



G A O

Accountability * Integrity * Reliability

United States Government Accountability Office
Washington, DC 20548

July 14, 2011

The Honorable Madeleine Z. Bordallo
Ranking Member
Subcommittee on Readiness
Committee on Armed Services
House of Representatives

Subject: *Defense Logistics: Oversight and a Coordinated Strategy Needed to Implement the Army Workload and Performance System*

Dear Ms. Bordallo:

In 1996, the Army began development of the Army Workload and Performance System (AWPS) at the direction of the House National Security Committee.¹ AWPS is a capstone information system that receives data from other systems, primarily the Logistics Modernization Program (LMP), and produces management reports and decision support tools intended to assist the Army in linking its industrial facility workload demands to its workforce requirements. AWPS defines workload demands in terms of the amount of work projected to be completed in an 8-hour period and labels each such period as one “resource.” Based on the calculation of these resources, reports from AWPS are designed to aid decision makers in determining workforce needs. In 1998, the House National Security Committee directed that the Army provide the committee with a long-range master plan to implement AWPS.² The committee also directed that we provide a report on the Army’s plan to implement AWPS, and in 1999 we recommended that the Army strengthen its oversight of AWPS development efforts.³

In 2001, Congress enacted statutory requirements related to the use and implementation of AWPS. Specifically, Section 346 of the National Defense Authorization Act for Fiscal Year 2002⁴ stated that AWPS would continue as a standard Army-wide manpower system under the supervision and management of the Secretary of the Army. The act also required the Secretary of the Army to submit

¹ This committee is now known as the House Armed Services Committee.

² H. Rep. No. 105-532 to accompany a bill for the National Defense Authorization Act for Fiscal Year 1999 (H.R. 3616).

³ GAO, *Defense Logistics: Army Should Assess Cost and Benefits of the Workload Performance System Expansion*, [GAO/NSIAD-00-16](#) (Washington, D.C.: Nov. 12, 1999).

⁴ Pub. L. No. 107-107 (2001).

annual progress reports to Congress on the implementation of the AWPS master plan until the Secretary certified to Congress that AWPS was fully implemented. The act additionally required GAO to submit an evaluation of the annual reports not later than 60 days after their submission to Congress. In May 2002, the Army submitted to Congress its first and only progress report on the implementation of the AWPS master plan. During our evaluation of the report, we identified several weaknesses and recommended improvements.⁵ Although the Army concurred with our recommendations, since 2002, the Army has not submitted any additional required annual reports to Congress, and the Secretary of the Army has not certified that implementation is complete.

In this context, you asked us to assess the Army's development and use of AWPS. In response, we evaluated (1) the extent to which the Army is using AWPS and (2) the Army's plans regarding the future use of AWPS.

To conduct this work, we reviewed the laws, committee reports, and prior GAO reports regarding AWPS. In addition, we received briefings from Army officials on the current and intended capabilities of AWPS, and reviewed documents that discuss the future use of AWPS. We also discussed the current and future uses of AWPS during interviews with officials from the Army Office of Business Transformation; the Office of the Deputy Under Secretary of the Army; the Deputy Chief of Staff of the Army G-4, Directorate G-44 (Maintenance); and the Army Materiel Command and its subordinate organizations. During our visits to the Army maintenance depots, we also observed how depot officials use AWPS to generate reports. Additionally, we observed the capabilities of AWPS and discussed how AWPS generates reports by meeting with system developers at the Army Data Center and the Army Materiel Command's AWPS program management office. We also assessed the reliability of the information provided in AWPS reports and updated our knowledge of data reliability issues identified in our recent studies of LMP by interviewing data managers and users and reviewing AWPS reports. We determined that because the data from the LMP were not reliable, some reports from AWPS were inaccurate.

We conducted this performance audit from May 2010 to July 2011 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

⁵ GAO, *Army Logistics: Report on Manpower and Workload System Inadequate and System Interface Untested*, [GAO-03-21](#) (Washington, D.C.: Oct. 30, 2002).

Results in Brief

The Army uses AWPS to generate reports on a variety of workload and workforce issues at its industrial activities located throughout the United States, but the accuracy of the reports varies. As we previously reported, information must be accurate in order for it to be useful in decision making.⁶ Some AWPS reports—such as those used to monitor the status of efforts to repair equipment and to assess whether the Army is maintaining a core logistics capability—are accurate, and Army users express satisfaction with the reports. Other AWPS reports—specifically, those reports that are used to forecast workload at Army depots—are substantially inaccurate. For example, we reviewed the workload forecast reports for all five Army maintenance depots in February 2011, and found that the workload forecasted for the depots was higher than the workforce that was actually needed to complete the anticipated work. These AWPS reports overestimated the workforce actually needed by amounts ranging from 1,500 resources per day to 200,000 resources per day. Consistent with findings from our prior reports, we determined that these inaccurate AWPS reports are a result of inaccuracies in data that AWPS receives from LMP. Army officials stated that they are continuing to correct the underlying data inaccuracies, and in May 2011, they provided us AWPS reports that indicate slight declines in the overestimation at some of the five depots, but the workload forecast reports continue to estimate more workforce than is needed to complete ongoing and anticipated work at all five Army depots. Without accurate information, the Army's ability to use AWPS to serve as a standard Army-wide manpower system and to link its industrial facility workload demands to its workforce requirements is limited.

