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Monterey, California. Naval Postgraduate School

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ACQUISITION RESEARCH PROGRAM  
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NAVAL POSTGRADUATE SCHOOL

# Federal Contracting: Senior Leaders Should Use Leading Companies' Key Practices to Improve Performance

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## Abstract

Each year, federal agencies spend over \$500 billion to buy a wide variety of products and services, ranging from cutting-edge military aircraft to common office supplies. Given the federal funds spent and the missions these contracts support, it is critical that agencies' procurement leaders manage their organizations effectively. GAO found procurement leaders at six of the federal government's largest agencies did not consistently use key practices that leading companies use to improve the performance of their procurement organizations. For example, only the procurement leaders at NASA collaborated with end users when developing performance metrics. Corporate procurement leaders told GAO that collaboration with end users during the development and implementation of performance metrics increases coordination and improves performance at the strategic level. Additionally, GAO found procurement leaders at most of the agencies reviewed had ongoing or planned efforts to use performance metrics to measure at least one of the four procurement outcomes identified as important by corporate procurement leaders: (1) cost savings/avoidance, (2) timeliness of deliveries, (3) quality of deliverables, and (4) end-user satisfaction. However, all of the leaders had work to do to fully implement metrics measuring these outcomes. The original GAO report is accessible at [www.gao.gov/products/gao-21-491](http://www.gao.gov/products/gao-21-491).

## Methodology

GAO's report examined key practices that leading companies use to improve the performance of their procurement organizations, and the extent to which procurement leaders at selected federal agencies use those practices. GAO interviewed senior procurement leaders at seven leading companies, and experts from four professional associations and five academic institutions. GAO selected these individuals based on literature reviews and conversations with knowledgeable officials. GAO compared key practices they identified to those used at six federal agencies selected based on the dollar value and number of procurement actions, among other factors:

- The Air Force
- The Army
- The Navy
- The Department of Homeland Security (DHS)
- NASA
- The Department of Veterans Affairs (VA)

GAO analyzed documentation on each agency's procurement management practices, and interviewed the agencies' senior procurement leaders. The federal government does not have generally accepted definitions for outcome-oriented and process-oriented metrics.



## Background

The Federal Acquisition Regulation (FAR)—which provides policies and procedures for federal government acquisition—states that the federal acquisition system must be responsive and adaptive to customer needs, concerns, and feedback (FAR 1.102-2). There are a variety of officials responsible for managing the contracting functions at federal agencies. The FAR establishes that, unless specifically prohibited by another provision of law, authority and responsibility to contract for products and services is vested in the agency head (FAR 1.601). The FAR also states that the agency head may establish contracting activities, and delegate broad authority to manage the agency’s contracting functions to the Heads of the Contracting Activities (HCA). Further, the Services Acquisition Reform Act established that non-DOD agencies’ Senior Procurement Executives (SPE) are generally responsible for (1) ensuring that procurement goals align with agencies’ missions, (2) establishing procurement policies, and (3) managing the agencies’ procurement activities (Services Acquisition Reform Act of 2003). Table 1 presents the senior procurement leaders—HCAs and SPEs—we focused on in this review.

**Table 1: Senior Procurement Leaders at the Federal Agencies Included in GAO’s Review**

Agencies	Senior Procurement Leaders
Department of the Air Force	Deputy Assistant Secretary of the Air Force (Contracting)/Head of Contracting Activity (HCA)
Department of the Army	Deputy Assistant Secretary of the Army (Procurement)/HCA
Department of the Navy	Deputy Assistant Secretary of the Navy (Procurement)/HCA
Department of Homeland Security	Chief Procurement Officer/Senior Procurement Executive (SPE)
National Aeronautics and Space Administration	Assistant Administrator, Office of Procurement/SPE
Department of Veterans Affairs	Executive Director, Office of Acquisition and Logistics/SPE

Source: GAO analysis of agency documentation.

Note: The Army and the Navy have a total of four and 11 HCAs, respectively. In addition to the senior procurement leaders identified in this table who have department-wide responsibilities, the Army and Navy have HCAs with narrower areas of responsibility, for example, at an individual command.

## Prior GAO Work on Performance Management

Congress has taken actions to improve performance management across the federal government, including the management of agencies’ procurement operations. In 1993, Congress passed, and the president signed into law, the Government Performance and Results Act (GPRA) to improve agencies’ performance by establishing a framework for developing and integrating agencies’ missions, strategic priorities, and performance goals, among other things (GPRA, 1993). Congress subsequently amended GPRA with the GPRA Modernization Act of 2010, which includes several provisions that provide an opportunity for agencies to increase federal agencies’ use of information to improve their performance (GPRA Modernization Act, 2010). We previously reported on how agencies can better meet the intent of GPRA and the GPRA Modernization Act. For example, we identified key practices agencies can take to implement these laws, including the following:

- **Linkage between individual performance and organization success:** We found that explicit linkage helps individuals see the connection between their daily activities and organizational goals, and encourages individuals to focus on how they can help achieve those goals (GAO, 2003, 2017).
- **Collaborating with stakeholders on performance management:** We found it is valuable for performance evaluators to develop relationships with stakeholders to gain



their input and buy-in, and that doing so can increase the usefulness and use of performance information in program management and policy (GAO, 1996, 2005, 2013).

- **Using performance information:** We found that agencies should establish and use a balanced set of performance measures, including outcome and process measures, and that they should obtain complete and reliable performance information (GAO, 1996, 2005, 2015). We found these actions help federal agencies identify improvement opportunities, set priorities, and allocate resources.

For the purposes of the GAO report, we established two categories of performance metrics for contracting: (1) outcome-oriented performance metrics, and (2) process-oriented performance metrics. The federal government does not have generally accepted definitions for these categories, so we defined them as follows. Outcome-oriented performance metrics for procurement organizations are those metrics that measure the results of organizations' procurement activities. Process-oriented performance metrics for procurement organizations are those metrics that measure the type or level of procurement activities conducted. Both types of measures have merit. See Table 2 for examples of outcome and process-oriented performance metrics for procurement organizations, whether in the government or the private sector.

<b>Outcome-oriented</b>	<b>Process-oriented</b>
Quality of product or services procured	Number of contract awards
Timeliness of deliveries to end users	Competition rates <sup>a</sup>
Cost savings or avoidance	Small business utilization rates

Source: GAO analysis of leading practices for private sector companies and agencies in our review.

<sup>a</sup>In general, "competition rate" measures the extent to which contracts are competitively awarded pursuant to the Federal Acquisition Regulation.

Additionally, for the purposes of this report, we are using the term *end users* to identify internal stakeholders that use the products and services procured. Some individuals identify end users as "customers," but we are not using the term *customer*, except when agencies use it in formal documentation. We chose the term end user because some key leaders told us they did not agree with the unequal partnership the term customer implies.

