Army Federal Acquisition Regulation Supplement Guidance on Independent Government Cost Estimates (IGCE)
The IGCE shall include:

- The name(s) of the preparer, approving reviewer (the preparer’s supervisor) and position title(s).
- The preparer and approving reviewer organization and contact information (telephone & e-mail). A signature and date (either hand signed or Common Access Card signed) for the preparer and approving reviewer.
- A statement certifying that the IGCE was developed independently and prior to seeking any formal proposals from contractors.
- Sufficient narrative and analytical detail, to include reference material, to support its preparation.

Source: Army Federal Acquisition Regulation Supplement Subpart 5107.90. | GAO-17-398

- The DHS Acquisition Manual also contains detailed documentation requirements, stating that IGCEs must address the information used, sources of data, and assumptions made for the requirements as outlined in the Statement of Work in a contract.

Although DOD and DHS guidance specifically calls for information on how the IGCE was prepared, as previously noted, it was not always followed. When regulations or guidance are not followed to clearly document IGCEs, agencies may be missing opportunities to more effectively plan acquisitions. In the other departments in our review, guidance did not clearly state that IGCEs should contain all the elements of a good estimate per GAO’s cost estimating guide. For example:

- The Department of Labor IGCE guidebook includes instructions on developing IGCEs and suggests potential data sources to help develop the cost estimates. While the guidebook’s IGCE templates include fields to cite the source of the information used and the rationale for the IGCE, the templates are not required.
- The HHS directive for acquisition planning asks for a brief explanation of how the IGCE was derived when examining costs.
- HUD’s acquisition best practices guide for cost realism analysis—which would not be applicable to all procurements—suggests that contracting officers document how the IGCE was calculated and what sources were used to develop it.
- The Department of Education’s CAM group has information on its website stating that the basis for the numbers included in the IGCE should be explained. The other contracting activity—Federal Student Aid—does not have guidance on how IGCEs should be documented, but officials said the CAM website is available throughout the department.

One reason agency officials may not be following guidance is that the CORs and program officials responsible for developing IGCEs look to their program offices for guidance on IGCEs rather than the agency guidance available to them. In fact, several people we interviewed were not familiar with their agency’s guidance. Officials explained that they predominantly learned how to prepare IGCEs through on-the-job training from experienced staff, rather than through written guidance or formal training. For example, HHS officials at the National Institutes of Health explained the majority of what they learned in constructing IGCEs was through their on-the-job training and experience. Officials noted that existing guidance helps them understand the basic parts of IGCEs, but they learn how to estimate the costs by actually preparing them on the
The lack of familiarity with agency guidance was also reflected in our review of contract files. For example, DHS guidance requires that the IGCE document sources and assumptions, yet in some cases the DHS contracts and task orders we reviewed did not do so. For example, the IGCE for a $2.8 million contract for professional engineering services did not identify the information used or assumptions incorporated into the estimate. This was in part because officials were not aware of department-level requirements and were more likely to follow local practices that did not emphasize IGCE documentation.

Further, few program officials said they had formal training on how to develop IGCEs. Several said that the only training they had related to IGCEs was through the standard COR training, which most of the program officials responsible for IGCEs are required to take for their COR certification.26 They reported, however, that the COR training did not provide detailed information on how to build an IGCE, but rather focused on its general definition and uses. For example, DHS, HHS, and Department of Labor officials told us they took introductory IGCE training through the Federal Acquisition Institute. The training includes a video on the purpose of an IGCE in the acquisition process but did not explain how to prepare one. In a few cases, officials said they had previous experience that helped them understand how to build cost estimates. For example, a contracting officer and program official for a HHS contract we reviewed said they had business backgrounds that helped them become familiar with various cost estimating techniques and helped them to understand how detailed IGCEs can be used. One official also noted that the businesses who contract with the government typically know more about cost estimating processes than the government, which gives contractors an advantage in pricing their work.

In some cases, program officials said they had developed templates to prepare an IGCE for their individual acquisitions for a service. For example, at HHS, the National Institute of Allergy and Infectious Diseases provides online guidance for service contracts, including IGCE templates for the COR. DHS’s Office of Procurement Operations also provides IGCE templates. While several departments or their program offices established templates or worksheets to help guide program officials in

26In September 2011, the Office of Management and Budget’s Office of Federal Procurement Policy established three certification levels for CORs and associated training. In addition to initial training requirements, CORs in the top two certification levels must complete 40 hours of continuing learning every 2 years.
developing IGCEs, Education and HHS program officials said that using the templates is not a requirement, and only a few told us they actually used the templates.

