COAST GUARD

Non-Homeland Security Performance Measures Are Generally Sound, but Opportunities for Improvement Exist
GAO Highlights

Highlights of GAO-06-816, a report to the Subcommittee on Fisheries and Coast Guard, Committee on Commerce, Science, and Transportation, U.S. Senate

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Why GAO Did This Study

Using performance measures, the Coast Guard explains how well its programs are performing. To do so, it reports one “primary” measure for each program (such as percent of mariners rescued) and maintains data on other, “secondary” measures (such as percent of property saved). Concerns have been raised about whether measures for non-homeland security programs accurately reflect performance, that is, they did not rise or fall as resources were added or reduced. For the six non-homeland security programs, GAO used established criteria to assess the soundness of the primary measures—that is, whether measures cover key activities; are clearly stated; and are objective, measurable, and quantifiable—and the reliability of data used to calculate them. GAO also used these criteria to assess the soundness of 23 selected secondary measures. Finally, through interviews and report review, GAO assessed challenges in using measures to link resources to results.

What GAO Found

While some opportunities for improvement exist, the primary measures for the Coast Guard’s six non-homeland security programs are generally sound, and the data used to calculate them are generally reliable. All six measures cover key program activities and are objective, measurable, and quantifiable, but three are not completely clear—that is, they do not consistently provide clear and specific descriptions of the data, events, or geographic areas they include. Also, the processes used to enter and review the Coast Guard’s own internal data are likely to produce reliable data; however, neither the Department of Homeland Security (DHS) nor the Coast Guard have policies or procedures for reviewing or verifying data from external sources, such as other federal agencies. Currently, the review processes vary from source to source, and for the primary measure covering marine environmental protection (which concerns oil and chemical spills), the processes are insufficient.

Of the 23 secondary performance measures GAO assessed, 9 are generally sound, with weaknesses existing in the remaining 14. These weaknesses include (1) a lack of measurable performance targets, (2) a lack of agencywide criteria or guidance to ensure objectivity, and (3) unclear descriptions of the measures.

Two main challenges exist with using primary measures to link resources to results. In one case, the challenge is comprehensiveness—that is, although each primary measure captures a major segment of program activity, no one measure captures all program activities and thereby accounts for all program resources. The other challenge involves external factors, some of which are outside the Coast Guard’s control, that affect performance. For example, weather conditions can affect the amount of ice that must be cleared, the number of aids to navigation that need repair, or mariners that must be rescued. As a result, linking resources and results is difficult, and although the Coast Guard has a range of ongoing initiatives to do so, it is still too early to assess the agency’s ability to successfully provide this link.

What GAO Recommends

GAO made recommendations to clarify, develop targets, establish criteria, and review external data for certain performance measures and improve the Coast Guard’s overall reporting of results. DHS and the Coast Guard generally agreed with the recommendations in this report.

www.gao.gov/cgi-bin/getrpt?GAO-06-816

To view the full product, including the scope and methodology, click on the link above. For more information, contact Stephen L. Caldwell at (202) 512-9610 or caldwell@gaogov.

August 2006

Source: GAO analysis of Coast Guard primary performance measures.
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Abbreviations

Corps United States Army Corps of Engineers
BARD Boating Accident Reporting Database
DHS Department of Homeland Security
GPRA Government Performance and Results Act of 1993
OMB Office of Management and Budget
PART Program Assessment Rating Tool

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August 16, 2006

The Honorable Olympia J. Snowe  
Chair  
The Honorable Maria Cantwell  
Ranking Minority Member  
Subcommittee on Fisheries and Coast Guard  
Committee on Commerce, Science, and Transportation  
United States Senate

Recent years have seen a marked shift in the Coast Guard’s responsibilities. The events of September 11, 2001, shifted the Coast Guard’s priorities and focus toward homeland security responsibilities, such as protecting the nation’s network of ports and waterways. At the same time, however, the agency’s traditional non-homeland security programs, such as rescuing people at sea and directing oil spill cleanup efforts, remain an integral part of its operations. In all, the Coast Guard has six non-homeland security programs (see table 1), and collectively, the effort that goes into them constitutes 50 percent of the Coast Guard’s fiscal year 2006 enacted budget.  

1The Coast Guard’s six non-homeland security programs account for about $4.2 billion of the Coast Guard’s $8.4 billion fiscal year 2006 enacted budget. The remaining $4.2 billion is for its five homeland security programs—ports, waterways, and coastal security; illegal drug interdiction; defense readiness; undocumented migrant interdiction; and other law enforcement activities, including U.S. Exclusive Economic Zone enforcement.
Table 1: Coast Guard’s Non-Homeland Security Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aids to navigation</td>
<td>Managing U.S. waterways through maintaining navigation aids and monitoring marine traffic</td>
</tr>
<tr>
<td>Ice operations</td>
<td>Conducting domestic and polar icebreaking and international ice monitoring</td>
</tr>
<tr>
<td>Living marine resources</td>
<td>Ensuring compliance with domestic living marine resources laws and regulations within the U.S. Exclusive Economic Zone by fishermen through at-sea enforcement</td>
</tr>
<tr>
<td>Marine environmental protection</td>
<td>Preventing and responding to oil and chemical spills; prevention of invasive aquatic nuisance species; and preventing illegal dumping of plastics and garbage in U.S. waters</td>
</tr>
<tr>
<td>Marine safety</td>
<td>Setting safety standards and inspecting commercial and passenger vessels; partnering with states and organizations to reduce recreational boating deaths</td>
</tr>
<tr>
<td>Search and rescue</td>
<td>Conducting operations to find and assist mariners in distress</td>
</tr>
</tbody>
</table>

Source: GAO analysis of Coast Guard documents.

*Starting with the fiscal year 2007 budget, OMB has designated the Coast Guard’s drug interdiction and other law enforcement programs as non-homeland security missions for budgetary purposes. However, at the time of our review, Coast Guard officials told us that, in terms of measuring performance, the agency still categorized these programs as homeland security missions as delineated under section 888 of the Homeland Security Act of 2002, 6 U.S.C. § 468.

The U.S. Exclusive Economic Zone is defined as an area within 200 miles of U.S shores in which U.S. citizens have primary harvesting rights to fish stocks.

Since the changes that increased the Coast Guard’s homeland security responsibilities, Congress has paid renewed attention to the Coast Guard’s ability to carry out its non-homeland security programs. To help gauge its performance in these areas, the Coast Guard collects data on 45 performance measures, such as the percentage of mariners successfully rescued from imminent danger and the number of oil spills and chemical discharges. When reporting its performance, the Coast Guard follows the instructions of its parent agency, the Department of Homeland Security (DHS), and reports one measure for each program. For example, for the ice operations program, the Coast Guard reports on the annual number of days certain waterways are closed because of ice, and for the aids to navigation program, the Coast Guard reports on the number of collisions, allisions, and groundings. These performance measures, which we call “primary measures” in this report, are intended to communicate Coast Guard performance and provide information for the budgeting process to Congress, other policymakers, and taxpayers. Beyond the six primary performance measures, the Coast Guard also uses a variety of other

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2The Coast Guard defines an “allision” as a collision between a vessel and a fixed object.
performance measures to manage its programs, called “secondary measures” in this report. There are three key publications that DHS and the Coast Guard use to report the Coast Guard’s non-homeland security primary performance measures—the DHS Performance and Accountability Report, the DHS fiscal year budget request, and the Coast Guard’s fiscal year Budget-in-Brief.

Our recent analyses have raised concerns about whether the primary measures accurately reflect what the Coast Guard is accomplishing with the resources it expends. In April 2004, we testified that despite substantial changes in the distribution of resources among programs, performance results appeared largely unaffected, and the Coast Guard had limited data and no systematic approach to explain the lack of a clear relationship between resources expended and performance results achieved.³ You asked us to consider whether shortcomings in the primary measures might explain why there was no apparent connection between resources expended and results achieved for the non-homeland security programs. In response, we evaluated the primary measures for the Coast Guard’s six non-homeland security programs with regard to two key characteristics: (1) their soundness—that is, whether the measures cover the key activities of the program, are clearly stated and described, and are objective, measurable, and quantifiable—including having annual targets—and (2) the reliability of the data used to calculate the measures—that is, whether controls are in place to ensure the timeliness, completeness, accuracy, and consistency of the data.⁴ You also asked us to provide information on some of the secondary measures that are used in the Coast Guard’s six non-homeland security programs. Our report addresses three questions:

- Are the primary performance measures for the Coast Guard’s six non-homeland security programs sound, and are the data used to calculate them reliable?


⁴The criteria for assessing soundness are not equal, and failure to meet a particular criterion does not necessarily preclude that measure from being useful; rather, it may indicate an opportunity for further refinement.
• Are selected secondary performance measures for four of the Coast Guard’s non-homeland security programs sound?

• What challenges, if any, are present in trying to use the primary measures to link resources expended and results achieved?