### **Differences between Procurement Organizations at Companies and Agencies**

Leading companies and federal agencies both buy a wide variety of products and services critical to their operations. However, procurement leaders at leading companies operate in a different environment than procurement leaders at federal agencies. Procurement leaders at leading companies often focus on financial measures like profit margins and return on investment, but procurement leaders at federal agencies do not. Further, procurement leaders' actions are subject to laws and regulations intended to promote transparency and fairness, and to support socioeconomic goals. For example, procurement leaders are expected to maximize competition for government contracts, and meet small business utilization goals, which can introduce additional dimensions to procurement leaders' management responsibilities at federal agencies (FAR 7.105).<sup>1</sup>

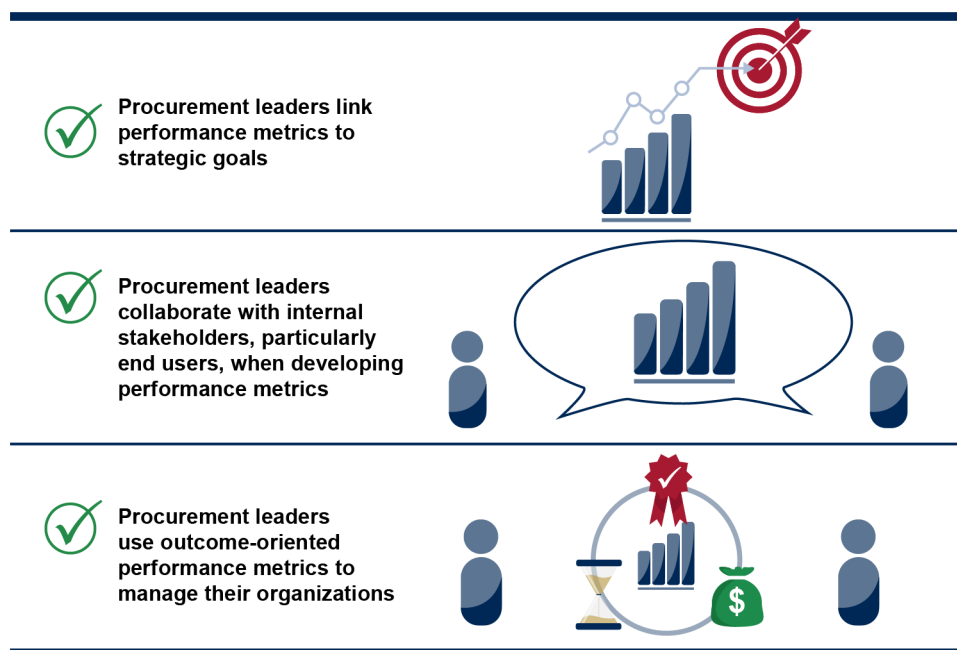
<sup>1</sup>Federal program managers are required to engage in acquisition planning to ensure maximum competition, while considering small business contract goals (FAR 7.105).



Our prior work identified leading practices for federal agencies to obtain best value for taxpayer dollars and meet socioeconomic goals. For example, to leverage the government’s buying power, we recommended that agencies enhance various category management efforts intended to improve how the government buys common products and services (GAO, 2004, 2016, 2020a). To meet socioeconomic goals, we recommended the Small Business Administration improve oversight of the women-owned small business program, and improve record-keeping of federal contracting and subcontracting opportunities for small businesses (GAO, 2019, 2020b).

## Procurement Leaders at Leading Companies Generally Use Three Key Practices to Improve Organizational Performance

Corporate procurement leaders and subject matter experts we interviewed told us leading companies have increasingly recognized the extent to which procurement operations help them achieve their overarching business goals. Based on those interviews, we identified three key practices leading companies use to improve the performance of their procurement organizations and help their companies achieve strategic goals (see Figure 1).



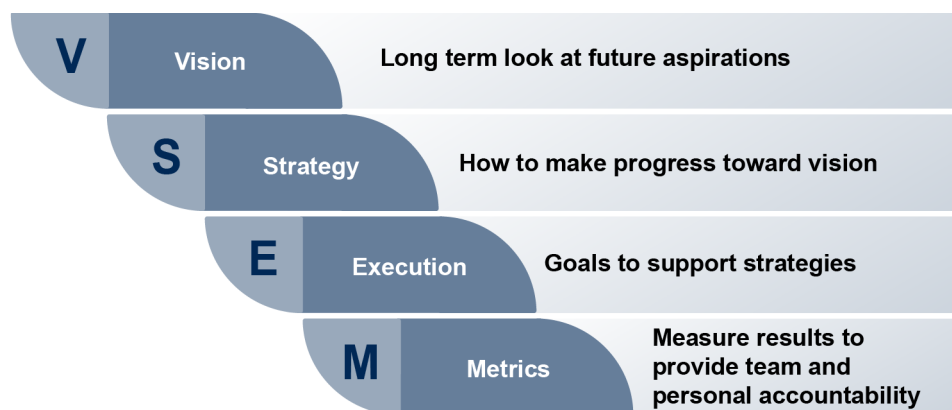
Source: GAO analysis of private sector companies’ procurement practices. | GAO-21-491  
 Figure 1: Procurement Leaders at Leading Companies Generally Use Three Key Practices When Managing Their Procurement Organizations

### Corporate Procurement Leaders Link Performance Metrics to Strategic Goals

In interviews, corporate procurement leaders and subject matter experts emphasized the importance of linking performance metrics and procurement goals to corporate strategic goals. For example, a procurement expert at the Naval Postgraduate School told us the private sector has come to appreciate the extent to which procurement operations help companies achieve their overarching business goals, and that it is now common for corporate-level goals to drive procurement-specific goals and metrics. The expert added that companies can make better purchasing decisions when their procurement teams understand how they are expected to contribute to corporate goals. Similarly, a procurement executive who served as a senior

contracting leader at a private technology firm, and prior to that in similar positions at several federal agencies, told us that successful private sector contracting leaders and organizations link their procurement teams' goals to the overall organization's goals. Procurement leaders from leading companies provided us examples of how they linked performance metrics to strategic goals, including the following.

- Facebook** procurement leaders told us the company uses the Vision, Strategy, Execution, and Metrics (VSEM) method—which was originally pioneered by Cisco—to link the procurement team's metrics to the company's top-level goals. Facebook representatives said the VSEM method allows the procurement team to understand how its activities contribute to the company's overarching strategy. For example, procurement representatives told us they used the VSEM method to translate Facebook's strategic goals—which focus on quality, speed, protecting Facebook, and cost—into performance metrics (see Figure 2).



Source: GAO depiction of VSEM concept by Stewart McCutcheon and Ecolab. | GAO-21-491

Figure 2: The Vision, Strategy, Execution, and Metrics Method

- General Electric (Aviation)** procurement leaders told us their company's leadership uses the Hoshin Kanri process to link procurement goals and performance metrics to strategic goals (see Figure 3). This process is well established, and used by other leading companies—including Toyota and Hewlett Packard—to communicate strategic goals throughout the company and link them to lower-order goals and metrics, including goals and metrics for procurement teams. For example, a strategic goal to improve product quality could drive a procurement goal for reducing defects in components procured from key suppliers, and a corresponding metric that measures the number of defects per thousand units procured.