In general, program or contracting officials from five of the six departments we reviewed said they would like more training or detailed guidance to enhance their knowledge of developing IGCEs. In a limited number of cases, officials said they developed and provided training in response to a recognized need for more information on IGCEs. For example,

- Department of Labor officials said the Job Corps program established a process for developing IGCEs and then offered a training course in January 2016 to help standardize their approach. Officials for Job Corps said this training is helping to improve consistency in preparing IGCEs.

- A contracting officer in another component of the Department of Labor developed training slides for the offices he supports to help them understand the role of IGCEs.

- The Department of Education’s Contracts and Acquisitions Management officials said they developed training and brownbag discussions to share IGCE knowledge and experience with less experienced CORs.

Without clear guidance or training on how to develop IGCEs, including detailing the source and methodology information needed for a well-documented IGCE, agencies limit the IGCE’s effectiveness as an acquisition planning tool.

Conclusions

An IGCE is an important part of the acquisition planning process, serving as a key analytical and communication tool between the program office and contracting officer about what is required for a service contract and what it should cost. All of the agencies in our review acknowledge the importance of IGCEs by including them in various types of guidance. When no IGCE is prepared—particularly in sole source procurements where competitive forces are not in play—the contracting officer may not have full information on the program office’s needs or expected costs. When guidance pertaining to IGCEs is not followed or not clear to whom it applies, clarifying guidance or increasing awareness—through training or reminding officials—can help improve use. This also applies to instances where contracting officers do not have full information on what data sources, methodologies, and assumptions the program office used to
develop the IGCE. IGCEs without these elements—which are noted as key elements of a good estimate in GAO’s cost estimating guide—can create inefficiencies in the acquisition planning process. Clear guidance on what constitutes a good IGCE—including what information should be factored into the estimate—may improve the quality of the acquisition planning process, and efforts to increase awareness through training or reminding officials may help improve the usefulness of the IGCEs. Further, when contracting officials do not document differences between the IGCE and the contract value at award, the government may be losing important information on what happened in the procurement process, including in some cases how key decisions were made. Documenting the reasons for a difference between the estimates and the final contract award value may help provide valuable information for future procurements.

Recommendations for Executive Action

To ensure that IGCEs are optimized as a tool in the procurement planning process, we recommend that the Secretaries of Defense and Housing and Urban Development take the following action:

- Take steps—such as clarifying guidance, providing additional training, or issuing reminders to officials—to help ensure that guidance on when to prepare an IGCE is followed.

To ensure that IGCEs are optimized as a tool in the procurement planning process, we recommend that the Secretary of Education take the following action:

- Consider making Contracts and Acquisitions Management guidance applicable to all agency procurements, and if so, take steps—such as clarifying guidance, providing additional training, or issuing reminders to officials—to help ensure that guidance on when to prepare an IGCE is followed.

To ensure that IGCEs contain key information consistent with good cost estimating practices, we recommend that the Secretaries of Defense and Homeland Security take the following action:

- Take steps to ensure that IGCE guidance is followed by, for example, providing training or issuing reminders to officials.

To ensure that IGCEs contain key information consistent with good cost estimating practices, we recommend that the Secretaries of Education, Health and Human Services, Housing and Urban Development, and Labor take the following action:
• Revise or clarify guidance to require that IGCEs document data sources, methodology, and assumptions, and take steps to help ensure that guidance is followed by, for example, providing training or issuing reminders to officials to include this information when developing IGCEs.