The Army does not have a coordinated strategy for AWPS development and implementation. At present, the users and oversight of AWPS are dispersed among several Army entities. Our prior work has shown that strategic planning is the foundation for achieving desired results.⁷ However, the Army has not maintained or updated the AWPS master plan since 2002. Moreover, the Army is not following its original master plan, and certain AWPS capabilities are no longer being developed or used. Through 2010, the Army has spent more than \$63 million to develop and sustain AWPS, and expects to spend another \$22.75 million through 2012. One reason that the Army has not submitted the required reports or developed a strategic plan for AWPS is because the Army's oversight of AWPS is fragmented. For example, several Army organizations are pursuing developments in AWPS, but officials from these organizations told us that they were not responsible for providing overall oversight of the system. Even without a strategy guiding AWPS implementation and with

⁶ GAO, *Tax Administration: IRS Needs to Further Refine Its Tax Filing Season Performance Measures*, [GAO-03-143](#) (Washington, D.C.: Nov. 22, 2002); *Managing for Results: GPRA Modernization Act Implementation Provides Important Opportunities to Address Government Challenges*, [GAO-11-617T](#) (Washington, D.C.: May 10, 2011); and *Performance Plans: Selected Approaches for Verification and Validation of Agency Performance Information*, [GAO/GGD-99-139](#) (Washington, D.C.: July 30, 1999).

⁷ GAO, *DOD's 2010 Comprehensive Inventory Management Improvement Plan Addressed Statutory Requirements, But Faces Implementation Challenges*, [GAO-11-240R](#) (Washington, D.C.: Jan. 7, 2011), and *DOD's High-Risk Areas: Observations on DOD's Progress and Challenges in Strategic Planning for Supply Chain Management*, [GAO-10-929T](#) (Washington, D.C.: July 27, 2010).

fragmented oversight, the Army nevertheless intends to use AWPS in the future and is continuing development of the system, but the end point for AWPS development is unknown. Until the Army develops a long-term strategy guiding the development and implementation of AWPS, the Army will not have assurance that AWPS is meeting its objectives, and the Army will be unable to inform Congress on its progress.

For additional information on the results of our work, see our briefing in enclosure I.

Recommendations for Executive Action

To improve the accuracy and efficiency of the Army plans for utilizing its industrial facility workforce, we are recommending that the Secretary of Defense direct the Secretary of the Army to take two actions:

- Identify which Army organization is responsible for the overall oversight of AWPS.
- Report—as required by law—to Congress annually on the implementation of the system’s master plan, and specifically address any changes made to the master plan.

Agency Comments and Our Evaluation

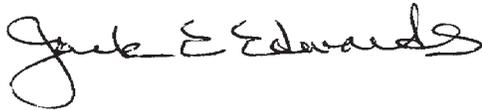
In written comments on a draft of this report, the Director of the Business Transformation Directorate, Army Office of Business Transformation, concurred with both of our recommendations. In response to our first recommendation, the Army stated that because AWPS spans multiple functional domains, it will identify the organization responsible for the overall oversight of AWPS by August 30, 2011. The Army also stated that workload and performance policy remains the responsibility of the Assistant Secretary of the Army (Manpower and Reserve Affairs). With respect to our second recommendation, the Army stated that it is updating the AWPS master plan, which is expected to be completed by August 30, 2011. The Army stated that it will make the next annual report to Congress on October 1, 2011. The Army’s written comments are reprinted in enclosure II.

We are sending copies of this report to the appropriate congressional committees. We are also sending copies to the Secretary of Defense, the Deputy Secretary of Defense, and the Secretary of the Army. This report also is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have questions on matters discussed in this report, please contact Jack Edwards at (202) 512-8246 or edwardsj@gao.gov or Nabajyoti Barkakati at (202) 512-4499 or barkakatin@gao.gov. 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 key contributions to this report are listed in enclosure III.

Sincerely yours,

A handwritten signature in black ink that reads "Jack E. Edwards". The signature is written in a cursive style with a large, looping initial "J".

Jack E. Edwards
Director, Defense Capabilities and Management

A handwritten signature in black ink that reads "Nabajyoti Barkakati". The signature is written in a cursive style with a large, looping initial "N".

Nabajyoti Barkakati
Chief Technologist
Applied Research and Methods
Center for Technology and Engineering

Enclosures - 3



**Defense Logistics: Oversight and a
Coordinated Strategy Needed to Implement
the Army Workload and Performance System**

July 2011



Contents

- Introduction
- Objectives
- Scope and Methodology
- Results in Brief
- Objective 1: Army's Use of AWPS
- Objective 2: Army's Future Plans for AWPS
- Conclusions
- Recommendations for Executive Action
- Agency Comments and Our Evaluation



Introduction

Army Workload and Performance System (AWPS) links workload and workforce data

- AWPS is an information system designed to provide decision support tools that link workload demands to workforce requirements at Army Materiel Command facilities and activities.
 - AWPS is a capstone system that primarily extracts data from other information systems used by Army life cycle management commands and Army depots.
 - AWPS generates reports in the form of graphics and tables. These reports include
 - the workload and resources report to compare forecasted workload against the available workforce and
 - performance measurement and control tables to assess the cost and schedule for production programs.
 - AWPS defines workload demands in terms of the amount of work projected to be completed in an 8-hour period and labels each such period as one “resource.”
- According to an Army regulation, an organic depot maintenance capability (including trained personnel) will be sized, among other things, based on the workload forecasted in AWPS.¹

¹ Army Regulation 750-1, *Army Materiel Maintenance Policy* (Sept. 20, 2007). Organic refers to installations that are government owned and government operated. In the case of the Army, there are five organic maintenance depots: Anniston Army Depot, Alabama; Corpus Christi Army Depot, Texas; Letterkenny Army Depot, Pennsylvania; Red River Army Depot, Texas; and Tobyhanna Army Depot, Pennsylvania.