STEP 1	Establish organizational vision
STEP 2	Develop strategic objectives
STEP 3	Develop annual objectives
STEP 4	Deploy annual objectives
STEP 5	Implement annual objectives
STEP 6	Conduct monthly review
STEP 7	Conduct annual review

Source: GAO depiction of the Hoshin Kanri process from "The Seven Steps of Hoshin Planning" (Waldo, Lean Methods Group). | GAO-21-491

Figure 3: The Hoshin Kanri Process

- Procter and Gamble's (P&G)** senior procurement leader told us he ensured that there was linkage between his company's strategic goals and his procurement team's performance metrics. Specifically, he told us he uses language from the strategic goals when reviewing his procurement team's work plans, and that this approach facilitates consistent messaging, which is critical to building a team and common goals.

**Procurement Leaders Collaborate with Internal Stakeholders, Particularly End Users, When Developing Performance Metrics**

Corporate procurement leaders told us they also collaborate with internal stakeholders to determine what procurement performance metrics should measure. These leaders said it is particularly important to collaborate with the internal stakeholders that use the products and services their teams procure—these stakeholders are often referred to as “end users.” The procurement leaders told us that collaboration with end users and end-user representatives increases coordination across functional teams—for example, sales, logistics, finance—and improves performance at the strategic level. For example:

- Raytheon Technologies** procurement leaders told us they continually collaborate with other functional teams when establishing performance metrics and goals to ensure they do not conflict with one another. For example, a procurement team with a unit-price metric may be incentivized to buy large volumes of a commodity to get a discount rate, but this approach could conflict with a logistics team's efforts to decrease warehousing costs. Raytheon Technologies' procurement leaders told us they mitigate these types of conflicts through cross-functional coordination focused on strategic goals, such as reducing total operating costs.
- One of **ExxonMobil's** senior procurement leaders told us that procurement teams are expected to collaborate and maximize efficiencies across functional teams when they are buying products and services. He explained that it is important for procurement teams and stakeholders to have clarity as to why purchasing must be done a certain way. ExxonMobil has various types of businesses, including fuel and chemical businesses. End users from these businesses often collaborate with one another and procurement teams to determine whether they should buy a particular product, such as a



valve, on a micro-scale or at an enterprise-level. ExxonMobil's senior procurement leader told us the company's procurement team managers understand they are expected to meet the needs of the business units to help create value for shareholders.

- **AT&T** procurement leaders told us they collaborate with internal stakeholders to establish goals and metrics for their procurement teams that support the company's strategic goals. For instance, in pursuit of a strategic goal for revenue growth, the procurement leaders worked closely with the sales and logistics teams to establish metrics for measuring availability and turnover of inventory.

## **Procurement Leaders Use Outcome-Oriented Performance Metrics to Manage Their Organizations**

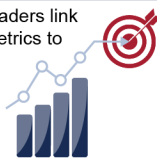


Experts at academic institutions and professional associations told us companies use outcome-oriented performance metrics to enhance procurement operations. They said companies use these metrics to identify which of their procurement teams are achieving desired outcomes, such as reducing costs and improving performance. The corporate procurement leaders we interviewed emphasized the importance of using four types of outcome-oriented metrics: (1) cost savings/avoidance, (2) timeliness of deliveries, (3) quality of deliverables, and (4) end-user satisfaction. Corporate procurement leaders provided specific examples of how they have used outcome-oriented performance data to make management decisions, including the following.





- **Facebook** procurement leaders told us they use outcome-oriented performance metrics to identify operational deficiencies and make needed improvements, and that these metrics measure (1) whether products and services cost more or less than they should, (2) on-time deliveries, and (3) failure rates indicating the quality of deliverables. They emphasized that Facebook is a metric-heavy organization, and that it would be counter to their operating model to make decisions in the absence of outcome-oriented metrics. They also provided an example of how they used outcome-oriented procurement data. During a performance assessment, procurement leaders found some groups were missing performance targets for quality and timeliness of deliveries. This discovery drove additional analysis, and the procurement team determined that the lack of a dedicated contract execution team was contributing to these issues. After various discussions, company leadership created a contract execution team to help improve the quality and timeliness of deliveries.
- **Kroger's** senior procurement leader told us Kroger uses data to demonstrate how procurement teams are benefitting the company. As part of this effort, the leader told us he uses outcome-oriented metrics to measure cost savings, timeliness of deliveries, and quality of deliverables. He also said that prior to having a strong procurement organization with reliable outcome-oriented performance data, many management decisions were based on "I think, I feel, and I want," which led to poor decisions.
- **Raytheon Technologies** procurement leaders told us they have several outcome-oriented metrics, which measure cost savings, delivery times, and supplier quality. A senior procurement representative told us that these metrics are reviewed regularly to determine how the procurement organization is performing.
- **AT&T** procurement leaders told us they used end-user survey data to adjust their procurement team's buying behavior to better meet the company's needs. Specifically, they told us AT&T relies on real-time data and feedback from its frontline employees to adjust and optimize productivity while focusing on continuous process improvements.



## Procurement Leaders at Selected Federal Agencies Did Not Consistently Use Key Practices to Improve Organizational Performance

Procurement leaders at all six of the federal agencies we reviewed linked the performance metrics for their procurement organizations to their agency’s strategic goals to help procurement personnel see connections between their daily activities and their agency’s mission. However, procurement leaders at five of the six agencies we reviewed told us that they did not collaborate with end users to develop performance metrics. Procurement leaders told us that they did not collaborate with end users for various reasons, including that end users were not particularly interested in the types of process-oriented metrics used to assess procurement organizations, and that they could define metrics appropriately without formal end-user input. As a result, the leaders missed opportunities to increase the usefulness and use of performance information in program management and policy. Additionally, the procurement leaders’ use of outcome-oriented metrics was limited, as they primarily relied instead on process-oriented metrics. The leaders cited various reasons for not using more outcome-oriented metrics. For example, two leaders told us that their current performance data for product and service quality are unreliable. As a result, the leaders lack balanced sets of performance measures that include both process- and outcome-oriented metrics, which we previously found help federal agencies identify improvement opportunities, set priorities, and allocate resources (GAO, 2015). Figure 4 shows the extent to which federal agencies used leading companies’ key practices when managing their procurement organizations.

Private sector practices	Air Force	Army	Navy	DHS	NASA	VA
 Procurement leaders link performance metrics to strategic goals	✓	✓	✓	✓	✓	✓
 Procurement leaders collaborate with internal stakeholders, particularly end users, when developing performance metrics	✗	✗	✗	✗	✓	✗
 Procurement leaders use outcome-oriented performance metrics to manage their organizations	🕒	🕒	✗	🕒	🕒	🕒

 Used   
  Limited use   
  In progress   
  Not used

NASA = National Aeronautics and Space Administration    VA = Department of Veterans Affairs  
 DHS = Department of Homeland Security

Source: GAO analysis of federal agencies procurement practices. | GAO-21-491

Note: Our assessment of procurement leaders’ collaboration when developing performance metrics reflects the extent to which they collaborated with end users.