To conduct our analysis of the soundness of the primary performance measures, we relied primarily on a set of criteria that we had previously developed. These criteria were developed based on the Government Performance and Results Act of 1993 (GPRA) and Office of Management and Budget (OMB) guidelines for agency performance measures. We used our judgment to assess whether these measures met our criteria. We also reviewed the fiscal years 2005 and 2006 DHS Performance and Accountability Report, the fiscal years 2006 and 2007 DHS budget requests, and the Coast Guard’s fiscal years 2006 and 2007 Budget-in-Brief. To conduct our reliability analysis, we relied primarily on comparisons of Coast Guard data collection methods and internal control processes with GPRA and the Reports Consolidation Act of 2000 requirements, as well as commonly accepted standards and practices. Our reliability analysis assessed only the specific data fields used to collect and report data for the six non-homeland security primary performance measures, and not the relevant databases as a whole. We reviewed and analyzed information collected and assembled at Coast Guard headquarters as well as at four Coast Guard field locations. To the extent possible, we also reviewed secondary measures for four of the six non-

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8The field locations we selected were District 1 (Boston, Massachusetts); District 7 (Miami, Florida); District 9 (Cleveland, Ohio); and District 13 (Seattle, Washington). We selected these field locations because of the number and types of non-homeland security programs that are performed at these locations. We reviewed activities at multiple offices or units at each location.
To identify and assess the challenges in trying to use the primary measures to link resources expended and results achieved we interviewed Coast Guard officials at agency headquarters to discuss how measures are used in resource and budget allocation decisions and reviewed previous GAO reports on performance measures, performance reporting, and the link between the Coast Guard’s resources used and results achieved. We conducted our work from July 2005 to August 2006 in accordance with generally accepted government auditing standards. More details about the scope and methodology of our work are presented in appendix I.

Although some opportunities for improvement exist, the Coast Guard’s primary performance measures for its six non-homeland security programs are generally sound, and the data used to calculate them are generally reliable. All six measures are generally sound in that they cover key program activities and are objective, measurable, and quantifiable, but three are not completely clear, that is, they do not consistently provide clear and specific descriptions of the data, events, or geographic areas they include. For example, the primary performance measure for ice operations, “domestic icebreaking—annual number of waterway closure days,” actually only reflects closures for certain waterways within the Great Lakes region. Although these waterways are the main location for domestic icebreaking, icebreaking also takes place on the East Coast. While this caveat is included in some accompanying text, the description is inconsistent across department and agency publications. For instance, the DHS fiscal year 2005 Performance and Accountability Report notes that the measure is made up of nine critical waterways, but the DHS fiscal year 2007 budget request reports that the measure consists of seven

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9The four programs we selected were aids to navigation, living marine resources, marine environmental protection, and search and rescue. We selected these programs because they had the largest budget increases of the six non-homeland security programs (as reflected in the fiscal year 2005 budget and the Coast Guard’s fiscal year 2006 budget request) and because they are programs of particular interest because of events surrounding Hurricane Katrina. Further, we selected only those measures that Coast Guard officials said were high-level, strategic measures used in performance budgeting, budget projections, and management decisions. In addition, we did not assess any of the secondary measures that were in development at the time of our report. The 23 secondary measures we assessed for these four programs represent more than half of the 39 high-level, strategic secondary measures used to manage the six non-homeland security programs.
critical waterways, while the Coast Guard’s fiscal year 2007 *Budget-in-Brief* does not mention the number of waterways included in the measure. With regard to data reliability, although the processes the Coast Guard uses to enter and review its own internal data are likely to produce reliable data for the performance measures we reviewed, we identified weaknesses with processes used to review the reliability of data gathered from external sources. Specifically, we found that neither DHS nor the Coast Guard has policies requiring review or consistent verification processes for these data. Instead, the processes vary for different data sources. For example, the Coast Guard tests the reliability of state-provided data used for its marine safety program’s primary measure, but does not test the reliability of Army Corps of Engineers (Corps) data or review the Corps’ data reliability procedures for data used for its marine environmental protection program’s primary measure. While, according to a Corps official, the Corps does have some controls in place, without, at a minimum, familiarity with the internal controls used by the Corps to ensure the reliability of these data, the Coast Guard cannot provide assurance that the data are reliable.

For the four non-homeland security programs we assessed, more than a third of the secondary performance measures are generally sound (9 of the 23), while opportunities for improvement exist for the remainder (14 of the 23). More specifically, for the 14 secondary measures, we found (1) the Coast Guard does not have measurable targets to assess whether program and agency goals and objectives are being achieved for 12 measures, (2) the Coast Guard does not have agencywide criteria or guidance to accurately reflect program results and ensure objectivity for 1 measure, and (3) the Coast Guard does not clearly state or describe the data or events included in 1 measure. For example, a secondary measure for the search and rescue program, “percent of lives saved after Coast Guard notification,” does not clearly state that it excludes incidents in which 11 or more lives were saved or lost in a single case. While including such large incidents in performance measures would skew annual performance results, it is important for the Coast Guard to identify these exclusions, either through a footnote or accompanying text, to ensure that events such the rescues of Hurricane Katrina—when the agency rescued more than 33,500 people within a few weeks—are recognized; otherwise, performance results could be misinterpreted or misleading to users.

Although the primary performance measures are generally sound and data used to calculate them are generally reliable, even sound performance measures have limits to how much they can explain about the relationship between resources expended and results achieved. Specifically, we
identified two challenges that stand in the way of establishing a clear link between resources and results. One challenge involves the difficulty of capturing an entire program such as ice operations or marine environmental protection in a single performance measure. The Coast Guard follows DHS guidance in reporting a single measure per program, which is consistent with our prior work on agencies that were successful in measuring performance and implementing GPRA. However, reporting some secondary measures or additional data in venues, such as the Coast Guard’s annual Budget-in-Brief or program-specific publications, could provide additional context and help to more clearly articulate to stakeholders and decision makers the relationship between resources expended and results achieved. For instance, reporting data on the annual number of search and rescue cases in the search and rescue program, in addition to its primary measure, “the percent of mariners in imminent danger who are rescued,” can provide greater context for the program’s activity level. This is important because while the percentage of mariners saved may remain consistent from year-to-year, the number of cases, number of lives saved, and the resources used to achieve this result can vary. The second challenge involves the Coast Guard’s ability to account for factors other than resources that can affect program results. Some of these factors are external to the agency—and perhaps outside of its ability to influence. Because of the potentially large number of external factors, and their sometimes unpredictable or often unknown effect on performance, it may be difficult to account for how they—and not the resources expended on the program—affect results. For example, a change in fishery regulations reduced the number of search and rescue cases in Alaska because it provided greater flexibility for fishermen to choose when they would fish for certain fish stocks—this flexibility allowed them to choose different timeframes and therefore safer weather conditions for their fishing activities. Developing a system or model that could realistically take all such factors into account may not be achievable, but, the challenge is to develop enough sophistication about each program’s context so the Coast Guard can more systematically consider these factors, and then explain their influence on resource decisions and performance results. Recognizing these limitations, and responding to recommendations we have made in past reports, the Coast Guard has developed a range of initiatives that agency officials believe will help explain the effects of these factors and decide where resources are

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best spent. Some of these initiatives have been ongoing for several years, and according to agency officials, the extent and complexity of the effort, together with challenges presented in integrating them into a data-driven and comprehensive strategy, requires additional time to complete. Currently, the Coast Guard does not expect to fully implement many of the initiatives until 2010, and thus it is not possible to assess their likely impact in linking resources and results until they are further developed and operational.

To improve the quality of program performance reporting and to more efficiently and effectively assess progress toward achieving the goals or objectives stated in agency plans, we are recommending that the Secretary of the Department of Homeland Security direct the Commandant of the Coast Guard to take steps to further improve the soundness of the 3 primary measures and 14 secondary measures we found to have weaknesses, develop and implement a policy to review the reliability of all external data that is used in calculating performance measures, and report additional information—besides the one primary performance measure—in appropriate venues to better inform stakeholders and decision makers about the relationship between resources expended and results achieved. In commenting on this draft, DHS and Coast Guard officials generally agreed with our findings and recommendations, and provided technical comments that we incorporated.

Background

The Coast Guard has responsibilities divided into 11 programs that fall under two broad missions—homeland security and non-homeland security—which are recognized in the Homeland Security Act. To accomplish its wide range of responsibilities, the Coast Guard is organized into two major commands that are responsible for overall mission execution—one in the Pacific area and the other in the Atlantic area. These commands are divided into nine districts, which in turn are organized into 35 sectors that unify command and control of field units and resources, such as multimission stations and patrol boats. In fiscal year 2005, the Coast Guard had over 46,000 full-time positions—about 39,000 military and 7,000 civilians. In addition, the agency had about 8,100 reservists who support the national military strategy or provide

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1 In 2004, we recommended that the Coast Guard identify the intervening factors that may affect performance and systematically assess the relationship among these factors, resources used, and results achieved. GAO-04-432.
additional operational support and surge capacity during times of emergency, such as natural disasters. Furthermore, the Coast Guard also had about 31,000 volunteer auxiliary personnel help with a wide array of activities, ranging from search and rescue to boating safety education.

For each of its six non-homeland security programs, the Coast Guard has developed a primary performance measure to communicate agency performance and provide information for the budgeting process to Congress, other policymakers, and taxpayers. The Coast Guard has also developed 39 secondary measures that it uses to manage these six programs. The Coast Guard selected and developed the six primary measures based on a number of criteria, including GPRA, DHS, and OMB guidance as well as legislative, department, and agency priorities. When viewed as a suite of measures, the primary and secondary measures combined are intended to provide Coast Guard officials with a more comprehensive view of program performance than just the program's primary measure. Some of these secondary measures are closely related to the primary measures; for example, a secondary measure for the marine environmental protection program, “annual number of oil spills greater than 100 gallons and chemical discharges per 100 million tons shipped,” is closely related to the program’s primary measure, “5-year average annual number of oil spills greater than 100 gallons and chemical discharges per 100 million tons shipped.” However, other secondary measures reflect activities and priorities that are not reflected in the primary performance measures. For example, a secondary measure in the search and rescue program, “percent of property saved,” reflects activities not captured in the program’s primary measure, “percent of mariners in imminent danger who are rescued.”