Introduction

AWPS was first used in 1996 and was certified operational in 1999

- The Army began developing AWPS in 1996 at the direction of the House National Security Committee (now the House Armed Services Committee).² The Army
 - first operationally used AWPS at Corpus Christi Army Depot in June 1996 and
 - expected implementation of AWPS to the other four Army depots to be completed in August 1997.
- In 1998, the House National Security Committee directed the Army to conduct a study and provide the committee with a master plan for implementing AWPS.³
 - Among other things, the committee directed the Army to provide information on future AWPS applications.
 - During our 1999 review of the Army's master plan for implementing AWPS, we recommended that the Army strengthen its oversight of development efforts.⁴
- Also, Section 364 of the National Defense Authorization Act for Fiscal Year 1998 (Pub. L. No. 105-85) restricted Army actions until certain conditions were met.
 - The legislation prohibited the Army (subject to certain exceptions) from initiating a reduction in force of civilian personnel at any of the five Army maintenance depots until after the Secretary of the Army certified to Congress that AWPS was fully operational.
 - On June 28, 1999, the Assistant Secretary of the Army for Manpower and Reserve Affairs certified that AWPS was fully operational at all five Army depots, but that new uses of AWPS were still under development.

² H. Rep. No. 104-131 to accompany a bill for the National Defense Authorization Act for Fiscal Year 1996 (H.R. 1530).

³ H. Rep. No. 105-532 to accompany a bill for the National Defense Authorization Act for Fiscal Year 1999 (H.R. 3616).

⁴ GAO, *Defense Logistics: Army Should Assess Cost and Benefits of the Workload Performance System Expansion*, [GAO/NSIAD-00-16](#) (Washington, D.C.: Nov. 12, 1999).



Introduction

Army is required to report on AWPS to Congress, and GAO is required to evaluate the reports

- Section 346 of the National Defense Authorization Act for Fiscal Year 2002 (Pub. L. No. 107-107 (2001)) encouraged the sharing of data between AWPS and the Logistics Modernization Program (LMP) and identified several requirements related to AWPS, including the following:
 - AWPS would continue as a standard Army-wide manpower system under the supervision and management of the Secretary of the Army.
 - The Secretary of the Army would submit annual progress reports to Congress on the implementation of the AWPS master plan until the Secretary certifies to Congress that AWPS is fully implemented.
 - The annual progress reports would specifically address any changes made to the master plan since the previous report.
 - GAO would submit an evaluation of the Army's annual reports not later than 60 days after the Army issues each annual report to Congress.



Introduction

Army has submitted one required annual AWPS report since 2001

- In May 2002, the Army submitted to Congress its first and only progress report on the implementation of the AWPS master plan.
 - Our evaluation identified several weaknesses.⁵ For example, we found the following:
 - The plan did not contain cost, schedule, and performance data.
 - It did not address potential overlaps with LMP, an information system that the Army Materiel Command began using in 1999 to replace two aging systems that fed data to AWPS.
 - The interface between AWPS and LMP was not sufficiently tested, and the required data transfer between AWPS and LMP might not function as needed.
 - We recommended that the Army
 - improve its progress reports to Congress on AWPS implementation and
 - ensure that the interface between AWPS and LMP is evaluated in such a way that its effectiveness and functionality are assured.
 - The Army concurred with our recommendations.
- Since 2002, the Army has neither submitted any additional required annual reports to Congress nor certified that implementation is complete.

⁵ GAO, *Army Logistics: Report on Manpower and Workload System Inadequate and System Interface Untested*, GAO-03-21 (Washington, D.C.: Oct. 30, 2002).



Introduction

AWPS users and oversight are dispersed among several Army entities

- The Army Materiel Command directs the activities of the Army's industrial facilities and is the primary user of AWPS. To implement and maintain AWPS at its installations, the Army Materiel Command chartered an AWPS program management office located at Rock Island Arsenal, Illinois.
- At the Army headquarters, several organizations are involved in the oversight of AWPS. Specifically:
 - The Army Office of Business Transformation, which was formally established on February 5, 2010, is the senior advisor to the Secretary of the Army on business transformation initiatives and reports directly to the Army Chief Management Officer. According to Army General Order 2010-01, the office's specific responsibilities include assisting the Secretary in ensuring that the Army's business transformation plan and the business systems architecture are implemented in a manner that is aggressive, realistic, and accurately measured.
 - The Office of the Deputy Chief of Staff of the Army G-4, Directorate G-44 (Maintenance), enhances logistics readiness by providing integrated maintenance policy and programs to maintain a ready Army. According to G-44 officials, maintenance at industrial facilities falls within G-44's mission, and G-44 oversees users of AWPS.
 - The Deputy Chief of Staff of the Army G-1 is responsible for, among other things, developing policy that provides guidance for responsive, flexible, and effective human resource support to the Army.