To ensure that IGCEs are optimized as a tool in the procurement planning process, we recommend that the Secretaries of Defense, Education, Health and Human Services, Homeland Security, Housing and Urban Development, and Labor take the following action:

• Take steps to ensure that, when appropriate, contracting staff document differences between IGCE and final contract award value in the contract file.
We provided a draft of this report to the Departments of Defense; Education; Health and Human Services; Homeland Security; Housing and Urban Development; and Labor for their review and comment. All of the departments agreed with our findings and recommendations; their responses are reproduced in appendices II through VII of this report. In their responses, most of the agencies stated that they would address our recommendations by revising guidance or providing training on IGCEs. The Department of Labor pointed out that our sample represented a relatively small percentage of Labor’s total contract awards; we clearly state that our sample was non-generalizable. HUD also noted that the IGCE is one of several tools available to a contracting officer; we added more detail on this in the background of our report. Four of the departments – the Departments of Education, Health and Human Services, Homeland Security, and Labor – also provided technical comments that we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretaries of the Departments of Defense; Education; Health and Human Services; Homeland Security; Housing and Urban Development; and Labor, and other interested parties. In addition, this report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions concerning this report, please contact me at (202) 512-4841 or by e-mail at makm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix VIII.

Sincerely yours,

Marie A. Mak
Director, Acquisition and Sourcing Management
Appendix I. Objectives, Scope and Methodology

This report addresses the extent to which (1) selected departments developed independent government cost estimates (IGCE) for service contracts, and (2) selected departments’ IGCEs were useful in supporting the acquisition planning process.

To address both objectives, we reviewed a random, non-generalizable sample of 76 contracts and task orders from six federal departments—the Departments of Defense (DOD), Education, Health and Human Services (HHS), Homeland Security (DHS), Housing and Urban Development (HUD), and Labor—and interviewed program and contracting officials associated with each award. These departments were selected based on our analysis of fiscal year 2015 service obligations in the Federal Procurement Data System-Next Generation (FPDS-NG), the most current data available at the time of our review. We determined that FPDS-NG was sufficiently reliable for the purpose of selecting departments based on their fiscal year 2015 obligations for service contracts. Using FPDS-NG data, we selected six departments with the following characteristics:

- **Highest total obligations for services**: DOD, HHS, and DHS were among the top five federal agencies with obligations for service contracts in fiscal year 2015. We did not select the two remaining agencies—the Department of Energy and the National Aeronautics and Space Administration—because they had a high percentage of management and operating contracts or research and development contracts, respectively, which we believed would limit the range of contract types available for review.

- **Obligated a large percentage of their total obligations for services**: HUD and the Departments of Education and Labor were among the top four agencies in terms of the percentage of total obligations that went to service contracts in fiscal year 2015. The fourth agency was the Department of Energy, which we had previously decided not to review.

Within the selected departments, we also used FPDS-NG to identify the agencies or contracting components that accounted for a large share of service contracting obligations.

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1The Federal Procurement Data System–Next Generation (FPDS-NG) is a system for collecting, developing, and disseminating procurement data. Agency reporting requirements for FPDS-NG are in Federal Acquisition Regulation (FAR) subpart 4.6.
From the selected departments and subcomponents, we identified a total of 76 contracts and orders—between 10 and 16 from each department—as shown in table 3.

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</table>

Source: GAO analysis of agency documents. | GAO-17-398

To select the individual contract and task order awards, we generated a random list of service contracts and task orders at each agency or contracting component with obligations greater than the simplified acquisition threshold—$150,000—in fiscal year 2015. We chose contracts and task orders from these lists to ensure a roughly even number of competed and non-competed awards from each department. We also selected awards to obtain a mix of different contract types and services. To ensure a range of contract values, we included at least one award at each department with more than $10 million in obligations in fiscal year 2015.

To assess the first objective, the extent to which selected departments developed IGCEs for service contracts, we requested and analyzed available contract file documentation for the 76 contracts and task orders selected. The documents reviewed included, where available, the IGCE, the statement of work, and acquisition planning documents to understand how the IGCE was developed. In cases where IGCEs were not located, we verified this information with the departments. We also interviewed the officials from the programs associated with each contract and order to determine how the IGCE was developed and used. We analyzed the
federal acquisition regulation and department and contracting guidance to understand the requirements and information available for developing IGCEs. We compared the IGCEs to standards in GAO’s cost estimating guide and the departments’ guidance on IGCEs to federal internal control standards.\(^2\)

To assess the second objective, the extent to which selected departments’ IGCEs were useful in supporting the acquisition planning process, we also reviewed the contract file documentation available for each of the 76 contracts and task orders selected, focusing on the IGCE as well as documents such as source selection and price negotiation memos. We also analyzed the available IGCEs to determine whether they were well-documented, based on whether they identified the information sources and assumptions used to develop the IGCE as described in GAO cost estimating guidance.\(^3\) We interviewed contracting officials for the awards to understand how they used IGCEs during the contract award process. We also analyzed available guidance, including the federal acquisition regulation and department and program office guidance and tools to understand the requirements for developing and documenting IGCEs and the information and resources available to assist staff in developing IGCEs.