Figure 4: Federal Agencies Consistently Used One of the Three Key Practices Leading Companies Use When Managing Their Procurement Organizations



## Procurement Leaders at Federal Agencies GAO Reviewed Linked Performance Metrics to Strategic Goals

Procurement leaders at all the agencies in our review linked their performance metrics to their agencies' strategic goals. These leaders stated that doing so helps ensure acquisition personnel are focused on the right things to support their agency's mission. These statements are consistent with statements we heard from procurement leaders at leading companies. Additionally, our previous work on creating a results-oriented culture found that explicit alignment between individuals' daily activities and organizational goals encourages individuals to focus on how they can help achieve those goals (GAO, 2003, 2017).

## Procurement Leaders at Most of the Federal Agencies Reviewed Did Not Collaborate with End Users When Developing Performance Metrics

Procurement leaders at the six agencies in our review derived their performance metrics from statute, federal regulations, and OMB metrics, and collaborated with other members of the procurement community to develop performance metrics. However, only the procurement leaders from **NASA** collaborated with end users from the installation centers—such as technical experts—when developing performance metrics. In early 2021, NASA procurement leaders collaborated with these end users to develop a survey tool that collects quantitative and qualitative information that reflects end-user priorities. For example, the survey tool asks end users to rate the extent to which procurement officials met their needs, and gauges end-users' satisfaction with procurement officials' communication. NASA officials told us they initiated development of the survey tool in an effort to develop an end-user satisfaction performance metric after we provided them information about the key practices corporate leaders use in August 2020.

Procurement leaders at the other five agencies we reviewed did not collaborate with end users when they developed their performance metrics.

- The senior procurement leader at the **Air Force** told us he did not collaborate with end users, such as wing commanders, when developing performance metrics because he did not want end users to influence contracting operations excessively. He said too much end-user influence could discourage contracting officers from being business leaders, and lead to suboptimal results, such as narrowly pursuing specific, less-innovative solutions from industry. Instead, he collaborated with subordinate procurement leaders and members of the Air Force's financial management community to develop performance metrics for cost savings and cost avoidance, among other things.
- The senior procurement leader at the **Army** said she did not collaborate with end users, such as brigade commanders, and instead collaborated only within the procurement community when developing performance metrics.
- Procurement leaders at **Navy** headquarters, including the Navy's senior procurement leader, told us they did not collaborate with end users, including those representing the fleets, but that individual HCAs did collaborate with end users to develop performance metrics for their individual areas of responsibility. However, as a result, the performance metrics the Navy's senior procurement leader uses to assess activities across the entirety of the Navy are not informed by end-user input.
- **DHS's** senior procurement leader told us she did not collaborate with end users or their representatives when she developed performance metrics. She explained that end-user representatives, such as the leadership of the Border Patrol, are not particularly interested in the types of process-oriented metrics DHS uses to assess procurement



organizations, including small business utilization rates and workforce certifications. Instead, the DHS's senior procurement leader collaborated with other members of the procurement community, such as HCAs and small business proponents, to refine performance metrics and the associated targets. For example, for Fiscal Year 2020, she worked with the HCA for Immigration and Customs Enforcement to revise the component's "spend under management" target from \$592 million to \$779 million based on the prior year's performance.<sup>2</sup>

- In March 2021, **VA** procurement leaders told us their current performance metrics were not informed by end user input, but that they were in the process of testing a new survey tool they may use in the future, and that they had solicited end-user input through contracting officer representatives as part of that testing.<sup>3</sup>

Procurement leaders in the private sector told us that collaboration with end users during the development and implementation of performance metrics increases coordination and improves performance at the strategic level. While one senior procurement leader told us that too much end-user influence could lead to suboptimal results, leaders do not have to cede control when they collaborate with end users, and we have previously found that obtaining stakeholder input can increase the usefulness and use of performance information in program management and policy (GAO, 2005, 2013).

### **Procurement Leaders Primarily Rely on Process-Oriented Metrics, but Most Have Plans to Use at Least One Outcome-Oriented Metric In the Future**

Procurement leaders at most of the agencies we reviewed have ongoing or planned efforts to use performance metrics to measure at least one procurement outcome, such as cost savings and end-user satisfaction. However, we found the leaders at all six of the agencies we reviewed rely primarily on metrics measuring processes, as they have in the past. These metrics are largely derived from OMB or statutorily required goals, and measure competition rates, small business utilization, and workforce certifications, among other things.

These leaders cited various reasons for not implementing metrics that are more outcome-oriented. For example, one leader said that too much focus on end-user satisfaction is a risk because some of the procurement community's innovations are achieved by focusing on mission rather than end-user satisfaction. While we recognize that too much end-user influence can introduce risk, corporate procurement leaders we interviewed emphasized the importance of measuring end-user satisfaction as part of their efforts to improve the performance of their procurement organizations. Additionally, two leaders told us current performance data for product and service quality are unreliable, although half of the leaders in our review are working to improve the quality of this data at their respective agencies, which can help facilitate the use of outcome-oriented metrics. Private sector procurement leaders we interviewed also noted they made concerted efforts to improve the quality of high-priority data.

We have previously reported that establishing a balanced set of performance measures, including both process- and outcome-oriented measures, and obtaining complete and reliable performance information can help federal agencies identify improvement opportunities, set priorities, and allocate resources (GAO, 1996, 2005, 2015). Below, we assess the extent to

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<sup>2</sup>The Office of Management and Budget uses a spend under management model to identify contracts that adhere to category management principles. When contracts adhere to those principles, that spending is considered "managed." According to the General Services Administration, increasing spend under management will decrease costs, contract duplication, and inefficiency; and lead to better buying outcomes. For additional information on spend under management, see GAO, *Federal buying power* (2020a).

<sup>3</sup>Contracting officers representatives are designated and authorized in writing by the contracting officer to collaborate with requiring activities and contractors to perform specific technical or administrative functions (FAR 2.101).



which senior procurement leaders at the agencies we reviewed used the four types of outcome-oriented metrics used at leading companies: (1) cost savings/avoidance, (2) timeliness of deliveries, (3) quality of deliverables, and (4) end-user satisfaction.

### Department of the Air Force

The Air Force’s senior procurement leader has used a cost savings/cost avoidance metric to manage the Air Force’s procurement organizations and is working to develop an outcome-oriented timeliness metric to supplement existing process-oriented metrics (see Figure 5).