Objectives

- At the request of the Ranking Member of the Subcommittee on Readiness, House Committee on Armed Services, we evaluated
 - the extent to which the Army is using AWPS and
 - the Army's plans regarding the future use of AWPS.



Scope and Methodology

- To conduct our work, we took the following actions:
 - Reviewed the laws and committee reports related to AWPS usage.
 - Reviewed prior GAO reports regarding AWPS.
 - Received briefings from Army officials on the current and intended capabilities of AWPS. We also reviewed documents, such as the *Army Industrial Base Strategy*, that discuss the future use of AWPS.
 - Observed demonstrations of how AWPS is used to generate reports.
 - Assessed the reliability of the information provided in AWPS reports and updated our knowledge of data reliability issues identified in our recent studies of LMP (e.g., by interviewing data managers and users). We determined that because the data from LMP were not reliable, some reports from AWPS were inaccurate.
 - Discussed current and future uses of AWPS during interviews with Army officials from the Army Office of Business Transformation, the Office of the Deputy Under Secretary of the Army, the Office of the Army G-4 (Maintenance), Army Materiel Command Headquarters, Army Data Center, Communications-Electronics Command, Aviation and Missile Command, and all five organic Army maintenance depots—Anniston, Red River, Tobyhanna, Corpus Christi, and Letterkenny Army Depots.
- We conducted this performance audit from May 2010 to July 2011 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.



Results in Brief

-
- **Objective 1:** The Army uses AWPS to generate reports on a variety of workload and workforce issues at its industrial activities located throughout the United States, but the accuracy of the reports varies. As we previously reported, information must be accurate in order for it to be useful in decision making. Some AWPS reports—such as those used to monitor the status of efforts to repair equipment and to assess whether the Army is maintaining a core logistics capability—are accurate, and Army users express satisfaction with the reports. Other AWPS reports—specifically, those reports that are used to forecast workload at Army depots—are substantially inaccurate. For example, we reviewed the workload forecast reports for all five Army depots in February 2011, and the workload forecasted for the depots was higher than the workforce that was actually needed to complete the anticipated work. These AWPS reports overestimated the workforce actually needed by amounts ranging from 1,500 resources per day to 200,000 resources per day. Consistent with findings from our prior reports, we determined that these inaccurate AWPS reports are a result of inaccuracies in data that AWPS receives from LMP. Army officials stated that they are continuing to correct the underlying data inaccuracies, and in May 2011, they provided us AWPS reports that indicate slight declines in the overestimation at some of the five depots, but the workload forecast reports continue to estimate more workforce than is needed to complete ongoing and anticipated work at all five Army depots. Without accurate information, the Army's ability to use AWPS to serve as a standard Army-wide manpower system, and to link its industrial facility workload demands to its workforce requirements, is limited.



Results in Brief (cont.)

- **Objective 2:** The Army does not have a coordinated strategy for AWPS development and implementation. At present, the functions and users are dispersed among several entities. Our prior work has shown that strategic planning is the foundation for achieving desired results. However, the Army has not maintained or updated the AWPS master plan since 2002. Moreover, the Army is not following its original master plan, and certain AWPS capabilities are no longer being developed or used. Through 2010, the Army has spent more than \$63 million to develop and sustain AWPS, and expects to spend another \$22.75 million through 2012. One reason that the Army has not submitted the required reports or developed a strategic plan for AWPS is because the Army's oversight of AWPS is fragmented. For example, several Army organizations are pursuing developments in AWPS, but officials from these organizations told us that they were not responsible for providing overall oversight of the system. Even without a strategy guiding AWPS implementation and with fragmented oversight, the Army nevertheless intends to use AWPS in the future and is continuing development of the system, but the end point for AWPS development is unknown. Until the Army develops a long-term strategy guiding the development and implementation of AWPS, the Army will not have assurance that AWPS is meeting its objectives, and the Army will be unable to inform Congress on its progress.
- **Recommendations for Executive Action:** To improve the accuracy and efficiency of the Army plans for utilizing its industrial facility workforce, we are recommending that the Secretary of Defense direct the Secretary of the Army to identify which Army organization is responsible for the overall oversight of AWPS and to report—as required by law—to Congress annually on the implementation of the system's master plan.