We conducted this performance audit from December 2015 to May 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.


\(^3\)GAO-09-3SP.
Ms. Marie A. Mak
Director, Acquisition and Sourcing Management
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Ms. Mak:


Sincerely,

Claire M. Grady
Director, Defense Procurement and Acquisition Policy

Enclosure:
As stated
Appendix II: Comments from the Department of Defense

GAO Draft Report Dated March 20, 2017
GAO-17-398 (GAO CODE 100497)

“SERVICE CONTRACTS: AGENCIES SHOULD TAKE STEPS TO MORE EFFECTIVELY USE INDEPENDENT GOVERNMENT COST ESTIMATES”

DEPARTMENT OF DEFENSE COMMENTS TO THE GAO RECOMMENDATION

RECOMMENDATION 1: To ensure that independent government contractor estimates (IGCEs) are optimized as a tool in the procurement planning process, GAO recommends that the Secretary of Defense take steps such as clarifying guidance, providing additional training or issuing reminders to officials to help ensure that guidance on when to prepare an IGCE is followed.

DoD RESPONSE: Concur. The Department is in the process of developing IGCE guidance and additional training for the acquisition and non-acquisition workforce.

RECOMMENDATION 3: To ensure that IGCEs contain key information consistent with good cost estimating practices, GAO recommends that the Secretary of Defense take steps to ensure that IGCE guidance is followed by, for example, providing training or issuing reminders to officials.

DoD RESPONSE: Concur. The Department is in the process of developing IGCE guidance and additional training for the acquisition and non-acquisition workforce.

RECOMMENDATION 5: To ensure that IGCEs are optimized as a tool in the procurement planning process, GAO recommends that the Secretary of Defense take steps to ensure that, when appropriate, contracting staff document differences between IGCE and final contract award value in the contract file.

DoD RESPONSE: Concur. The Department intends to issue IGCE guidance and develop additional training for the Contracting career field.
Appendix III: Comments from the Department of Education

UNITED STATES DEPARTMENT OF EDUCATION
OFFICE OF THE CHIEF FINANCIAL OFFICER

April 17, 2017

Ms. Marie A. Mak  
Director, Acquisition Sourcing Management  
Government Accountability Office  
Washington, DC  20548

Dear Ms. Mak:

Thank you for providing the U.S. Department of Education (Department) with an opportunity to review and respond to the draft of the Government Accountability Office (GAO) report, SERVICE CONTRACTS: Agencies Should Take Steps to More Effectively Use Independent Government Cost Estimates (GAO-17-398).

The Department is committed to ensuring that we effectively use Independent Government Cost Estimates (IGCEs). The Department’s Deputy Chief Acquisition Officer and Senior Procurement Executive will spearhead efforts to develop and implement internal guidance, policies, and processes for maximizing the effective use of IGCEs.

With regard to the report’s three recommendations, the Department’s response to each of the recommendations follows:

**Recommendation 1**: Consider making Contracts and Acquisition Management guidance applicable to all agency procurements, and if so, take steps — such as clarifying guidance, providing additional training or issuing reminders to officials — to help ensure that guidance on when to prepare an IGCE is followed.

**Response**: The Department will enhance current Contracts and Acquisitions Management guidance to implement Department-wide IGCE guidance, policies, and processes. Internal guidance will clarify the steps required to develop an IGCE. Processes will be enhanced to ensure Department compliance with policy. Additionally, training and reminder alerts will be developed and delivered to officials to ensure adherence with policy and approved processes.

**Recommendation 2**: Revise or clarify guidance to require that IGCEs document data sources, methodology, and assumptions, and take steps to ensure that guidance is followed by, for example, providing training or issuing reminders to officials to include this information when developing IGCEs.