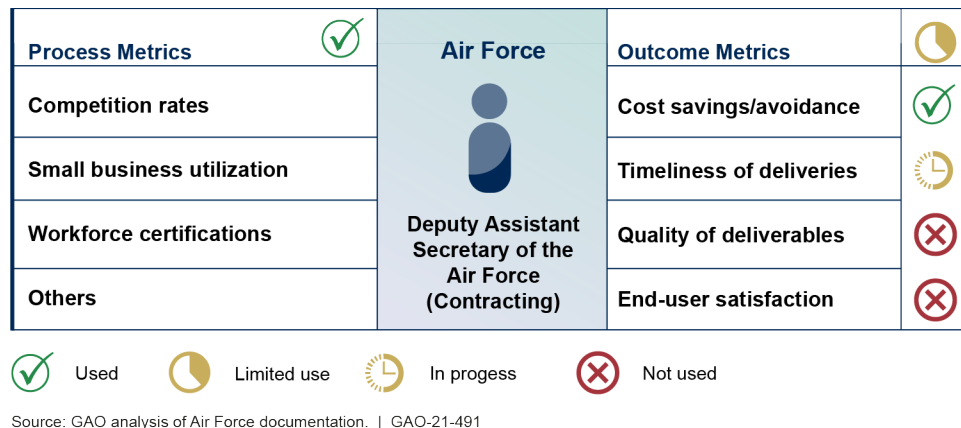


Figure 5: Air Force Performance Metrics for Procurement Organizations

The Air Force’s senior procurement leader established a cost-savings tracker to identify, track, and validate **cost savings and avoidance** across the department. As of March 2021, the Cost Savings Tracker had identified \$2.38 billion in cost savings and avoidance.<sup>4</sup> For example, the Cost Savings Tracker identified \$158 million in cost savings for IT, which the Air Force achieved by adjusting IT refresh rates so they were driven by need rather than funding availability. Air Force procurement leaders told us they used the Cost Savings Tracker to identify additional opportunities to save or avoid costs, including by reassessing IT refresh rates. Additionally, the Air Force’s senior procurement leader told us he was taking initial steps to obtain congressional approval for a pilot program to reinvest some of these savings back into the Air Force, which he said will incentivize decision-makers to reduce costs.

The Air Force’s senior procurement leader is also working to develop an outcome-oriented metric for **timeliness of deliveries**, which he designated as Total Acquisition Lead Time (TALT). The Air Force defined *TALT* as the time from the identification of a requirement to the delivery of a capability. The Air Force’s senior procurement leader told us the Air Force does not currently have the technical capability necessary to measure TALT, but there are efforts underway to develop this capability.

In addition to these outcome-oriented metrics, the Air Force’s senior procurement leader told us the Air Force currently uses **process-oriented** metrics to manage procurement organizations. For example, the Air Force assessed cycle-time data for sole source contract awards and identified factors contributing to longer cycle times. To address these factors, the Air Force’s senior procurement leader deployed the DoD’s sole source streamlining toolbox,

<sup>4</sup>As part of this process, the Air Force has standardized definitions for cost savings and avoidance. It has defined *cost savings* as reductions to budget lines or funded programs resulting from a new policy, process, or activity with no adverse impact on mission. It has defined *cost avoidance* as reductions in (1) the need for increased funding if present management practices continued; (2) unfunded requirements that were avoided; and (3) productivity gains, such as a reduction in required labor hours.



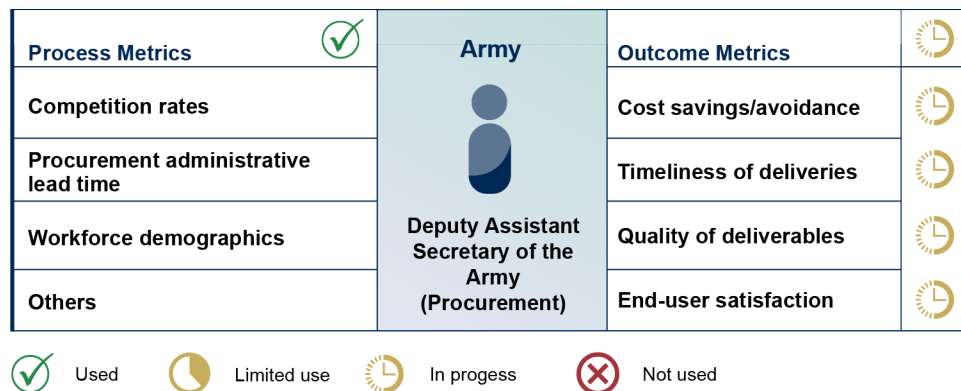
which identifies actions procurement personnel can take to reduce cycle times and award these contracts faster.

However, the Air Force’s senior procurement leader has not pursued metrics to assess **end-user satisfaction** and the **quality of deliverables**. The official said this is because opinions vary about what end users should expect from procurement organizations, and what constitutes “quality” products and services. He also said that too much focus on end-user satisfaction is a risk because some of the procurement community’s innovations are achieved by focusing on mission rather than end-user satisfaction. While we recognize that too much end-user influence can introduce risk, corporate procurement leaders we interviewed emphasized the importance of measuring end-user satisfaction as part of their efforts to improve the performance of their procurement organizations.

In addition, the Air Force’s senior procurement leader told us he considers existing data on the quality of deliverables, specifically data in the Contractor Performance Assessment Reporting System (CPARS), to be generally unreliable.<sup>5</sup> This is a common challenge, and half of the leaders in our review are working to improve the quality of CPARS data at their respective agencies—which would facilitate more reliable outcome-oriented assessments. Private sector procurement leaders consistently told us it is important to measure the quality of deliverables, and that they make concerted efforts to improve the quality of important data. By using additional outcome-oriented metrics to assess the quality of deliverables and end-user satisfaction, the Air Force’s senior procurement leader would have a more balanced set of performance measures to help identify improvement opportunities, set priorities, and allocate resources.

### Department of the Army

The Army’s senior procurement leader is developing several outcome-oriented metrics to supplement existing process-oriented metrics in an effort to field a balanced set of performance measures and better manage the Army’s procurement organizations (see Figure 6).



Source: GAO analysis of Army documentation. | GAO-21-491

Figure 6: Army Performance Metrics for Procurement Organizations

In the past, Army leadership reviewed **process-oriented metrics** at quarterly meetings to identify challenges and opportunities for improvement. For example, the Army’s quarterly assessments of procurement administrative lead time helped the Army update workforce certification programs to provide acquisition personnel the knowledge needed to shorten lead

<sup>5</sup>The contractor performance evaluation contained in CPARS is a method of recording contractor performance as required by FAR 42.15 and is used in source selection evaluations as required by FAR Part 15.










times. The official told us the Army will continue to use process-oriented data to inform management decisions in the future, but procurement officials told us she suspended the quarterly review in 2020 when she started modifying the reviews to incorporate outcome-oriented metrics, among other things. As of March 2021, the Army had not yet determined a date for resuming quarterly reviews.