In 2004, we compared trends in performance results, as reported by the Coast Guard’s primary performance measures, with the agency’s use of resources and found that the relationship between results achieved and resources used was not always what might be expected—that is, resources expended and performance results achieved did not have consistent direction of movement and sometimes bore an opposite relationship. We reported that disconnects between resources expended and performance results achieved have important implications for resource management and accountability, especially given the Coast Guard’s limited ability to explain them. In particular, these disconnects prompted a question as to
why, despite substantial changes in a number of programs’ resource hours used over the period we examined, the corresponding performance results for these programs were not necessarily affected in a similar manner—that is, they did not rise or fall along with changes in resources. At that time, the Coast Guard could not say with any assurance why this occurred. For example, while resource hours for the search and rescue program dropped by 22 percent in fiscal year 2003 when compared to the program’s pre-September 11, 2001 baseline, the performance results for the program remained stable for the same period. These results suggest that performance was likely affected by factors other than resource hours. One set of factors cited by the Coast Guard as helping to keep performance steady despite resource decreases involved strategies such as the use of new technology, better operational tactics, improved intelligence, and stronger partnering efforts. Coast Guard officials also pointed to another set of factors, largely beyond the agency’s control (such as severe weather conditions), to explain performance results that did not improve despite resource increases. At the time of our 2004 report, the Coast Guard did not have a systematic approach to effectively link resources to results. However, the Coast Guard had begun some initiatives to better track resource usage and manage program results, but many of these initiatives were still in early stages of development and some did not have a time frame for completion.

Like other federal agencies, DHS is subject to the performance-reporting requirements of GPRA. GPRA requires agencies to publish a performance report that includes performance measures and results. These reports are intended to provide important information to agency managers, policymakers, and the public on what each agency accomplished with the resources it was given. The three key annual publications that DHS and the Coast Guard use to report the Coast Guard’s non-homeland security primary performance measures are the DHS Performance and Accountability Report, the DHS fiscal year budget request, and the Coast Guard’s fiscal year Budget-in-Brief. The DHS Performance and Accountability Report provides financial and performance information to the President, Congress and the public for assessing the effectiveness of the department’s mission performance and stewardship of resources. The DHS annual budget request to Congress identifies the resources needed

13The Coast Guard maintains information on how assets, such as cutters, patrol boats, and aircraft are used. Each hour that these resources are used is called a resource hour. Resource hours do not include such things as the time that the asset stands idle or the time that is spent maintaining it.
for meeting the department’s missions. The Coast Guard’s annual *Budget-in-Brief* reports performance information to assess the effectiveness of the agency’s performance as well as a summary of the agency’s most recent budget request. These documents report the primary performance measures for each of the Coast Guard’s non-homeland security programs, as well as descriptions of the measures and explanations of performance results. While these documents report performance results from some secondary measures, DHS and the Coast Guard do not report most of the Coast Guard’s secondary measures in these documents.

GPRA also requires agencies to establish goals and targets to define the level of performance to be achieved by a program and express such goals in an objective, quantifiable, and measurable form. In passing GPRA, Congress emphasized that the usefulness of agency performance information depends to a large degree on the reliability of performance data. To be useful in reporting to Congress on the fulfillment of GPRA requirements and in improving program results, the data must be reliable—that is, they must be seen by potential users to be of sufficient quality to be trustworthy. While no data are perfect, agencies need to have sufficiently reliable performance data to provide transparency of government operations so that Congress, program managers, and other decision makers can use the information. In establishing a system to set goals for federal program performance and to measure results, GPRA requires that agencies describe the means to be used to validate and verify measured values to improve congressional decision making by providing objective, complete, accurate and consistent information on achieving statutory objectives, and on the relative effectiveness and efficiency of federal programs and spending.\textsuperscript{15} In addition, to improve the quality of agency performance management information, the Reports Consolidation Act of 2000 requires an assessment of the reliability of performance data used in the agency’s program performance report.\textsuperscript{16}

OMB’s Program Assessment Rating Tool (PART) is designed to strengthen and reinforce performance measurement under GPRA by encouraging


careful development of outcome-oriented performance measures.\textsuperscript{16} Between 2002 and 2005, OMB reviewed each of the Coast Guard's six non-homeland security programs.\textsuperscript{17} OMB found that four programs—ice operations, living marine resources, marine environmental protection, and marine safety—were performing adequately or better, and two programs— aids to navigation and search and rescue—did not demonstrate results. OMB recommended that for the aids to navigation program, the Coast Guard develop and implement a better primary performance measure that allows program managers to understand how their actions produce results. Specifically, OMB recommended using an outcome-based measure, the number of collisions, allisions, and groundings, as a measure for the program, instead of the measure that was being used—aid availability. For the search and rescue program, OMB recommended that the Coast Guard develop achievable long-term goals for the program. Since these reviews, the Coast Guard has implemented a new primary performance measure for the aids to navigation program, “5-year average annual number of distinct collisions, allisions, and groundings,” and developed new long-term goals for the search and rescue program’s primary performance measure, that is rescuing between 85 and 88 percent of mariners in imminent danger each year from fiscal year 2002 through 2010.

\textsuperscript{16}OMB’s PART review is a systematic method of assessing the performance of program activities across the federal government used by OMB to review federal agency programs. The PART review is a series of questions that assess different aspects of program performance in which agencies under review must answer; responses must be evidenced-based. Agencies must clearly explain their answers and include relevant supporting evidence such as agency performance information, independent evaluations, and financial information. PART reviews provide an overall rating for each program that includes effective (the program is well managed), moderately effective (the program is well managed but needs improvements), adequate (the program needs to improve accountability), ineffective (the program is unable to achieve results), results not demonstrated (the program does not have acceptable performance goals or targets).

\textsuperscript{17}OMB reviewed the aids to navigation and search and rescue programs in 2002, the living marine resources and marine environmental protection programs in 2003, the ice operations program in 2004, and the marine safety program in 2005.
While the six non-homeland security primary performance measures are generally sound, and the data used to calculate these measures are generally reliable, we found weaknesses with the soundness of three measures and the reliability of the data used in one measure (see table 2). All six measures cover key program activities and are objective, measurable, and quantifiable, but three are not completely clear, that is, they do not consistently provide clear and specific descriptions of the data, events, or geographic areas they include. The Coast Guard’s processes for entering and reviewing its own internal data are likely to produce reliable data. However, processes for reviewing or verifying data gathered from external sources vary from source to source, and for the marine environmental protection measure, the processes are insufficient.

<table>
<thead>
<tr>
<th>Program</th>
<th>Primary measure</th>
<th>Is the measure sound?</th>
<th>Are the data used to calculate the measure reliable?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aids to navigation</td>
<td>5-year average annual number of distinct collisions, allisions, and groundings</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Ice operations</td>
<td>Domestic icebreaking—annual number of waterway closure days</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Living marine resources</td>
<td>Percent of fishermen in compliance with regulations</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Marine environmental protection</td>
<td>5-year average annual number of oil spills greater than 100 gallons and chemical discharges per 100 million tons shipped</td>
<td>●</td>
<td>○</td>
</tr>
<tr>
<td>Marine safety</td>
<td>5-year average annual number of deaths and injuries of recreational boaters, mariners, and passengers</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Search and rescue</td>
<td>Percent of mariners in imminent danger who are rescued</td>
<td>○</td>
<td>●</td>
</tr>
</tbody>
</table>

Legend:  
● Yes  
○ Weaknesses identified

Source: GAO analysis of Coast Guard primary performance measures.

While the six primary performance measures are generally sound—in that the measures cover key activities of the program, and are objective, measurable, and quantifiable—three of the measures are not completely clear. The primary performance measures for the ice operations, living marine resources, and search and rescue programs do not consistently provide clear and specific descriptions of the data, events, or geographic areas they include. It is possible these weaknesses could lead to decisions...
or judgments based on inaccurate, incomplete, or misreported data. The three programs with primary measures that are not completely clear are as follows:

- **Ice operations.** Further clarity and consistency in reporting the geographic areas included in the ice operations primary performance measure, “domestic ice breaking—annual number of waterway closure days,” would provide users additional context to discern the full scope of the measure. Despite its broad title, the measure does not reflect the annual number of closure days for all waterways across the United States, but rather reflects only the annual number of closure days in the Great Lakes region, although the Coast Guard breaks ice in many East Coast ports and waterways. According to Coast Guard officials, the measure focuses on the Great Lakes region because it is a large commerce hub where the icebreaking season tends to be longer and where ice has a greater impact on maritime transportation. While this limitation is included in accompanying text in some documents, the description of the limitation is inconsistent across department and agency publications. The DHS fiscal year 2005 Performance and Accountability Report notes that the measure is made up of nine critical waterways within the region, but the DHS fiscal year 2007 budget request reports that it consists of seven critical waterways, while the Coast Guard’s fiscal year 2007 Budget-in-Brief does not mention the number of waterways included in the measure. In addition, Coast Guard program officials said that the measure only reflects closures in one critical waterway—the St. Mary’s River. Coast Guard program officials at agency headquarters said that they are in the early stages of developing a new primary performance measure that will incorporate domestic icebreaking activities in areas beyond the Great Lakes. However, until a better measure is developed, the description of the current measure can confuse users and might cause them to think performance was better or worse than it actually was.