550 12th St. S.W., WASHINGTON, DC 20202
www.ed.gov

The Department of Education’s mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.
Response: Internal guidance and policy will be revised and clarified to ensure IGCEs document data sources, methodology, and assumptions. Processes will be enhanced to ensure compliance with issued IGCE guidance. Training and reminder alerts will be developed as a tool to monitor compliance with guidance and approved processes.

Recommendation 3: Take steps to ensure that, when appropriate, contracting staff document differences between IGCE and final contract award value in the contract file.

Response: Policy will be developed requiring documentation of differences between IGCE and final contract award value in the contract file. Review processes will be put in place to ensure adherence with issued policy.

Thank you again for the opportunity to review and comment on the draft GAO report.

Sincerely,

Tim Solits
Deputy Chief Financial Officer, Delegated the Authority to Perform the Duties and Functions of the Chief Financial Officer
Appendix IV: Comments from the Department of Health and Human Services

APR 2 5 2017

Marie Mak
Director, Acquisition and Sourcing Management
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Ms. Mak:


The Department appreciates the opportunity to review this report prior to publication.

Sincerely,

Barbara Pisaro Clark
Acting Assistant Secretary for Legislation

Attachment
GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE’S DRAFT REPORT ENTITLED: SERVICE CONTRACTS: AGENCIES SHOULD TAKE STEPS TO MORE EFFECTIVELY USE INDEPENDENT GOVERNMENT COST ESTIMATES (GAO-17-398)

The U.S. Department of Health and Human Services (HHS) appreciates the opportunity from the Government Accountability Office (GAO) to review and comment on this draft report.

Recommendation
To ensure Independent government cost estimates (IGCEs) contain key information consistent with good cost estimating practices, we recommend the Secretaries of Education, HHS, Housing and Urban Development (HUD) and Labor take the following action, revise or clarify guidance to require that IGCEs document data sources, methodology, and assumptions, and take steps to help ensure guidance is followed by, for example, providing training or issuing reminders to officials to include this information when developing IGCEs.

HHS Response
HHS concurs with GAO’s recommendation. To ensure the appropriate revisions are made to HHS processes the HHS Independent Government Cost Estimate (IGCE) Template will be revised to enhance instructions on the documentation of data sources used, methodology and assumptions during the formulation process of an IGCE. HHS, the Office of Acquisition Workforce and Strategic Initiatives, the office responsible for the development of the acquisition workforce training requirements, has procured classroom training on the development of IGCEs that includes IGCE methodology, data sources used to complete IGCEs, and assumptions related to properly developing IGCEs. This training is offered to all HHS employees. In addition to the template and training, HHS is developing an HHS Independent Government Cost Estimate Guidebook. This guidebook will provide additional information on understanding the importance of IGCEs, regulations/policy/guidance surrounding the development of IGCEs, how IGCEs are used in the procurement process, and instructions on what to include in an IGCE.

Recommendation
To ensure that IGCEs are optimized as a tool in the procurement planning process, we recommend that the Secretaries of Defense, Education, HHS, Homeland Security, HUD, and Labor take the following action, take steps to ensure that, when appropriate, contracting staff document differences between IGCE and final contract award value in the contract file.

HHS Response
HHS concurs with GAO’s recommendation. HHS will revise the HHS IGCE Template to include instructions for documenting the differences between the IGCE and final contract award value in the contract file. In addition, the HHS Independent Government Cost Estimate Guidebook, being developed, will include instructions for documenting the differences between the IGCE and final contract award value in the contract file.
Appendix V: Comments from the Department of Homeland Security

April 20, 2017

Marie A. Mak
Director, Acquisition and Sourcing Management
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548


Dear Ms Mak:

Thank you for the opportunity to review and comment on this draft report. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office’s (GAO) work in planning and conducting its review and issuing this report.

The Department is pleased to note GAO’s recognition that the DHS Acquisition Manual requirements for Independent Government Cost Estimates (IGCEs) are both sufficient and specific regarding the documentation needed for IGCEs. DHS remains committed to ensuring program officials provide useful and complete estimates that enable the Government to properly plan for and obtain the best value in an efficient and effective manner.

The draft report contained two recommendations for DHS, with which the Department concurs. Attached find our detailed response to each recommendation.

