INFORMATION TECHNOLOGY

HUD Needs to Address Significant Weaknesses in Its Cost Estimating Practices

What GAO Found

The cost estimates that the Department of Housing and Urban Development (HUD) developed for the four selected information technology (IT) investments were unreliable and, thus, lacked a sound basis for informing the department’s investment and budgetary decisions. GAO’s Cost Estimating and Assessment Guide (Cost Guide) defines best practices that are associated with four characteristics of a reliable estimate—comprehensive, well documented, accurate, and credible. However, none of the cost estimates for the selected investments exhibited all of these characteristics. Only one estimate—for the Customer Relationship Management investment—more than minimally met best practices associated with any of the four characteristics because it partially met the practices for a comprehensive and accurate estimate. The remaining three investments minimally or did not meet the best practices associated with the four characteristics. For example, the Enterprise Data Warehouse estimate minimally met all four characteristics; the Enterprise Voucher Management System investment did not meet the characteristic for being accurate and minimally met the other three characteristics; and the Federal Housing Administration Automation and Modernization estimate did not meet the characteristic for being credible, while minimally meeting the remaining characteristics (see table).

GAO’s Assessment of Cost Estimates for Selected Information Technology (IT) Investments at the Department of Housing and Urban Development (HUD)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Customer Relationship Management</th>
<th>Enterprise Data Warehouse</th>
<th>Enterprise Voucher Management System</th>
<th>Federal Housing Administration Automation and Modernization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Well-documented</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Accurate</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Credible</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Legend: ●=Fully met ●=Substantially met ○=Partially met ○=Minimally met ○=Not met

Source: GAO analysis of data provided by HUD officials. | GAO-17-281

The significant weaknesses in the cost estimates for the selected investments can largely be attributed to the department’s lack of guidance for developing reliable cost estimates. HUD officials responsible for the selected investments stated that the department had not required the development of estimates that exhibit the four characteristics of a reliable estimate. As a result, according to these officials, cost estimating practices have been decentralized and inconsistent across the department. While HUD drafted guidance in June 2015 that was intended to conform to the best practices in GAO’s Cost Guide, the department has not yet finalized the guidance because it has focused on establishing the infrastructure needed to support improved cost estimation practices. Until HUD finalizes and ensures the implementation of guidance to improve its cost estimating practices, the department is at risk of continuing to make investment decisions based on unreliable information.

What GAO Recommends

To improve cost estimating practices, GAO recommends that HUD finalize and implement guidance that incorporates best practices called for in the Cost Guide. HUD concurred with this recommendation.

Why GAO Did This Study

HUD relies extensively on IT to deliver services and manage programs in support of its mission. For fiscal year 2017, HUD requested $36 million for IT investments intended to deliver modernized enterprise-level capabilities that better support the department’s mission. Critical to the success of such efforts is the department’s ability to develop reliable cost estimates that project life-cycle costs and provide the basis for, among other things, informed decision making and realistic budget formulation.

The joint explanatory statement that accompanied the Consolidated and Further Continuing Appropriations Act, 2015, included a provision for GAO to evaluate HUD’s cost estimating practices. This review determined the extent to which HUD implemented cost estimating best practices for selected IT investments. GAO selected four IT modernization investments with the largest portion of requested funding for fiscal year 2017, interviewed relevant agency officials, and analyzed and compared each investment’s cost estimate to best practices in the Cost Guide. This guide states that, when most or all of the practices are “fully” or “substantially” met, an estimate is considered reliable.

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