- **Search and rescue.** While the primary performance measure for the search and rescue program, “percent of mariners in imminent danger who are rescued,” reflects the program’s priority of saving lives, it excludes those incidents in which 11 or more lives were saved or lost. According to Coast Guard officials, an agency analysis in fiscal year 2005 showed that 98 percent of search and rescue cases involved 10 or fewer people that were saved or lost. Coast Guard officials added that large cases involving 11 or more people are data anomalies and by excluding these cases the agency is better able to assess the program’s performance on a year-to-year basis. While we understand the Coast Guard’s desire to assess program performance on a year-to-year basis,
and to not skew the data, in some instances this type of exclusion may represent a significant level of activity that is not factored into the measure. For example, during Hurricane Katrina, the Coast Guard rescued more than 33,500 people. While including such large incidents in the performance measure would skew annual performance results, it is important for the Coast Guard to recognize these incidents, either through a footnote or accompanying text in department and agency publications. Not clearly defining the measure and recognizing such incidents may cause internal managers and external stakeholders to think performance was better or worse than it actually was.

- **Living marine resources.** Similar to the ice operations primary measure, the living marine resources primary performance measure, “percent of fishermen in compliance with regulations,” is not consistently and clearly defined in all department and agency publications. The Coast Guard enforces federal regulations, similar to agencies across law enforcement, not by checking fishing vessels at random, but instead by targeting those entities that are most likely to be in violation of fishery regulations, such as vessels operating in areas that are closed to fishing. Because the Coast Guard targets vessels, the primary measure does not reflect the compliance rate of all fishermen in those areas patrolled by the Coast Guard, as could be inferred by the description, but rather is an observed compliance rate, that is, the compliance rate of only those fishing vessels boarded by Coast Guard personnel. The description of this performance measure is inconsistent across department and agency publications. For example, in the DHS fiscal year 2005 *Performance and Accountability Report* and the Coast Guard’s *Budget-in-Brief*, this measure is described as an observed compliance rate, but the DHS fiscal year 2007 budget request does not clarify that this measure represents an observed compliance rate rather than the compliance rate of all fishermen in those areas patrolled by the Coast Guard. A measure that is not consistently and clearly stated may affect the validity of managers’ and stakeholders’ assessments of program performance, possibly leading to a misinterpretation of results.

Existing Procedures Help Ensure Reliable Internal Data, but Procedures Do Not Exist to Check Reliability of All External Data

While the Coast Guard has controls in place to ensure the timeliness, completeness, accuracy, and consistency of internal data it creates—that is, original data that Coast Guard personnel collect and enter into its data systems—the agency does not have controls in place to verify or review the completeness and accuracy of data obtained from all external sources that it uses in calculating some of the primary performance measures. The internal data used to calculate the six primary performance measures are
generally reliable—in that the Coast Guard has processes in place to ensure the data’s timeliness, completeness, accuracy, and consistency. These controls include data fields, such as pick lists and drop-down lists, that allow for standardized data entry, mandatory data fields to ensure all required data are entered, access controls that allow only authorized users to enter and edit data, requirements for entering data in a timely manner, and multiple levels of review across the agency. To ensure data consistency across the Coast Guard, each of the six non-homeland security programs has published definitions or criteria to define the data used for the primary measures. However, the Coast Guard acknowledges that in some instances these criteria may be open to subjective interpretation, such as with the search and rescue program. For example, when entering data to record the events of a search and rescue incident, rescuers must identify the outcome of the event by listing whether lives were “lost,” “saved,” or “assisted.” While program criteria define a life that is lost, saved, or assisted, there is potential for subjective interpretation in some incidents.\textsuperscript{18} Through reviews at the sector, district, and headquarters levels the Coast Guard attempts to remedy any inconsistencies from interpretations of these criteria.

While the Coast Guard uses internal data for all six of its non-homeland security primary performance measures, it also uses external data to calculate the primary performance measures for two programs—marine safety and marine environmental protection (see table 3). The Coast Guard’s procedures for reviewing external data are inconsistent across these two programs. For example, while the Coast Guard has developed better processes and controls for external data used in the marine safety program’s primary performance measure—such as using a news clipping service that gathers media articles on recreational boating accidents and fatalities and using a database that gathers recreational boating injury data

\textsuperscript{18}The U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement defines lives lost, saved, and assisted. A life saved is defined as a life that would have been lost had the rescue action not been taken, including actually pulling a person from a position of distress or removing them from a situation that would likely have resulted in their death had the action not been taken. A life assisted is defined as those persons who are provided assistance that did not meet the criteria for lives saved but did receive some assistance, however, persons merely onboard a vessel that is provided assistance directed at the vessel (such as providing repairs or fuel) are not necessarily assisted. To count a life as lost there must be a body recovered; otherwise it is considered a life-unaccounted-for. Lives lost before notification are those lives lost, which to the best of the reporting unit’s knowledge, occurred before notification of the incident was made to the Coast Guard and lives lost after notification are those lives lost that occurred after notification was made to the Coast Guard.
from hospitals—the agency does not have processes to test the reliability of external data used in the marine environmental protection program’s primary performance measure. The extent to which controls are used to verify external data for the marine safety and marine environmental protection primary measures is described below.

Table 3: Source of Data Used to Calculate Non-Homeland Security Primary Performance Measures

<table>
<thead>
<tr>
<th>Program</th>
<th>Internal Data Sources</th>
<th>External Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coast Guard Marine Information Safety and Law Enforcement database</td>
<td></td>
</tr>
<tr>
<td>Aids to navigation</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ice operations</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Living marine resources</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Marine environmental protection</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Marine safety</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Search and rescue</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Source: GAO analysis of Coast Guard data.

aThe Marine Information Safety and Law Enforcement database is a Web-based database used to track marine safety and law enforcement activities involving commercial and recreational vessels. The system provides query, reporting, and file-downloading capabilities to the Coast Guard marine safety and law enforcement operating programs.

bCoast Guard District 9 (headquartered in Cleveland, Ohio) develops weekly icebreaking reports by compiling information from icebreaking cutters operating within the district. Information in these reports includes data on the number of vessels beset in ice that were assisted, the number of waterways closed because of ice, the duration of any waterway closures, and the number of vessel transits through critical waterways. These reports are sent directly from the cutters to the district office and compiled into an annual report that is sent to Coast Guard headquarters.

cTo calculate the marine environmental protection primary performance measure, the Coast Guard uses data from the Army Corps of Engineers on the amount of oil and chemicals shipped in the United States.

dTo calculate the marine safety primary performance measure, the Coast Guard uses state data on recreational boating deaths and injuries.

- Marine safety. To calculate the marine safety program’s primary performance measure, “5-year average annual number of deaths and injuries of recreational boaters, mariners, and passengers,” the Coast Guard uses internal data on deaths and injuries for mariners and passengers, as well as external data on recreational boating deaths and injuries from the Boating Accident Reporting Database (BARD)—a Coast Guard managed database—that relies on data collected and entered by the states. In 2000, the Department of Transportation Office
of Inspector General reported that recreational boating fatality data collected from the states consistently understated the number of fatalities, in part because a precise definition of a recreational boating fatality did not exist.\textsuperscript{19} To improve the reliability and consistency of the data, the Coast Guard created a more precise definition and clarified reporting criteria by providing each state with a data dictionary that describes the definitions for all required data fields. In addition, to improve the timeliness of incident reporting, the Coast Guard created a Web-based version of BARD for electronic submission of recreational boating accident data. According to Coast Guard officials, this system allows Coast Guard staff to verify, validate, and corroborate data with each state for accuracy and completeness prior to inclusion in the measure.

According to Coast Guard officials, a recent Coast Guard analysis showed that these efforts have improved the error rate from an average of about 6 percent to about 1 percent annually. However, despite these improvements, the Coast Guard acknowledges that some incidents may still never be reported, some incidents may be inaccurately reported, and some duplicate incidents may be included. Coast Guard officials told us that the agency continues to work to reduce these errors by developing additional steps to validate data. These recent steps include using a news clipping service that gathers all media articles concerning recreational boating accidents and fatalities and using a database that gathers recreational boating injury data from hospitals.

- \textit{Marine environmental protection}. In contrast, the Coast Guard does not have processes to validate the reliability of external data used in the marine environmental protection program’s primary performance measure, “5-year average annual number of oil spills greater than 100 gallons and chemical discharges per 100 million tons shipped.” Each year the Coast Guard uses internal data on oil spills and chemical discharges, as well as external data from the Corps on the amount of oil and chemicals shipped annually in the United States to calculate this measure. However, the Coast Guard does not review the Corps’ data for completeness or accuracy, nor does it review the data reliability procedures the Corps uses to test the data for completeness or accuracy. Coast Guard officials said that they did not take these
More than a Third of the Secondary Performance Measures Assessed Are Generally Sound, and the Remainder Have Weaknesses

More than a third (9 of the 23) of the secondary performance measures assessed are generally sound—that is, they are clearly stated and described; cover key activities of the program; and are objective, measurable, and quantifiable (see table 4). However, as described below, weaknesses exist for the other 14 of these 23 measures. More specifically, for the 14 secondary measures, we found (1) the Coast Guard does not have measurable targets to assess whether program and agency goals and objectives are being achieved for 12 measures, (2) the Coast Guard does not have agencywide criteria or guidance to accurately reflect program results and ensure objectivity for 1 measure, and (3) the Coast Guard does not clearly state or describe the data or events included in 1 measure. These weaknesses do not allow the Coast Guard to provide assurance that these performance measures do not lead to decisions or judgments based on inaccurate, incomplete, or misreported information. More detail on all of the secondary measures we assessed is in appendix II.