Objective 1: Army's Use of AWPS

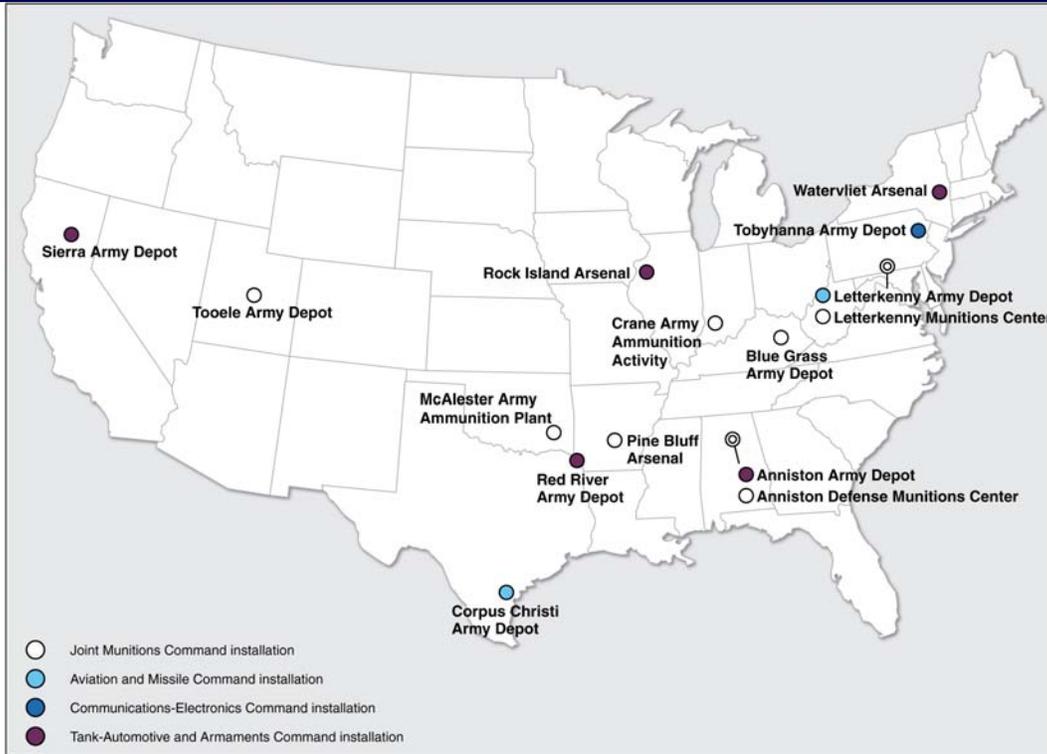
The Army uses AWPS at several locations and for a variety of purposes

- The Army uses AWPS to generate reports on a variety of workload and workforce issues at industrial activities throughout the United States.
 - According to the AWPS program management office, AWPS will be fully operationally capable at 15 Army locations by December 2011 (see fig. 1 on the next slide). Specifically, AWPS is:
 - Fully operational at the five Army organic maintenance depots: Tobyhanna, Letterkenny, Corpus Christi, Anniston, and Red River Army Depots.⁶
 - Expected to be fully operational at Crane Army Ammunition Activity, Letterkenny Munitions Center, Sierra Army Depot, and Tooele Army Depot by July 2011.
 - Expected to be fully operational at McAlester Army Ammunition Plant, Blue Grass Army Depot, and Anniston Defense Munitions Center by October 2011.
 - Expected to be fully operational at Pine Bluff Arsenal, Rock Island Arsenal, and Watervliet Arsenal by December 2011.
 - Officials at the Army maintenance depots we visited confirmed that they were using AWPS. We also observed demonstrations of how AWPS reports are generated for each of the five depots.
 - Army G-4 (Maintenance) and Army Materiel Command officials stated that they are using AWPS to generate management reports and develop budget estimates for future workload and workforce needs.

⁶ In addition to the five organic maintenance depots, the Army also has three depots with the primary mission of storage and distribution: Sierra Army Depot, California; Toole Army Depot, Utah; and Blue Grass Army Depot, Kentucky.

Objective 1: Army's Use of AWPS

Figure 1: Army Materiel Command installations that currently use or will use AWPS



Source: GAO.



Objective 1: Army's Use of AWPS

AWPS reports that provide information on completed work are generally accurate

- According to Army officials, some AWPS reports are generally accurate. They are based on counting work already completed during a fixed period, such as a month or year. For example:
 - Army Materiel Command uses an AWPS report to monitor the status of efforts to repair and recapitalize equipment returning from the current conflicts.
 - This report compares the actual number of items already repaired during a given month against the number of items scheduled for repair in that month.
 - Army officials told us that these AWPS reports accurately assess the performance at depots in meeting their schedules.
 - Officials from Army G-44 (Maintenance) told us that a module of AWPS—the Core Module—assisted them in identifying and reporting core depot requirements.⁷
 - This AWPS report is developed by comparing core requirements with funded workloads that the Army has identified as critical for maintaining core capabilities.
 - Army officials told us that the Core Module was used during the development and reporting of the Army's fiscal year 2011 core requirements.
 - Because these AWPS reports are generated by comparing known quantities, Army officials stated that these reports are generally accurate. Moreover, Army officials stated that these AWPS reports address their needs.

⁷ Core refers to a depot maintenance capability that is government owned and operated (including government personnel and government-owned and government-operated equipment and facilities) to ensure a ready and controlled source of technical competence and resources necessary for effective and timely response to a mobilization, national defense contingencies, or other emergency requirements. 10 U.S.C. § 2464.



Objective 1: Army's Use of AWPS

Other AWPS reports that provide forecasted workloads are inaccurate

- AWPS workload forecast reports that we reviewed for all five organic Army depots in February 2011 were substantially inaccurate. That is, the workload forecasted for the depots was substantially higher than the workforce that would actually be needed to complete the anticipated work. Specifically:
 - **Anniston Army Depot:** The workload forecast exceeded the workforce actually needed by approximately 200,000 resources per day. Some of these errors were due to extreme outliers that could be readily identified. For example, one erroneous order accounted for approximately 22,000 resources per day. Army officials corrected this data error, but the workload forecast was still incorrect.
 - **Tobychanna Army Depot:** The workload forecast exceeded the workforce actually needed by approximately 4,000 resources per day. This discrepancy was due, in part, to the addition of anticipated workload that may not materialize. For example, one anticipated order—which accounted for nearly 1,000 resources per day—had yet to be funded.
 - **Corpus Christi Army Depot:** The workload forecast exceeded the workforce actually needed by approximately 4,000 resources per day. These data errors were a result of how the depot structured its data in LMP. Army officials stated that these errors are not easily identified for correction.