The Army’s senior procurement leader has proposed using **outcome-oriented metrics** that match the types of outcome-oriented metrics commonly used by procurement leaders in the private sector: (1) negotiated **cost savings**, (2) **timeliness of deliveries**, (3) **quality of deliverables**, and (4) **end-user satisfaction**. The Army’s senior procurement leader told us she began to pursue these outcome-oriented metrics in late 2020, after we provided her our interim assessment of the Army practices and how they differed from private sector practices. The Army’s senior procurement leader envisions a dashboard where procurement organizations’ performance can be viewed at any time, and plans to conduct reviews of outcome-oriented data on a quarterly basis. If the Army is able to develop this type of dashboard and consistently conduct quarterly reviews, it may provide the Army’s senior procurement leader a balanced set of performance measures to help identify improvement opportunities, set priorities, and allocate resources.

In addition to performance metrics, the Army’s senior procurement leader also uses Procurement Management Reviews to assess the health of the Army’s procurement organizations. These reviews focus, in part, on workforce management and compliance with statutes and regulations, and they culminate in risk ratings for the Army’s procurement organizations. The reviews are also a source for best practices, such as delivering training on key topics related to quality assurance. The Army’s senior procurement leader is working to update the Procurement Management Review program to better align to procurement and Army-level strategic goals. The revised Procurement Management Review is intended to improve visibility into the Army’s procurement organization’s cost, schedule, and performance and identify any compliance problems.

### Department of the Navy

The Navy’s senior procurement leader has used process-oriented metrics to manage the Navy’s procurement organizations and deferred responsibility for outcome-oriented performance assessments to the Navy’s other HCAs, in accordance with direction from the Assistant Secretary of the Navy for Research, Development and Acquisition (see Figure 7).

<b>Process Metrics</b> 	 <b>Deputy Assistant Secretary of the Navy (Procurement)</b>	<b>Outcome Metrics</b> 
<b>Competition rates</b>		<b>Cost savings/avoidance</b> 
<b>Small business utilization</b>		<b>Timeliness of deliveries</b> 
<b>Workforce certifications</b>		<b>Quality of deliverables</b> 
<b>Others</b>		<b>End-user satisfaction</b> 

 Used    
  Limited use    
  In progress    
  Not used

Source: GAO analysis of Navy documentation. | GAO-21-491

Figure 7: Navy Performance Metrics for Procurement Organizations



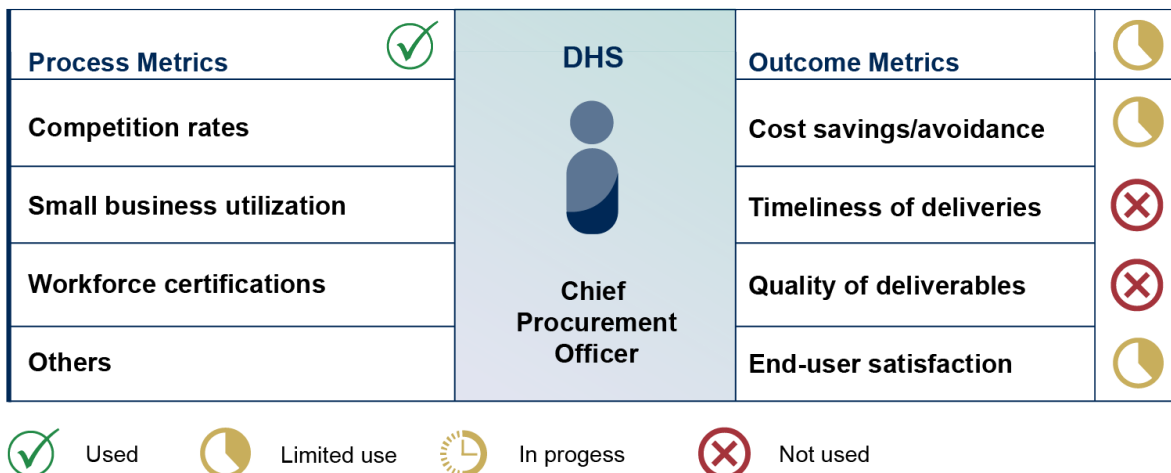


The Navy’s senior procurement leader told us she has implemented a centralized approach for using **process-oriented metrics**—such as competition rates and small business utilization—across the department. The official told us that centralized process-oriented assessments provide broad visibility into HCAs’ procurement processes and facilitate assessments of how well department-wide procurement processes are working. Additionally, the Navy’s senior procurement leader uses the Navy’s Procurement Performance Management Assessment Program, which primarily involves HCA self-assessments of procurement processes. These self-assessments are reviewed by senior Navy procurement personnel and subject matter experts to identify challenges, good practices, and lessons learned, which the Navy’s senior procurement leader disseminates through a yearly newsletter. The Navy’s senior procurement leader also participates in the Navy’s “Two-Pass Seven-Gate” process, which the Chief of Naval Operations, Commandant of the Marine Corps, ASN (RDA), and other Navy leaders use to make investment decisions for large system acquisitions. The Navy’s senior procurement leader told us this process provides her opportunities to influence procurement outcomes on a case-by-case basis.

The Navy’s senior procurement leader told us she has not developed **outcome-oriented metrics**. The official defers outcome-oriented performance assessments to the Navy’s 10 other HCAs, who have developed metrics unique to their organizations, because Navy leadership uses a decentralized approach to manage the department’s various commands. However, a decentralized approach does not preclude the senior procurement leader from using outcome-oriented performance metrics in the same manner she uses process-oriented performance metrics. By using outcome-oriented performance metrics, the Navy’s senior procurement leader would have a balanced set of performance measures to help identify improvement opportunities, set priorities, and allocate resources.

### Department of Homeland Security

DHS’s senior procurement leader has routinely used process-oriented performance metrics to manage DHS’s procurement organizations, and has used end-user satisfaction and cost savings metrics on a limited basis. However, DHS’s senior procurement leader has not used other outcome-oriented performance metrics (see Figure 8).



Source: GAO analysis of Department of Homeland Security (DHS) documentation. | GAO-21-491

Figure 8: Department of Homeland Security Performance Metrics for Procurement Organizations



DHS's senior procurement leader routinely uses **process-oriented metrics** to manage HCAs' performance in terms of competition rates, small business utilization, and other process-oriented activities. DHS's senior procurement leader regularly meets with the department's HCAs and reviews plans detailing the actions the HCAs intend to take to meet their targets for these process-oriented activities. DHS's senior procurement leader and HCAs also review policies, procedures, and training courses to identify additional opportunities to improve procurement processes. In addition to the metrics targeting the HCAs' performance, DHS's senior procurement leader uses metrics to assess industry engagement, and the extent to which contracting organizations value innovation, human relations, and other organizational traits.