<table>
<thead>
<tr>
<th>Program</th>
<th>Number of measures that are sound</th>
<th>Number of measures with weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aids to navigation</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Living marine resources</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Marine environmental protection</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Search and rescue</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

Source: GAO analysis of Coast Guard secondary performance measures.
**Measures without measurable targets.** Twelve secondary measures—11 living marine resources measures and 1 marine environmental protection measure—do not have annual targets to assess whether program and agency goals and objectives are being achieved. According to Coast Guard officials, these measures do not have targets because the focus of the program is on the primary performance measures, and not the inputs and outputs reflected in these secondary measures. However, without any quantifiable, numeric targets, it is difficult for the Coast Guard to know the extent to which program and agency goals and objectives are being achieved.

**Measure without criteria or guidance to accurately reflect program results and ensure objectivity.** One of the search and rescue program’s secondary performance measures that we analyzed, “percent of property saved,” does not have criteria or guidance for agency personnel to objectively and consistently determine the value of saved property. Despite this lack of criteria on how to consistently and objectively determine property values, data from this measure are reported in both the Coast Guard’s annual *Budget-in-Brief* and the DHS fiscal year *Performance and Accountability Report*. Coast Guard officials said it would be difficult to develop such criteria because of the large number of boats and vessels and their varying values. Officials added that Coast Guard personnel generally do not have access to, and do not follow up to obtain, insurance or damage estimates for saved property. In addition, we found that Coast Guard units do not consistently record property values across the agency. For example, some units do not record property values at all, other units record property values only when the actual value can be determined, and other units estimate property values using a $1,000-per-foot-of-vessel-length rule of thumb. Without any criteria or guidance to determine property values, the Coast Guard cannot provide assurance that agency personnel are consistently and objectively making these assessments.

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20The 11 living marine resources performance measures without measurable targets are the (1) number of domestic fisheries enforcement resource hours, (2) number of active commercial fishing vessels by major fishery, (3) number of domestic boardings by major fishery, (4) boardings per active commercial fishing vessels by major fishery, (5) number of significant violations by major fishery, (6) number of significant violations per domestic resource hour, (7) status of fish stocks, (8) number of Coast Guard members trained at Regional Fishing Training Centers, (9) cost per Coast Guard member trained at Regional Fishing Training Centers, (10) number of Marine Affairs graduates on active duty, and (11) percent of Marine Affairs graduates in Marine Affairs-coded billets. The one marine environmental protection performance measure is the Tokyo and Paris memorandum of understanding port state control reports measure.
determinations across the agency, and whether the measure accurately reflects program results.

- **Measure not completely clear.** Similar to the primary performance measure for the search and rescue program, one of the search and rescue program’s secondary measures we analyzed, “percent of lives saved after Coast Guard notification,” reflects the program’s priority of saving lives, but excludes those incidents in which 11 or more lives were saved or lost in a single case. As with the primary measure, including such large incidents in performance measures would skew annual performance results, and thus it may be appropriate to exclude them. However, it is important for the Coast Guard to recognize, either through a footnote or accompanying text, the exclusion of these incidents—such as during Hurricane Katrina, in which the agency rescued more than 33,500 people—because otherwise, performance results could be misinterpreted or misleading to users.

While the primary measures for the Coast Guard’s six non-homeland security programs are generally sound and use reliable data, challenges exist with using the primary measures to assess the link between resources expended and results achieved. Ideally, a performance measure not only tells decision makers what a program is accomplishing, but it also gives them a way to affect these results through the decisions they make about resources—for example, by providing additional resources with a degree of confidence that doing so will translate into better results. Even sound performance measures, however, may have limits to how much they can explain about the relationship between resources expended and results achieved. For the Coast Guard, these limits involve (1) the difficulty of fully reflecting an entire program such as ice operations or marine environmental protection in a single performance measure and (2) the ability to account for the many factors, other than resources, that can affect program results. Recognizing these limitations, and responding to recommendations we have made in past reports, Coast Guard officials have been working on a wide range of initiatives they believe will help in understanding the effects of these other factors and deciding where resources can best be spent. According to Coast Guard officials, although the agency has been working on some of these initiatives for several years, the extent and complexity of the effort, together with the challenges presented in integrating a multitude of initiatives into a data-driven and comprehensive strategy, requires additional time to complete. At this time, the Coast Guard does not expect many of the initiatives to be implemented.
Primary Performance Measures Cover a Key Activity, but Not Every Activity Conducted under a Program

Performance measures are one important tool to communicate what a program has accomplished and provide information for budget decisions. It is desirable for these measures to be as effective as possible in helping to explain the relationship between resources expended and results achieved, because agencies that understand this linkage are better positioned to allocate and manage their resources effectively. The Coast Guard follows DHS guidance in reporting a single measure per program, and doing so is consistent with our prior work on agencies that were successful in measuring performance and implementing GPRA. 21

Previously, we found that agencies successful in measuring performance and meeting GPRA’s goal-setting and performance measurement requirements limited their measures to covering core program activities essential for producing data for decision making and not all program activities. Each of the Coast Guard’s primary measures for its six non-homeland security programs meets our criteria of covering a key activity. None of them, however, is comprehensive enough to capture all of the activities performed within the program that could affect results. For example, the primary performance measure for the marine environmental protection program relates to preventing oil and chemical spills. This is a key program activity, but under this program the Coast Guard also takes steps to prevent other marine debris and pollutants (such as plastics and garbage), protect against the introduction of invasive aquatic nuisance species, and respond to and mitigate oil and chemical spills that actually do occur. As such, resources applied to these other activities would not be reflected in the program’s primary measure, and thus, a clear and direct relationship between total program resources and program results is blurred.

In some cases, it may be possible to identify or develop a performance measure that fully encapsulates all the activities within a program, but in many cases the range of activities is too broad, resulting in a measure that would be too nebulous to be of real use. Coast Guard officials told us that developing primary measures that incorporate all of the diverse activities...

21GAO/GGD-96-118; and GAO-03-143.
within some programs, as well as reflect the total resources used within the program would be difficult, and that such a measure would likely be too broad to provide any value for assessing overall program performance. As such, officials added that performance measures provide a better assessment of program performance and resource use when all of a program’s measures—both primary and secondary—are viewed in conjunction as a suite of measures.

Performance Results Can Be Affected by Factors Other than Resources

A second challenge in establishing a clearer relationship between resources expended and results achieved is that many other factors can affect performance and blur such a relationship. Some of these factors can be external to an agency—and perhaps outside an agency’s ability to influence. At the time of our 2004 report, Coast Guard officials also pointed to these external factors outside of the agency’s control to explain performance results that did not improve despite resource increases. Because of the potentially large number of external factors, and their sometimes unpredictable or often unknown effect on performance, it may be difficult to account for how they—and not the resources expended on the program—affect performance results.

Such factors are prevalent in the Coast Guard’s non-homeland security programs, according to Coast Guard officials. They cited such examples as the following:

- Changes in fishing policies off the coast of Alaska had an effect on performance results in the search and rescue program. For many years, commercial sablefish and halibut fishermen were allowed to fish only during a 2-week period each year. Given the limited window of opportunity that this system provided, these fishermen had a strong incentive to go out to sea regardless of weather conditions, thereby affecting the number of the Coast Guard’s search and rescue cases that occurred. In 1994, these regulations were changed; in place of a 2-week fishing season with no limits on the amount of fish any permitted fisherman could harvest, the regulations set a longer season with quotas. This change allowed fishermen more flexibility and more opportunity to exercise caution about when they should fish rather than driving them to go out in adverse weather conditions. Following the change in regulations, Coast Guard statistics show that search and rescue cases decreased in halibut and sablefish fisheries by more than 50 percent, from 33 in 1994 to 15 in 1995. However, Coast Guard officials said that because of the large number of search and rescue cases in the district during these two years—more than
1,000 annually—this policy change only had a minimal impact on the amount of resources the district used for search and rescue cases.

- Vagaries of weather can also affect a number of non-homeland security missions. Unusually severe weather, such as Hurricane Katrina, for example, can affect the success rates for search and rescue or cause navigational aids to be out of service. Even good weather on a holiday weekend, can increase the need for search and rescue operations—and consequently affect performance results—because such weather tends to encourage large numbers of recreational boaters to be out on the water. Harsh winter weather can also affect performance results for the ice operations program.

- Results for the marine environmental protection primary performance measure, “the 5-year average annual number of oil spills greater than 100 gallons and chemical discharges per 100 million tons shipped” can be affected by policies and activities that are not part of the marine environmental protection program. For example, according to Coast Guard officials, a foreign country’s decision to institute a more aggressive vessel inspection program could reduce spills caused by accidents in U.S. waters, if the inspections uncovered mechanical problems that were corrected before those vessels arrived in the United States. While not captured in the primary performance measure, the Coast Guard tracks such information through a secondary measure, “the Tokyo and Paris memorandums of understanding port state control reports.”