Again, thank you for the opportunity to review and comment on this draft report. Technical comments were previously provided under separate cover. Please feel free to contact me if you have any questions. We look forward to working with you again in the future.

Sincerely,

JIM H. CRUMPACKER, CIA, CFE
Director
Departmental GAO-OIG Liaison Office

Attachment
Attachment: DHS Management Response to Recommendations Contained in GAO-17-398

GAO recommended that the Secretary of Homeland Security:

Recommendation 1: Take steps to ensure that IGCE guidance is followed by, for example, providing training or issuing reminders to officials.

Response: Concur. The DHS Office of the Chief Procurement Officer (OCPO) will work with Component contracting officers to better understand why program officials may not follow existing policy when developing IGCEs. Based on that assessment, OCPO, in collaboration with Component contracting offices, will develop the appropriate course(s) of action. Estimated Completion Date (ECD): July 31, 2017.

Recommendation 2: Take steps to ensure that, when appropriate, contracting staff document differences between IGCE and final contract award value in the contract file.

Response: Concur. OCPO will determine an appropriate variance threshold for when contracting officials will be required to document in the contract file the reasons for the differences between the IGCE and the contract award price. ECD: July 31, 2017.
MEMORANDUM FOR: Marie Mak, Director, Acquisition and Sourcing Management, United States Government Accountability Office
FROM: Keith W. Surber, Chief Procurement Officer, N
SUBJECT: GAO 17-398, Independent Government Cost Estimates (IGCE)

Thank you for the opportunity to respond to the report for the subject engagement. We concur with the information presented and the recommendations made for the Department to implement. There is also additional information that we believe would be beneficial to the readers of the report.

We agree that a well-documented IGCE could be an important tool in estimating a contract’s potential costs in advance of the actual procurement being conducted, but it is important to not overstate the reliance on the IGCE in determining fair and reasonable prices during the acquisition. We noted during the review that other methods are also used to determine price fair and reasonableness. While comparison to the IGCE is one method, the Federal Acquisition Regulation (FAR) 15.404-1 describes several methods that can be used, and specifically states that adequate price competition and comparison to historical pricing are the most preferred methods of ensuring fair and reasonable pricing is obtained. Comparison to the IGCE is listed as the fifth possible tool out of seven that may be used.

We make this point only to ensure that the context of the report is understood. While not having a reliable IGCE may be problematic for initially estimating potential costs, it is not the preferred method of ensuring price fair and reasonableness prior to award. It is just one part of the Contracting Officer’s (CO) tool kit. The CO must clearly document how fair and reasonable pricing was determined, including whether the IGCE was reliable and if it was utilized or not in the determination.

You also noted on page 15 that a HUD program official expressed dismay about additional costs that were negotiated on a contract that were well above the IGCE they submitted. As noted during the review, we researched the issue and found that poor communication existed within the program office, resulting in the program official being unaware of the facts of the case. The initial IGCE was for approximately $198 million. The contractor’s proposal was much higher, but the final negotiated price was closer to the IGCE than the initially proposed price. The most significant reason that the final price was significantly over the IGCE was because the customer changed the estimated quantities after submission of the IGCE to the CO without a commensurate update to the IGCE. As a result, the
Contracting Officer had to use other methods prescribed in the FAR for analyzing the cost elements to determine reasonableness. The entire process of analyzing and negotiating was documented in a 38-page price analysis report. The point remains, however, that the IGCE was not adequately supported and resulted in the Contracting Officer having to utilize other methods to ensure the prices were fair and reasonable.

We have had similar concerns over the past few years about the quality of IGCEs and high quality price and cost analyses. In 2015 and 2016, OCPO issued vacancy announcements to hire a full-time cost/price analyst. We were finally able to hire a high quality subject matter expert in late 2016. A core part of her job is to work closely with program customers in the requirements development phase to help develop quality IGCEs that are tied to the requirements and fully supported. She will also train acquisition staff in areas such as developing IGCEs and adequate price analysis techniques to ensure prices being obtained are well supported for a fair and reasonableness determination.

Additionally, in 2015, HUD mandated the use of the Acquisition Requirements Roadmap Tool (ARRT), an automated tool for writing standardized performance work statements (PWS). The contractor who developed the ARRT recently implemented a new module specifically designed to assist in developing IGCEs that tie each cost back to the tasks spelled out in the PWS. We are evaluating the module for implementation and believe this could significantly improve the quality of IGCEs at HUD.