Objective 1: Army's Use of AWPS

Other AWPS reports that provide forecasted workloads are inaccurate (cont.)

- **Letterkenny Army Depot:** The workload forecast exceeded the workforce actually needed by approximately 1,500 resources per day. These errors are a result of both the addition of anticipated workload and data errors in LMP.
- **Red River Army Depot:** The workload forecast exceeded the workforce actually needed by approximately 1,500 resources per day. Some of these errors were due to the incorrect transfer of data into LMP and then into AWPS. For example, an order that was nearly completed was not correctly entered into LMP. As a result, AWPS incorrectly forecasted the entire order as future workload.
- As we have previously reported, information must be accurate in order for it to be useful in decision making.⁸
 - Measures that do not provide managers with useful information will not alert managers to the existence of problems or help them respond when problems arise.
 - For performance information to be useful, it must be complete, accurate, valid, timely, and easy to use.
 - Data need to be good enough to document performance and support decision making, and the overall quality of the data depends on the uses of the data and the consequences of program or policy decisions based on those data.

⁸ GAO, *Tax Administration: IRS Needs to Further Refine Its Tax Filing Season Performance Measures*, GAO-03-143 (Washington, D.C.: Nov. 22, 2002); *Managing for Results: GPRA Modernization Act Implementation Provides Important Opportunities to Address Government Challenges*, GAO-11-617T (Washington, D.C.: May 10, 2011); and *Performance Plans: Selected Approaches for Verification and Validation of Agency Performance Information*, GAO/GGD-99-139 (Washington, D.C.: July 30, 1999).



Objective 1: Army's Use of AWPS

Inaccurate data from LMP is a key reason why AWPS forecasts are incorrect

- In November 2010, we reported that incorrect data loaded into LMP and then fed into AWPS resulted in inaccurate AWPS reports.⁹
 - The projected number of resources per day were multiple times that which was actually required per day for some depots.
 - Corpus Christi Army Depot, which normally requires 2,900 resources per day to accomplish its workload, was projected to need 14,500 resources.
 - Letterkenny Army Depot, which normally requires 1,800 resources per day to accomplish its workload, was projected to need 6,000 resources.
 - Army officials at the depots told us that their ability to use AWPS was directly related to the quality of the data in LMP, and that until the data in LMP are corrected, they do not expect the reports to be accurate.
 - Army officials said they are continuing to correct data inaccuracies in LMP and AWPS and expect this to be a long-term effort, but they have no identified target date at present. In May 2011, the Army provided us AWPS graphs that indicate slight declines in the overestimation at some of the five depots, but the workload forecast reports continue to estimate more workforce than is needed to complete ongoing and anticipated work at all five Army depots.

⁹ GAO, *Defense Logistics: Additional Oversight and Reporting for the Army Logistics Modernization Program Are Needed*, GAO-11-139 (Washington, D.C.: Nov. 18, 2010).



Objective 1: Army's Use of AWPS

Incorrect AWPS reports could have negative effects on efficient and effective workload and workforce planning

- Army officials have stated that they are improving the data in LMP, but LMP data issues are long-standing.
 - In April 2010, we noted that data quality problems at Corpus Christi and Letterkenny Army Depots prevented the depots from realizing benefits from LMP, such as determining
 - whether sufficient funds are available to perform the expected work and
 - whether a production schedule can be achieved with existing resources.¹⁰
 - Data inaccuracy problems continue despite LMP having been fielded in some locations for 2 or more years (see the following fielding dates).
 - July 2003: Tobyhanna Army Depot
 - May 2009: Corpus Christi and Letterkenny Army Depots
 - October 2010: The remaining Army Materiel Command locations, including Anniston and Red River Army Depots
- Since LMP is a primary source of data for AWPS, LMP-related data problems are likely to limit the effectiveness of AWPS. In November 2010, the Department of Defense agreed with our findings related to the deployment of LMP, which included our observations on the quality of data in LMP and its effect on AWPS reports. Moreover, inaccurate AWPS workload forecasts limit AWPS's ability to serve as a standard Army-wide manpower system.

¹⁰ GAO, *Defense Logistics: Actions Needed to Improve Implementation of the Army Logistics Modernization Program*, GAO-10-461 (Washington, D.C.: Apr. 30, 2010).



Objective 2: Army's Future Plans for AWPS

Army lacks a coordinated strategy for AWPS development and implementation

- The Army does not have an up-to-date, coordinated strategy to guide the development and implementation of AWPS, but officials from different areas within the Army have indicated that they are developing a master plan.
- As previously noted, Congress directed the Army to develop a master plan for implementing AWPS and required the Army to provide annual progress reports on AWPS implementation, but the Army has not submitted the required reports since 2002.
- Our prior work has shown that strategic planning is the foundation for defining what an agency seeks to accomplish, identifying the strategies it will use to achieve desired results, determining how well it succeeds in reaching results-oriented goals, and achieving objectives.¹¹
 - Combined with effective leadership, strategic planning provides decision makers with a framework to guide program efforts and the means to determine if these efforts are achieving the desired results.
 - Characteristics of an effective strategic plan should include a comprehensive mission statement; problem definition, scope, and methodology; goals and objectives; activities, milestones, and performance measures; resources and investments; organizational roles, responsibilities, and coordination; and key external factors that could affect the achievement of goals.