This small set of examples demonstrates that, in some situations, other factors beyond resources expended may influence performance results. Developing a system or model that could realistically take all of these other factors into account is perhaps impossible, and it would be a mistake to view this second challenge as a need to do so. Rather, the challenge is to develop enough sophistication about each program’s context so that the Coast Guard can more systematically consider such

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22 The Tokyo and Paris memorandums of understanding are agreements between the U.S. and other countries to promote maritime safety and environmental protection, and eliminate sub-standard shipping through port controls that include enforcing applicable treaties. These treaties include various construction, design, equipment, operating, and training requirements related to maritime safety, environmental protection, and security. The Tokyo memorandum of understanding includes 19 countries and the Paris memorandum of understanding includes 22 countries.
factors, and then explain the influence of these factors on resource decisions and performance results.

The Coast Guard is actively seeking to address such challenges, as those discussed above, through efforts, some of which have been under way for several years. In 2004, we reported that several initiatives had already begun, and we recommended that the Coast Guard ensure that its strategic planning process and associated documents include a strategy for identifying intervening factors that may affect performance and systematically assess the relationship among these factors, resources expended, and results achieved. Shortly thereafter the Coast Guard chartered a working group to investigate its then more than 50 ongoing initiatives to make recommendations on their value, contribution, and practicality, and to influence agency decisions on the integration, investment, and institutionalization of these initiatives. The working group’s product was a “road map” that clearly defined executable segments, sequencing, and priorities. These results were then documented in a January 2005 Coast Guard internal report that summarized these priorities. Agency documents indicate that the Coast Guard later reduced these 50 original initiatives to the 25 initiatives considered to be the most critical and immediate by evaluating and categorizing all 50 initiatives based on their ability to contribute to the agency’s missions. These 25 initiatives, listed along with their status in appendix III, involve a broad range of activities that fall into seven main areas, as follows:

- **Measurement.** Five initiatives are intended to improve the agency’s data collection, including efforts to quantify input, output, and performance to enhance analysis and fact-based decision making.

- **Analysis.** Eight initiatives are intended to transform data into information and knowledge to answer questions and enhance decision making on issues such as performance, program management, cause-and-effect relationships, and costs.

- **Knowledge management.** Three ongoing initiatives are intended to capture, evaluate, and share employee knowledge, experiences, ideas, and skills.

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• **Alignment.** Three initiatives are intended to improve the consistency and alignment of agency planning, resource decisions, and analysis across all Coast Guard programs.

• **Access.** Two initiatives relate to making data, information, and knowledge transparent and available to employees.

• **Policy and doctrine.** Three initiatives are intended to develop new and maintain current Coast Guard management policies.

• **Communication and outreach.** One initiative is intended to assist and guide program managers and staff to understand and align all aspects of the Coast Guard’s overall management strategy.

We found that one of the initiatives that the working group deemed important and included among the most critical and immediate initiatives, relates, in part, to the first challenge we discussed—that is, developing new measures and improving the breadth of old measures to better manage Coast Guard programs and achieve agency goals. Coast Guard efforts have been ongoing in this regard, and our current work has identified several performance measures that were recently improved, and others that are currently under development. For example, to provide a more comprehensive measure of search and rescue program performance, the Coast Guard is improving its ability to track lives-unaccounted-for—that is, those persons who at the end of a search and rescue response remain missing. According to Coast Guard officials, the agency is working on and anticipates being able to eventually include data on lives-unaccounted-for in the primary performance measure. Also, the Coast Guard began including data on the number of recreational boating injuries, along with the data on mariner and passenger deaths and injuries and recreational boater deaths, which can help provide a more comprehensive primary measure for the marine safety program. In addition, recently, OMB guidance began requiring efficiency measures as part of performance management, and in response, the Coast Guard has started developing such efficiency measures. The Coast Guard is also developing a variety of performance measures to capture agency performance related to other activities, such as the prevention of invasive aquatic nuisance species (marine environmental protection), maritime mobility (aids to navigation), and domestic and polar icebreaking (ice operations).

Many of the Coast Guard’s other ongoing initiatives are aimed at the second challenge—that is, developing a better understanding of the various factors that affect the relationship between resources and results.
This is a substantial undertaking, and in 2005, upon the recommendation of the working group, the Coast Guard created an office to conduct and coordinate these efforts.\(^{24}\) This office has taken the lead in developing, aligning, implementing, and managing all of the initiatives. Together, the activities cover such steps as (1) improving measurement, with comprehensive data on activities, resources, and performance; (2) improving agency analysis and understanding of cause-and-effect relationships, such as the relationship between external factors and agency performance; and (3) providing better planning and decision making across the agency. Coast Guard officials expect that once these initiatives are completed, the Coast Guard will have a more systematic approach to link resources to results.

The Coast Guard has already been at this effort for several years but does not anticipate implementation of many of these initiatives until at least fiscal year 2010. The amount of time that has already elapsed since our 2004 report may raise some concerns about whether progress is being made. However, as described in the examples below, many of these are complex data-driven initiatives that make up a larger comprehensive strategy to better link resources to results, and as such, we think the lengthy time frame reflects the complexity of the task. According to Coast Guard officials, the agency is proceeding carefully and is still learning about how these initiatives can best be developed and implemented. Three key efforts help show the extent of, and interrelationships among, the various components of the effort:

- **Standardized reporting.** The Coast Guard is currently developing an activities dictionary to standardize the names and definitions for all Coast Guard activities across the agency. According to Coast Guard officials, this activities dictionary is a critical step in continuing to develop, implement, and integrate these initiatives. Officials added that standardizing the names and definitions of all Coast Guard activities will create more consistent data collection throughout the agency, which is important because these data will be used to support many other initiatives.

- **Measurement of readiness.** Another initiative, the Readiness Management System, is a tool being developed and implemented to track the agency’s readiness capabilities by providing up-to-date

\(^{24}\)The Office of Performance Management and Decision Support was established by the Coast Guard Chief of Staff on August 11, 2005.
information on resource levels at each Coast Guard unit as well as the certification and skills of all Coast Guard uniformed personnel. This information can directly affect outcomes and performance measures by providing unit commanders with information to reconfigure resources for a broad range of missions. Tracking this information, for example, should allow the unit’s commanding officer to determine what resources and personnel skills are needed to help ensure the unit has the skills and resources necessary to accomplish its key activities, or for new programs or activities. Coast Guard officials told us that the Readiness Management System is in the early stages of being implemented across the agency.

- **Framework for analyzing risk, readiness, and performance.** According to Coast Guard officials, the information from the Readiness Management System will be integrated with another initiative currently under development, the Uniform Performance Logic Model. This initiative is intended to illustrate the causal relationships among risk, readiness management, and agency performance. Coast Guard officials said that by accounting for these many factors, the model will help decision makers understand why events and outcomes occur, and how these events and outcomes are related to resources. For example, the model will provide the Coast Guard with an analysis tool to assist management with decisions regarding the allocation of resources.

The Coast Guard currently anticipates that many of the 25 initiatives will initially be implemented by fiscal year 2010 and expects further refinements to extend beyond this time frame. While the Coast Guard appears to be moving in the right direction and has neared completion of some initiatives, until all of the agency’s efforts are complete, it remains too soon to determine how effective it will be at clearly linking resources to performance results.

**Conclusions**

It is important for the Coast Guard to have sound performance measures that are clearly stated and described; cover key program activities; are objective, measurable, and quantifiable—including having annual targets; and using reliable data. This type of information would help Coast Guard management and stakeholders, such as Congress, make decisions about how to fund and improve program performance. We found that the Coast Guard’s non-homeland security performance measures satisfy many of the criteria and use data that are generally reliable. The weaknesses and limitations we did find do not mean that the measures are not useful but rather represent opportunities for improvement. However, if these
weaknesses are not addressed—that is, if measures are not clearly stated and well-defined, do not have measurable performance targets, or do not have criteria to objectively and consistently report data, or processes in place to ensure external data are reliable—the information reported through these measures could be misinterpreted, misleading, or inaccurate. For example, without either processes in place to review the reliability of external data used in performance measures, or a familiarity with the controls used by external parties to verify and validate these data, the Coast Guard cannot ensure the completeness or accuracy of all of its performance results.

While the Coast Guard’s measures are generally sound, even sound performance measures have limits as to how much they can explain about the relationship between resources expended and results achieved. The Coast Guard continues to work to overcome these limitations by developing a number of different initiatives, including but not limited to developing and refining the agency’s performance measures. Although the agency appears to be moving in the right direction, until all of the Coast Guard’s efforts are complete, we will be unable to determine how effective these initiatives are at linking resources to results. In the interim, an additional step the Coast Guard can take to further demonstrate the relationship between resources and results is to provide additional information or measures in some of its annual publications—aside from the one primary measure used in department publications—where doing so would help provide context or provide additional perspective. For example, this could be done in other venues—such as the Coast Guard’s annual Budget-in-Brief, or any program-specific publications—where reporting some secondary measures or additional data could provide more context or perspective on programs, and could help to more fully articulate to stakeholders and decision makers the relationship between resources expended and results achieved. Reporting supplemental information on such things as the percentage of aids to navigation available and in need of maintenance, the annual number of search and rescue cases, and icebreaking activities beyond the Great Lakes region would provide additional information on the annual levels of activity that constitute the aids to navigation, search and rescue, and ice operations programs; information that external decision makers, in particular, might find helpful. Reporting these measures would be useful to provide additional information to Congress on activities being conducted that may require more or less funding while the Coast Guard continues its work on the many initiatives it has ongoing aimed at better linking its performance results with resources expended.
Recommendations for Executive Action