Thank you again for the opportunity to address the draft report. Please feel free to contact me directly if you have any questions.
Ms. Marie A. Mak  
Director, Acquisition and Sourcing Management  
Government Accountability Office  
441 G Street, NW  
Washington, D.C. 20548

Dear Ms. Mak:

Thank you for the opportunity to review the Government Accountability Office (GAO) draft report GAO-17-398. *Service Contracts: Agencies Should Take Steps to More Effectively Use Independent Government Cost Estimates (IGCEs).* Thank you also for the opportunity to provide comments.

We note that GAO’s review of the Department of Labor’s (DOL) IGCE utilization focused solely on a sample of ten contracts awarded by DOL’s Employment and Training Administration (ETA), nine of which supported a single program (Job Corps). These ten contracts represent a relatively small percentage of DOL’s total contract awards and therefore may not fully represent DOL’s IGCE utilization in other procurement areas.

With regard to Job Corps’ use of IGCEs, subsequent to an audit conducted by the DOL Office of Inspector General in 2013, Job Corps developed an advanced IGCE tool for use in both center operations procurements and outreach and admissions/career transition services procurements. The tool uses Bureau of Labor Statistics’ (BLS) Occupational Employment Statistics locality-based survey data to determine estimated personnel costs for each contract. The tool is updated each year based on current BLS data, ensuring that IGCEs provide up-to-date wage estimates for personnel costs. Additionally, the tool estimates non-personnel costs based on the incumbent and peer center costs, among other factors. Job Corps’ Contracting Officer Representatives were provided training on the new tool and its use is now required in the evaluation of cost proposals.

We also note a technical correction. On page 21 (third bullet from the bottom), shown below (strikethrough for deletions and underline for insertions):

- The Department of Labor IGCE Guidebook includes instructions on developing IGCEs and suggests potential data sources to help develop the cost estimates. While the guidebook’s IGCE templates include fields to identify the source of the information and the rationale for the IGCE, the templates are not required and the guidance does not directly address the need to include this information.

We appreciate the insights of the report and will take steps to further implement its recommendations across DOL.
Appendix VII: Comments from the Department of Labor

Below are DOL’s responses to the recommendations:

**Recommendation:** To ensure that IGCEs contain key information consistent with good cost estimating practices, the Secretary of Labor should revise or clarify guidance to require that IGCEs document data sources, methodology, and assumptions, and take steps to help ensure that guidance is followed by, for example, providing training or issuing reminders to officials to include this information when developing IGCEs.

**DOL Response:** DOL accepts this recommendation and will review existing policies, guidance and templates related to IGCEs to ensure that direction contained therein is consistent with good estimating practices and results in better procurement planning. DOL will implement training to improve IGCE development and application, and will utilize already planned procurement management reviews to further gauge opportunities for improvement in this area.

**Recommendation:** To ensure that IGCEs are optimized as a tool in the procurement planning process, the Secretary of Labor should take steps to ensure that, when appropriate, contracting staff document differences between IGCE and final contract award value in the contract file.

**DOL Response:** DOL accepts this recommendation and will continue working with procurement offices to ensure that contract files contain appropriate documentation.

We appreciate GAO’s efforts and the useful information the report provides in regards to procurement practices in DOL and other federal agencies. Should you have any questions regarding the Department’s response, please have your staff contact Mr. Carl Campbell, Chief Procurement Officer, at Campbell.Carl.V@dol.gov.

Sincerely,

Edward C. Hylander
Acting Assistant Secretary for
Administration and Management
Appendix VIII: GAO Contact and Staff Acknowledgments

<table>
<thead>
<tr>
<th>GAO Contact</th>
<th>Marie A. Mak, (202) 512-4841 or <a href="mailto:makm@gao.gov">makm@gao.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Acknowledgments</td>
<td>In addition to the contact named above, Tatiana Winger, Assistant Director; Jennifer Dougherty; Alexis Olson; Matthew Shaffer; Suzanne Sterling; Pete Anderson; Kurt Gurka; Julia Kennon; Rathanika Touch; and Robin Wilson made key contributions to this report.</td>
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