¹¹ GAO, *DOD's 2010 Comprehensive Inventory Management Improvement Plan Addressed Statutory Requirements, But Faces Implementation Challenges*, [GAO-11-240R](#) (Washington, D.C.: Jan. 7, 2011) and *DOD's High-Risk Areas: Observations on DOD's Progress and Challenges in Strategic Planning for Supply Chain Management*, [GAO-10-929T](#) (Washington, D.C.: July 27, 2010). For an example illustrating how GAO has evaluated a related Army plan, see GAO, *Depot Maintenance: Improved Strategic Planning Needed to Ensure That Army and Marine Corps Depots Can Meet Future Maintenance Requirements*, [GAO-09-865](#) (Washington, D.C.: Sept. 17, 2009).



Objective 2: Army's Future Plans for AWPS

Army development of AWPS has not followed its original master plan

- In May 2011, officials from the Army G-1 and the Army Materiel Command informed us that the AWPS program management office was developing a master plan. However, they did not provide us with the draft so that we could assess how fully it addresses the characteristics of an effective strategic plan.
- Moreover, certain AWPS capabilities identified in the 2002 master plan are no longer being developed or used. For example, the 2002 plan stated the following:
 - The Army would develop an AWPS reporting capability to provide installation managers with the ability to assess the financial health of the installations on a timely basis by tracking actual and projected financial performance. According to the AWPS program management office, the five maintenance depots had this capability beginning in 2002, but the capability ended after the depots began using LMP.
 - The strategy for future implementation of AWPS would expand into nonmaintenance missions, such as supporting the management of Army installations. This capability was fielded across Army installations in 2008. However, by 2010, AWPS was no longer in use to support nonmaintenance missions.
 - The Office of the Army Surgeon General was developing a prototype AWPS module—Medical AWPS—by 2004 to project patient loads and medical procedures. However, the module was never implemented.



Objective 2: Army's Future Plans for AWPS

Army continues to spend millions on AWPS development

- Through fiscal year 2010, the Army reported investing \$63 million in AWPS, and the Army plans to continue funding developments of AWPS through at least fiscal year 2012.
 - The Army expects to spend \$12.25 million during fiscal year 2011 for AWPS operations and development and has requested \$10.50 million for fiscal year 2012 to continue fielding and developing the system. These developments are funded through the Army Working Capital Fund.
 - Additionally, as noted in Army documents requesting additional funds for AWPS, the Army may request additional funds for fiscal years 2014 and 2015. The documents did not, however, estimate how much in additional funds would be needed.
- The Army's funding of AWPS has exceeded the amounts originally stated in the 2002 master plan.
 - According to the 2002 AWPS master plan, approximately \$20 million was needed through fiscal year 2006 in order to develop AWPS.
 - Army officials stated that development has continued past 2006 because AWPS implementation has been tied to the deployment of LMP.



Objective 2: Army's Future Plans for AWPS

Army has not designated an office with responsibility for AWPS

- The Army's oversight of the AWPS program is fragmented. The Army has not identified which office within the service has overall responsibility for development and implementation of the master plan for the future use of AWPS. Specifically:
 - Army Materiel Command officials stated that they intend to continue using AWPS. However, neither Army Materiel Command officials nor the command's AWPS program management office were able to provide the AWPS master plan or determine which Army organization has responsibility for and oversight of the system.
 - According to an official from the Army Office of Business Transformation, the Army Office of Business Transformation has not developed or maintained the AWPS master plan.
 - Army G-44 (Maintenance) officials, who have been leading the development of AWPS-related metrics to measure the health of the Army industrial base, told us that they were not aware of or responsible for development and implementation of the AWPS master plan.
 - Army G-1 officials told us in May 2011 that AWPS fell under the Human Capital Management Domain, and that they had oversight responsibility for the system. However, Army G-1 officials also told us that they had not developed or maintained the AWPS master plan, and that they were not involved in previous versions of the AWPS master plan. Additionally, Army G-1 officials stated that the Army Materiel Command, as the primary user, is responsible for developing the system.



Objective 2: Army’s Future Plans for AWPS

Army intends to continue using and developing AWPS

- Even without a strategy guiding AWPS implementation and with fragmented oversight of the system, the Army intends to use AWPS in the future and continue its development.
 - Life cycle management command and depot officials stated that they were planning to continue using AWPS.
 - Army Materiel Command officials stated that development, use, and enhancements of AWPS would continue.
 - According to Army G-44 (Maintenance) officials, plans are being developed to use AWPS to measure the capabilities of the Army industrial base. For example, according to the Army Industrial Base Strategy, the AWPS Core Module is being enhanced by adding other features, such as tracking workforce skills by job series for each weapon system end item.
- Moreover, the end point for AWPS development is unknown. In the 2011 request for funding, the AWPS program management office noted that development costs for fiscal years 2014 and 2015 were not specified because “from its inception, the Army Materiel Command and Department of the Army have continually asked for additional capabilities, reports, and tools from AWPS ... these numbers will become better defined and justified when we request funding for those years.”