To improve the quality of program performance reporting and to more efficiently and effectively assess progress toward achieving the goals or objectives stated in agency plans, we recommend that the Secretary of Homeland Security direct the Commandant of the Coast Guard to:

- Refine certain Coast Guard primary and secondary performance measures by:
  - further clarifying the ice operations primary measure by clearly and consistently describing the geographic area and number of waterways included in the measure; the living marine resources primary measure by clearly and consistently reporting the scope of the measure; and the search and rescue primary measure and the search and rescue “percent of lives saved after Coast Guard notification” secondary measure by reporting those incidents or data that are not included in the measures;
  - developing measurable performance targets to facilitate assessments of whether program and agency goals and objectives are being achieved for the 11 living marine resources secondary measures and the 1 marine environmental protection secondary measure, “Tokyo and Paris memorandums of understanding port state control reports,” that lack annual targets; and
  - establishing agencywide criteria or guidance to help ensure the objectivity and consistency of the search and rescue program’s “percent of property saved” secondary performance measure.
- Develop and implement a policy to review external data provided by third parties that is used in calculating performance measures to, at a minimum, be familiar with the internal controls external parties use to determine the reliability of their data.
- Report additional information—besides the one primary measure—in appropriate agency publications or documents where doing so would help provide greater context or perspective on the relationship between resources expended and program results achieved.
We provided a draft of this report to the Department of Homeland Security, including the Coast Guard, for their review and comment. The Department of Homeland Security and the Coast Guard generally agreed with the findings and recommendations of the draft and provided technical comments, which we incorporated to ensure the accuracy of our report. The Department of Homeland Security’s written comments are reprinted in appendix IV.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from the date of this letter. We will then send copies to the Secretary of Homeland Security; the Commandant of the Coast Guard; the Director, Office of Management and Budget; and make copies available to other interested parties who request them. In addition, the report will be available at no charge on GAO’s Web site at http://www.gao.gov.

If you have any questions about this report, please contact me at CaldwellS@gao.gov or (202) 512-9610. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix IV.

Stephen L. Caldwell
Acting Director, Homeland Security and Justice Issues
Appendix I: Objectives, Scope, and Methodology

For our first objective—whether the primary performance measure for the Coast Guard’s six non-homeland security programs are sound, and the data used to calculate them are reliable—we used previously established GAO criteria to determine the soundness of the primary performance measures. Specifically, we used our judgment to assess whether the measures are (1) clearly stated and described; (2) cover a key program activity and represent mission goals and priorities; (3) objective, that is whether they are open to bias or subjective interpretation; (4) measurable, that is, represent observable events; and (5) quantifiable, that is, are countable events or outcomes. A measure should be clearly stated and described so that it is consistent with the methodology used to calculate it and can be understood by stakeholders both internally and externally. Measures should also cover key program activities and represent program and agency goals and priorities to help identify those activities that contribute to the goals and priorities. To the greatest extent possible, measures should be objective, that is, reasonably free of bias or manipulation that would distort an accurate assessment of performance. When appropriate, measures should be measurable and quantifiable, including having annual targets, to facilitate future assessments of whether goals or objectives were achieved, because comparisons can be easily made between projected performance and actual results.

In addition, to further assess the soundness of the primary performance measures, we interviewed program officials from each non-homeland security program and reviewed planning and performance documentation from each program office at the headquarters, district, and sector levels. Program officials we spoke with included headquarters officials responsible for developing and implementing performance measures in each program, as well as officials at the district and sector levels responsible for collecting and entering performance data. We reviewed documentation on Coast Guard policies and manuals for performance measures, Coast Guard annual performance plans and reports, commandant instructions, prior GAO reports, Office of Management and Budget Program Assessment Rating Tool reviews for each program, and Department of Homeland Security annual reports.

To determine the reliability of data used in the primary measures, we assessed whether processes and controls were in place to ensure that the data used in the measures are timely, complete, accurate, and consistent.

1GAO/GGD-10-1.20.
and appear reasonable. We reviewed legislative requirements for data reliability in both the Government Performance and Accountability Act of 1993 and the Reports Consolidation Act of 2000 and reviewed Coast Guard standards and procedures for collecting performance data and calculating results. In addition, we interviewed agency officials at Coast Guard headquarters, as well as at the district and sector levels, regarding standardized agencywide data collection, entry, verification, and reporting policies, and inquired as to if and how these procedures differed across programs and at each level of the organization. We observed data entry for the Marine Information Safety and Law Enforcement database at Coast Guard district and sector offices in Boston, Massachusetts; Miami, Florida; and Seattle, Washington; a district office in Cleveland, Ohio; as well as at an air station in Miami, Florida; and a marine safety office in Cleveland, Ohio, to check for inconsistencies and discrepancies in how data are collected and maintained throughout the agency. We selected these field locations because of the number and types of non-homeland security programs that are performed at these locations. We also spoke with information technology officials responsible for maintaining the Marine Information Safety and Law Enforcement database.

For our second objective—whether selected secondary performance measures for four of the Coast Guard’s non-homeland security programs are sound—we selected measures in addition to the primary performance measures for the aids to navigation, living marine resources, marine environmental protection, and search and rescue programs. We selected these programs because they had the largest budget increases between the fiscal year 2005 budget and the Coast Guard’s fiscal year 2006 budget request, and are programs of particular interest because of events surrounding Hurricane Katrina. In addition, we did not assess any of the secondary measures that were in development at the time of our report. For these four programs, we assessed the soundness of only those other performance measures that Coast Guard officials said were high level, strategic measures used for performance budgeting, budget projections, management decisions, and external reporting. The 23 secondary measures we assessed for these four programs represent more than half of the 39 high-level, strategic secondary measures used to manage the six non-homeland security programs. To assess the soundness of the selected 23 secondary measures, we used the same GAO criteria and followed the same steps that we used to determine the soundness of the primary performance measures.

For our third objective—the challenges, if any, that are present in trying to use these measures to link resources expended to results achieved—we
interviewed Coast Guard budget officials at agency headquarters to discuss how performance measures are used in resource and budget allocation decision making processes. We reviewed previous GAO reports on performance measures, performance reporting, and the link between the Coast Guard's resources expended and results achieved. We also interviewed program officials at Coast Guard headquarters about ongoing initiatives the agency is developing and implementing to link resources expended to results achieved.

We conducted our work from July 2005 to August 2006 in accordance with generally accepted government auditing standards.
Appendix II provides our findings for the soundness of the high-level, strategic secondary measures we assessed (see table 5), as well as a list of those high-level, strategic secondary measures we did not assess (see table 6). Because of the large number of secondary measures for the Coast Guard's six non-homeland security programs, we assessed the soundness of secondary measures for the aids to navigation, living marine resources, marine environmental protection, and search and rescue programs, and we did not assess the soundness of secondary measures for the ice operations and marine safety programs.
Table 5: Soundness of Secondary Measures for Coast Guard’s Non-Homeland Security Programs

<table>
<thead>
<tr>
<th>Program and measure</th>
<th>Is measure sound?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aids to navigation</strong></td>
<td></td>
</tr>
<tr>
<td>Annual number of distinct collision, allision, and grounding events*</td>
<td>●</td>
</tr>
<tr>
<td>Aid availability</td>
<td>●</td>
</tr>
<tr>
<td>Aids overdue for servicing</td>
<td>●</td>
</tr>
<tr>
<td><strong>Living marine resources</strong></td>
<td></td>
</tr>
<tr>
<td>Percent of Marine Affairs graduates in Marine Affairs-coded billets</td>
<td>○</td>
</tr>
<tr>
<td>Number of domestic fisheries enforcement resource hours</td>
<td>○</td>
</tr>
<tr>
<td>Number of active commercial fishing vessels by major fishery</td>
<td>○</td>
</tr>
<tr>
<td>Number of domestic boardings by major fishery</td>
<td>○</td>
</tr>
<tr>
<td>Boardings per active commercial fishing vessels by major fishery</td>
<td>○</td>
</tr>
<tr>
<td>Number of significant violations by major fishery</td>
<td>○</td>
</tr>
<tr>
<td>Number of significant violations per domestic resource hours</td>
<td>○</td>
</tr>
<tr>
<td>Status of fish stocks</td>
<td>○</td>
</tr>
<tr>
<td>Number of Coast Guard members trained at Regional Fishing Training Centers</td>
<td>○</td>
</tr>
<tr>
<td>Cost per Coast Guard member trained at Regional Fishing Training Centers</td>
<td>○</td>
</tr>
<tr>
<td>Number of Marine Affairs graduates on active duty</td>
<td>○</td>
</tr>
<tr>
<td><strong>Marine environmental protection</strong></td>
<td></td>
</tr>
<tr>
<td>Annual number of oil spills greater than 100 gallons and chemical discharges per 100 million tons shipped</td>
<td>●</td>
</tr>
<tr>
<td>Annual volume of oil spilled</td>
<td>●</td>
</tr>
<tr>
<td>5-year average annual volume of oil spilled</td>
<td>●</td>
</tr>
<tr>
<td>5-year average annual number of distinct collision, allision, and grounding events*</td>
<td>●</td>
</tr>
<tr>
<td>Port state annual detention ratio*</td>
<td>●</td>
</tr>
<tr>
<td>Port state 3-year average detention ratio*</td>
<td>●</td>
</tr>
<tr>
<td>Tokyo and Paris memorandums of understanding port state control reports*</td>
<td>○</td>
</tr>
<tr>
<td><strong>Search and rescue</strong></td>
<td></td>
</tr>
<tr>
<td>Percent of lives saved after Coast Guard notification</td>
<td>○</td>
</tr>
<tr>
<td>Percent of property saved</td>
<td>○</td>
</tr>
</tbody>
</table>

**Legend**

● Yes
○ Weaknesses identified

Source: GAO analysis of Coast Guard secondary performance measures.