DHS also measures cost savings achieved through category management activities, which are intended to improve how agencies procure common products and services, such as office supplies and building maintenance support. DHS officials told us the department's spending on common products and services accounted for about half of DHS's total contract obligations in Fiscal Year 2019 (\$8.9 billion of \$17.6 billion), and that the department saved \$601 million through category management activities that fiscal year.<sup>6</sup>

However, DHS's senior procurement leader told us it would be difficult to identify cost savings for the remainder of the department's contract obligations because of unreliable data. DHS's senior procurement leader explained the department could compare actual contract costs to independent government cost estimates, but the quality of independent government cost estimates is inconsistent. DHS's senior procurement leader told us the estimates are often set to match the funding level the department has set aside for the contract in the budget, for example—a point that is consistent with our prior findings, where agency officials told us some independent government cost estimates were dictated by budget. As a result, DHS does not currently account for a large portion of its contract obligations when it calculates cost savings. Despite the challenge, corporate procurement leaders consistently told us it is important to measure cost savings/avoidance, and that they make concerted efforts to improve the quality of important data.

Similarly, DHS's senior procurement leader has used an end-user satisfaction metric, but on a limited basis. DHS uses Acquisition 360 reviews to obtain feedback from stakeholders involved in a procurement, including contracting officer representatives. The department uses this process to review 100 contracts per year, assessing feedback on all aspects of the contracting process and identifying opportunities to improve operations. Furthermore, DHS established the Procurement Innovation Lab in 2015 to explore innovative procurement techniques, such as streamlined contracting approaches, and to share lessons learned—based in part on end-user feedback—among DHS's procurement community. In turn, DHS has disseminated the lessons learned to at least 1,750 personnel through training courses and other means. However, lessons learned through the Procurement Innovation Lab are based on a relatively small number of contracts. At the end of Fiscal Year 2019, DHS had awarded a total of 50 contracts through the Lab, but DHS awarded more than 23,800 contracts in Fiscal Year 2020 alone.

DHS's senior procurement leader told us the department does not have outcome-oriented metrics for the **timeliness of deliveries** and **the quality of deliverables** in large part because DHS lacks reliable data for these types of performance metrics, and applying the metrics to unreliable data would produce misleading results. For example, to measure timeliness and quality, DHS's senior procurement leader told us the department could attempt to

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<sup>6</sup>In November 2020, we recommended OMB report cost savings from the category management initiative by agency, and OMB concurred with the substance of our recommendation. See GAO, *Federal buying power* (2020a). We are continuing to track OMB's actions in response to this recommendation.







use CPARS data, but it is challenging to ensure the quality of these data. This statement is consistent with the Air Force’s senior procurement leader’s position about CPARS data for Air Force organizations. Nonetheless, DHS’s senior procurement leader, and leaders at the Army and VA, are working to improve the quality of CPARS data at their respective agencies, which would facilitate more reliable outcome-oriented assessments. Private sector procurement leaders consistently told us it is important to measure the timeliness and quality of deliverables, and that they make concerted efforts to improve the quality of important data. By using outcome-oriented metrics, DHS’s senior procurement leader would have a balanced set of performance measures to help identify improvement opportunities, set priorities, and allocate resources.

### National Aeronautics and Space Administration

NASA implemented process-oriented performance metrics across its procurement organizations, but NASA’s procurement leaders have not yet used outcome-oriented performance metrics to manage NASA’s procurement organizations (see Figure 9).

<b>Process Metrics</b> 	 <b>NASA</b>    <b>Assistant Administrator, Office of Procurement</b>	<b>Outcome Metrics</b> 
<b>Contract close out</b>		<b>Cost savings/avoidance</b> 
<b>Small business utilization</b>		<b>Timeliness of deliveries</b> 
<b>Workforce attrition rates</b>		<b>Quality of deliverables</b> 
<b>Others</b>		<b>End-user satisfaction</b> 

 Used    
  Limited use    
  In progress    
  Not used

Source: GAO analysis of National Aeronautics and Space Administration (NASA) documentation. | GAO-21-491

Figure 9: National Aeronautics and Space Administration Performance Metrics for Procurement Organizations

NASA’s procurement leaders told us they have quarterly meetings with the procurement leaders at NASA’s 11 installation centers to discuss their organizations’ performance against NASA’s process-oriented procurement metrics, which measure contract closeout rates, small business utilization, and other aspects of the procurement process. Through these meetings, NASA’s procurement leaders determine what processes are working well and what processes they should revise. For example, they observed an increased use of contracts with undefinitized terms and determined that it was due to lengthy proposal evaluations. They took steps to make evaluations timelier, which reduced the use of such contracts. However, NASA’s procurement leaders have not set annual goals for the HCAs at the installation centers. Instead, NASA’s procurement leaders have focused on whether NASA’s installation centers are collectively achieving agency-wide goals. NASA’s procurement leaders told us this approach is consistent with NASA’s recent efforts to increasingly manage procurement across the installation centers as a single enterprise. They added that NASA’s procurement leaders consistently work to ensure procurement organizations are adhering to the FAR. For example, the FAR states that



firm-fixed-price contracts should be closed within 6 months, and NASA’s procurement leaders monitor how long it is taking installation centers to close firm-fixed-price contracts.<sup>7</sup>

In addition to performance metrics, NASA procurement leaders also use information collected and analyzed through procurement initiatives aimed at improving their procurement practices. For example, NASA established a Source Selection Capability Group—comprised of subject matter experts from different installation centers—that assessed delays contributing to longer procurement lead times, and developed standardized document templates to increase efficiencies.

In August 2020, NASA’s procurement leaders told us NASA was exclusively focused on implementing process-oriented performance metrics, rather than outcome-oriented metrics, because NASA’s procurement leaders hoped process assessments and improvements would lead to better outcomes over time. As a result, NASA’s procurement leaders do not have specific plans to use metrics measuring cost savings/avoidance, the timeliness of deliveries, or the quality of deliverables. However, in March 2021, NASA officials told us they had developed an end-user satisfaction survey in response to our interim assessment of their practices, that this survey is intended to help them develop end-user satisfaction metrics, and that they plan to start presenting the survey results during quarterly performance reviews by the end of Fiscal Year 2021. Using end-user satisfaction survey results in this way has the potential to facilitate more robust performance reviews, but NASA procurement leaders could better identify improvement opportunities, set priorities, and allocate resources by using a more balanced set of performance measures that include outcome-oriented metrics for cost savings and avoidance, timeliness of deliveries, and quality of deliverables.

### Department of Veterans Affairs

VA’s senior procurement leader has used process-oriented performance metrics to manage procurement organizations and implemented an end-user satisfaction metric, but lacks other outcome-oriented metrics (see Figure 10).

<b>Process Metrics</b> 	<b>VA</b>  <b>Executive Director, Office of Acquisition and Logistics</b>	<b>Outcome Metrics</b> 
<b>Competition rates</b>		<b>Cost savings/avoidance</b> 
<b>Small business utilization</b>		<b>Timeliness of deliveries</b> 
<b>Workforce certifications</b>		<b>Quality of deliverables</b> 
<b>Others</b>		<b>End-user satisfaction</b> 

 Used    
  Limited use    
  In progress    
  Not used

Source: GAO analysis of Department of Veterans Affairs (VA) documentation. | GAO-21-491

Figure 10: Department of Veterans Affairs Performance Metrics for Procurement Organizations

<sup>7</sup>FAR 4.804-1 stated that firm-fixed-price contracts, other than those using simplified acquisition procedures, should be closed within 6 months after the date on which the contracting officer receives evidence of physical completion. Contracts that require settlement of indirect cost rates should be closed within 36 months and other contracts should be closed within 20 months.