*Four secondary measures—(1) port state annual detention ratio; (2) port state 3-year average detention ratio; (3) Tokyo and Paris memorandums of understanding port state control reports; and (4) annual number of distinct collision, allision, and grounding events—are each used by the aids to navigation, marine environmental protection, and marine safety programs.

*The marine environmental protection program secondary measure, 5-year average annual number of distinct collision, allision, and grounding events, is also the primary performance measure for the aids to navigation program.
## Table 6: Coast Guard Non-Homeland Security Secondary Performance Measures Not Assessed

<table>
<thead>
<tr>
<th>Program and measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ice operations</strong></td>
<td><strong>Ensure that ferry service to isolated communities is not interrupted for more than 2 days annually</strong>&lt;br&gt;<strong>Annually respond to all Army Corps of Engineers requests to assist in relieving ice jams to prevent potential flooding</strong>&lt;br&gt;<strong>Annually during ice season ensure that 95 percent of vessels transiting during light winters, 90 percent of vessels transiting during normal winters, and 70 percent of vessels transiting during severe winters are able to maintain an average track speed of 3 knots.</strong>&lt;br&gt;<strong>With adequate advanced notice, annually provide all necessary icebreaking services to allow product delivery</strong></td>
</tr>
<tr>
<td><strong>Marine safety</strong></td>
<td><strong>Annual observed wear rate of personal flotation devices</strong>&lt;br&gt;<strong>Annual number of voluntary Vessel Safety Exams</strong>&lt;br&gt;<strong>Annual number of boating operators receiving boating education (by state)</strong>&lt;br&gt;<strong>Annual number of recreational boating safety boardings by states</strong>&lt;br&gt;<strong>Annual number of recreational boating safety boardings by Coast Guard</strong>&lt;br&gt;<strong>Annual number of citations issued for improper carriage of safety equipment</strong>&lt;br&gt;<strong>Annual number of boatings under the influence (by state)</strong>&lt;br&gt;<strong>Annual number of commercial vessel safety-related mariner deaths</strong>&lt;br&gt;<strong>Annual number of commercial vessel safety-related passenger deaths</strong>&lt;br&gt;<strong>Annual number of commercial vessel safety-related mariner injuries</strong>&lt;br&gt;<strong>Annual number of commercial vessel safety-related passenger injuries</strong>&lt;br&gt;<strong>5-year average number of passenger and maritime worker casualties and recreational boating deaths divided by the ratio of the current period to the prior period 5-year average operating expense authority for marine safety</strong></td>
</tr>
</tbody>
</table>

Source: Coast Guard.
Appendix III provides a list of the Coast Guard’s ongoing initiatives to improve the agency’s planning, resource management, and decision support systems to more closely align performance with resources. (See table 7.)

Table 7: Ongoing Coast Guard Initiatives to Link Resources Used to Results Achieved

<table>
<thead>
<tr>
<th>Type of initiative</th>
<th>Purpose</th>
<th>Initiative</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measurement initiatives</strong></td>
<td>Measurement initiatives are being developed to provide numerical facts and data to quantify input, output, and performance dimensions of processes, products, services, and overall organizational outcomes.</td>
<td>Readiness Management System</td>
<td>Operational in fiscal year 2005.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Risk-Based Decision Making</td>
<td>Estimated to be completed in fiscal year 2010.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Operational Transactional Systems</td>
<td>These systems are currently operational.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Logistics</td>
<td>Estimated to be completed in fiscal year 2010.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Performance Measures and Scorecards</td>
<td>Measures and scorecards are currently used, but efforts to improve are ongoing.</td>
</tr>
<tr>
<td><strong>Analysis initiatives</strong></td>
<td>Analysis initiatives are being developed to examine and transform numerical facts and data into information and knowledge for effective decision making. Analyses are conducted to answer questions about performance, program management, cause-and-effect relationships, costs, strategy, and, in general, overall Coast Guard management.</td>
<td>Activity-Based Management</td>
<td>Estimated to be completed in fiscal year 2010.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modeling and Simulation</td>
<td>Estimated to be completed in fiscal year 2010.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Force/Asset Requirements</td>
<td>Operational in fiscal year 2003 but efforts to improve are ongoing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Risk Assessments and Profiles</td>
<td>These assessments are currently used, but efforts to improve are ongoing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Competency Assessments</td>
<td>Initially performed in fiscal year 2004, but efforts continue to be ongoing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G-Organizational Assessments</td>
<td>These assessments are performed annually.</td>
</tr>
</tbody>
</table>
## Appendix III: Ongoing Coast Guard Initiatives to Link Resources Used to Results Achieved

<table>
<thead>
<tr>
<th>Type of initiative</th>
<th>Purpose</th>
<th>Initiative</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge management initiatives</strong></td>
<td>Knowledge management initiatives are being developed to accumulate, evaluate, and share enterprise information assets—that is, management strategies, methods, and knowledge possessed by employees in the form of information, ideas, learning, understanding, memory, insights, cognitive and technical skills, and capabilities.</td>
<td>Evergreen Strategic Renewal Process</td>
<td>This strategic process is conducted every 4 years.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Risk-based Performance Management</td>
<td>Currently undergoing testing as a pilot project; estimated to be completed in fiscal year 2010.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capital Asset Management</td>
<td>Estimated to be completed in fiscal year 2010.</td>
</tr>
<tr>
<td><strong>Alignment initiatives</strong></td>
<td>Alignment initiatives are being developed to improve consistency of plans, processes, actions, information, resource decisions, results, analyses, and learning to support key organizationwide goals.</td>
<td>Unified Performance Logic Model</td>
<td>Estimated to be completed in fiscal year 2010.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Activities Dictionary, Product and Services Catalog, and Enterprise lexicon</td>
<td>Partially completed; estimated to be completed in fiscal year 2010.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enterprise Architecture</td>
<td>Ongoing; began development in fiscal year 2004.</td>
</tr>
<tr>
<td><strong>Access initiatives</strong></td>
<td>Access initiatives are being developed to provide enterprise-wide right of entry to organizational information and knowledge to promote visibility, transparency, and use of valid, reliable, and consistent data and information to know, compare, benchmark, and improve organizational performance.</td>
<td>Coast Guard Central</td>
<td>Operational in fiscal year 2005, but efforts to improve are ongoing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enterprise Data Warehouse</td>
<td>This is an ongoing effort to merge Coast Guard data sources.</td>
</tr>
<tr>
<td><strong>Policy and doctrine initiatives</strong></td>
<td>Policy and doctrine initiatives are being developed to maintain current, and develop new, Coast Guard management policies.</td>
<td>Commandant's Performance Excellence Criteria</td>
<td>Ongoing; performed on annual and biennial basis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Innovation Process and Recognition Program</td>
<td>Ongoing; performed on annual basis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Measurement</td>
<td>Ongoing, initially implemented in fiscal year 1995.</td>
</tr>
<tr>
<td><strong>Communication and outreach initiative</strong></td>
<td>This communication and outreach initiative is being developed to assist and guide commands and staffs in understanding and aligning with all aspects of the Coast Guard.</td>
<td>Organizational Performance Consultants Field Guide</td>
<td>Completed.</td>
</tr>
</tbody>
</table>

Source: Coast Guard.
Appendix IV: Comments from the Department of Homeland Security

Homeland Security

August 11, 2006

Mr. Stephen L. Caldwell
Acting Director
Homeland Security and Justice Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Caldwell:


The Department of Homeland Security appreciates the opportunity to review and comment on the draft report. The Government Accountability Office (GAO) recommends that the Coast Guard refine particular primary and secondary performance measures, develop and implement a policy to review external data provided by third parties used in calculating Coast Guard performance measures, and report additional information in appropriate publications or documents. We generally agree with the recommendations which essentially recognize that performance measures are in place and meet Government Performance and Results Act requirements, but can be improved upon or refined.

The report acknowledges Coast Guard’s successful efforts to address prior GAO and Office of Management and Budget recommendations designed to improve performance measures. During this engagement, GAO found that primary performance measures were generally sound and the data used to calculate them reliable and correctly noted that even sound performance measures have limits to how much they can explain the relationship between resources expended and results achieved. Coast Guard has developed a range of initiatives that we believe will help explain the effects of external factors on program results other than resources expended. Some of these initiatives, due to their complexity, will require additional time to complete. The report overall reflects Coast Guard’s focus on continuous improvement.

Sincerely,

Steven J. Pecinovsky
Director
Departmental GAO/OIG Liaison Office

www.dhs.gov
Appendix V: GAO Contact and Staff
Acknowledgments

<table>
<thead>
<tr>
<th>GAO Contact</th>
<th>Stephen L. Caldwell, Acting Director, Homeland Security and Justice Issues, (202) 512-9610, or <a href="mailto:CaldwellS@gao.gov">CaldwellS@gao.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgments</td>
<td>In addition to the individual named above, Billy Commons, Christine Davis, Michele Fejfar, Dawn Hoff, Allen Lomax, Josh Margraf, Dominic Nadarski, Jason Schwartz, and Stan Stenersen made key contributions to this report.</td>
</tr>
</tbody>
</table>


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