VA's senior procurement leader told us she primarily relies on process-oriented metrics—such as competition rates and small business utilization—to manage the department's procurement organizations. The official said these process-oriented data can help identify performance weaknesses and enable her to take corrective actions. For example, VA's percentage of competitive acquisitions receiving one bid ranked 21st out of 24 federal agencies in Fiscal Year 2018, and the VA's senior procurement leader told us she is currently working on collecting data to identify what factors have contributed to the department's low standing among other federal agencies with regard to this metric.<sup>8</sup> Further, the official has implemented an online knowledge portal and hosted acquisition innovation symposiums to help develop the department's procurement workforce. The VA's senior procurement leader is also co-chair of the Senior Procurement Council, which is composed of the department's HCAs and other internal stakeholders, such as small business proponents and attorneys. The VA's senior procurement leader told us the council meets at least quarterly to identify and address issues affecting the department's procurement organizations, such as the COVID-19 pandemic and the passage of the CARES Act.

The VA's senior procurement leader also piloted an Acquisition Management Review Program in Fiscal Year 2020 aimed at improving operations at VA's acquisition centers. Among other things, these management reviews included interviews with end-users such as clinical subject matter experts. For example, during the VA's National Acquisition Center management review, end users expressed concerns about poor communication with contracting staff. In response, the review team recommended that contracting officers hold regular meetings with end users.

Additionally, VA's senior procurement leader has undertaken efforts to improve the end-user satisfaction survey. For example, VA's senior procurement leader told us she is currently vetting potential updates to make the survey more useful for management decisions. In particular, VA's senior procurement leader told us she is expanding the scope of the survey to cover the entire acquisition life cycle, including requirements development and contract execution, since prior surveys focused solely on the contract award process. Further, VA's senior procurement leader said she is broadening the survey's target audience in an effort to improve the survey's response rate of 14% in Fiscal Year 2019. The leader's efforts to improve the end-user satisfaction survey could help VA develop and use an end-user satisfaction metric.

VA's senior procurement leader, however, does not have similarly specific plans to improve visibility into cost savings/avoidance, the timeliness of deliveries, or the quality of deliverables, but did express a desire to eventually establish these types of metrics. Until these metrics are in place, VA's senior procurement leader will lack a balanced set of performance measures to help identify improvement opportunities, set priorities, and allocate resources.

## Conclusions

There are inherent differences between the procurement organizations at federal agencies and leading companies. For example, procurement leaders at leading companies often focus on profit margins and return on investment, while procurement leaders at federal agencies do not. Additionally, procurement personnel at federal agencies are subject to laws and regulations intended to promote transparency and fairness, and to support socioeconomic goals. That said, there are also significant similarities between the procurement organizations at federal agencies and leading companies. Both buy a wide variety of critical products and services, and company leaders are expected to be good custodians of shareholder funds in the

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<sup>8</sup>Competitive acquisitions receiving one bid refers to contracts awarded using competitive procedures for which only one offer is received (GAO, 2010).



same way agency leaders are expected to be good custodians of federal funds. As such, there are opportunities for agency leaders to improve their organizations' performance by using some practices commonly employed by company leaders.

Unlike senior procurement leaders at leading companies, the senior procurement leaders at most of the federal agencies we reviewed did not collaborate with end users when they developed their performance metrics. While one procurement leader told us that too much end-user influence could lead to poor results, the leaders can collaborate with end users without ceding control to them. This type of collaboration increases buy-in from key stakeholders and the usefulness of the resulting performance information in management decision-making. Additionally, the leaders at the federal agencies did not routinely use performance metrics to measure key procurement outcomes, including (a) cost savings/avoidance, (b) timeliness of deliveries, (c) quality of deliverables, and (d) end-user satisfaction. Most of the leaders have plans to use some outcome-oriented measures in the future, and in certain instances they have taken the initial step of developing the metrics. However, they generally have not yet implemented the metrics in a routine or comprehensive manner, and two leaders said they had not done so because performance data for product and service quality were unreliable. Half of the leaders in our review were working to improve these data at their respective agencies, but currently the leaders' performance assessments face common limitations. They focus mainly on opportunities to improve procurement processes, while procurement outcomes receive less consideration. This imbalance is significant because the agencies' senior leaders use the assessments to set priorities and allocate resources intended to improve their organizations' performance.

## **Recommendations for Executive Action**

### **Air Force**

The Secretary of the Air Force should ensure the Deputy Assistant Secretary of the Air Force (Contracting): (1) collaborates with end users to develop performance metrics for procurement organizations; (2) uses a balanced set of performance metrics to manage the department's procurement organizations, including outcome-oriented metrics to measure (a) timeliness of deliveries, (b) quality of deliverables, and (c) end-user satisfaction.

### **Army**

The Secretary of the Army should ensure the Deputy Assistant Secretary of the Army (Procurement): (1) collaborates with end users to develop performance metrics for procurement organizations; (2) uses a balanced set of performance metrics to manage the department's procurement organizations, including outcome-oriented metrics to measure (a) cost savings/avoidance, (b) timeliness of deliveries, (c) quality of deliverables, and (d) end-user satisfaction.

### **Navy**

The Secretary of the Navy should ensure the Deputy Assistant Secretary of the Navy (Procurement): (1) collaborates with end users to develop performance metrics for procurement organizations; (2) uses a balanced set of performance metrics to manage the department's procurement organizations, including outcome-oriented metrics to measure (a) cost savings/avoidance, (b) timeliness of deliveries, (c) quality of deliverables, and (d) end-user satisfaction.

### **Department of Homeland Security**

The Secretary of Homeland Security should ensure the DHS Chief Procurement Officer: (1) collaborates with end users to develop performance metrics for procurement organizations;



(2) uses a balanced set of performance metrics to manage the department's procurement organizations, including outcome-oriented metrics to measure (a) cost savings/avoidance, (b) timeliness of deliveries, (c) quality of deliverables, and (d) end-user satisfaction.

## **NASA**

The Administrator of NASA should ensure the NASA SPE uses a balanced set of performance metrics to manage the agency's procurement organizations, including outcome-oriented metrics to measure (a) cost savings/avoidance, (b) timeliness of deliveries, (c) quality of deliverables, and (d) end-user satisfaction.

## **Department of Veterans Affairs**

The Secretary of Veterans Affairs should ensure the VA SPE: (1) collaborates with end users to develop performance metrics for procurement organizations; (2) uses a balanced set of performance metrics to manage the department's procurement organizations, including outcome-oriented metrics to measure (a) cost savings/avoidance, (b) timeliness of deliveries, (c) quality of deliverables, and (d) end-user satisfaction.

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