Objective 2: Army's Future Plans for AWPS

Absence of AWPS master plan has negative consequences

- Without a long-term strategy guiding the development and implementation of AWPS, the Army
 - does not have assurance that AWPS is meeting its budgetary, scheduling, and performance objectives;
 - does not know how many additional resources it will need to complete the system's development and implementation; and
 - is unable to inform Congress on its progress in developing and implementing the system.



Conclusions

- AWPS has provided Army users some benefits, particularly in the areas of assessing progress in repair activities and assessing the industrial base. In contrast, inaccurate AWPS-produced forecasts linking anticipated workloads and workforce continue to result in erroneous portrayals of future maintenance situations.
- Three important and continuing problems make it difficult to determine when better forecasts of workloads and workforces will be available from AWPS:
 - No required annual AWPS progress reports or up-to-date master plan to Congress
 - Fragmented oversight of AWPS development and implementation
 - Inaccurate data being fed into AWPS from LMP
- If these problems are not corrected, senior leaders in the Army and Congress will not have a clear and accurate picture for determining the resources that the Army needs to efficiently and effectively carry out future missions of the Army commands covered by AWPS.



Recommendations for Executive Action

- To improve the accuracy and efficiency of the Army plans for utilizing its workforce, we recommend that the Secretary of Defense direct the Secretary of the Army to take two actions:
 - Identify which Army organization is responsible for the development of master plans and overall oversight of AWPS.
 - Report—as required by law—to Congress annually on the implementation of the system’s master plan and specifically identify any changes made to the master plan. In addition to the elements required by Section 346, the report should include milestones, dates, and responsible units for improving the accuracy of the data used to produce reports from AWPS.



Agency Comments and Our Evaluation

- In written comments on a draft of this report, the Director of the Business Transformation Directorate, Army Office of Business Transformation, concurred with both of our recommendations. Specifically, the Army stated that it
 - will identify the organization responsible for overall oversight of AWPS by August 30, 2011;
 - is updating the AWPS master plan, which is expected to be completed by August 30, 2011; and
 - intends to make the next annual report to Congress on October 1, 2011.

Enclosure II: Comments from the Department of Defense



DEPARTMENT OF THE ARMY
OFFICE OF BUSINESS TRANSFORMATION
102 ARMY PENTAGON
WASHINGTON, DC 20310-0102

June 24, 2011

SAUS-OBT

Mr. Jack E. Edwards
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Mr. Edwards:

The Army response to the U.S. Government Accountability Office (GAO) Draft Report, GAO-11-566R, 'DEFENSE LOGISTICS: Oversight and a Coordinated Strategy Needed to Implement the Army Workload and Performance System,' dated May 31, 2011 (GAO Code 351425) is attached. The Army concurs with the recommendations contained in the draft report.

The Army appreciates the opportunity to respond to your draft report. Should you have any questions, please contact me at: William.r.smith@us.army.mil / 703.693.1951.

Sincerely,

A handwritten signature in black ink, appearing to read "William R. Smith", written over a horizontal line.

WILLIAM R. SMITH
Director
Business Transformation Directorate

Attachment:

As stated

**GAO DRAFT REPORT DATED MAY 31, 2011
GAO-11-566R (GAO CODE 351425)**

**“DEFENSE LOGISTICS: OVERSIGHT AND A COORDINATED
STRATEGY NEEDED TO IMPLEMENT THE ARMY WORKLOAD AND
PERFORMANCE SYSTEM”**

**DEPARTMENT OF DEFENSE COMMENTS
TO THE GAO RECOMMENDATIONS**

RECOMMENDATION 1: The GAO recommends that the Secretary of Defense direct the Secretary of the Army to identify which Army organization is responsible for the overall oversight of the Army Workload and Performance System (AWPS).

DoD RESPONSE: The Army concurs with the recommendation. Because AWPS spans multiple functional domains, the Army will identify the organization responsible for the overall oversight of AWPS as a system using its Business Systems Information Technology governance processes as defined in the approved BSIT Technology Strategy dated February 14, 2011. Even without separate direction, the Army intends to identify the organization responsible for the system by August 30, 2011. Workload and performance policy remains the responsibility of the Assistant Secretary of the Army (Manpower and Reserve Affairs).

RECOMMENDATION 2: The GAO recommends that the Secretary of Defense direct the Secretary of the Army to report - as required by law - to Congress annually on the implementation of the system’s master plan, and specifically address any changes made to the master.

DoD RESPONSE: The Army concurs with the recommendation. It is updating the AWPS system’s master plan, which is expected to be completed by August 30, 2011. The Army will make the next annual report to Congress on October 1, 2011.

Enclosure III: GAO Contacts and Staff Acknowledgments

GAO Contacts

Jack Edwards, (202) 512-8246 or edwardsj@gao.gov

Nabajyoti Barkakati, (202) 512-4499 or barkakatin@gao.gov

Staff Acknowledgments

In addition to the contacts named above, J. Chris Martin, Senior-Level Technologist; David Schmitt, Assistant Director; Grace Coleman; Gilbert Kim; Jim Melton; Michael Willems; and Gregory Wilmoth made key contributions to this report.

(351425)

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday afternoon, GAO posts on its Web site newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to www.gao.gov and select "E-mail Updates."

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's Web site, <http://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm

E-mail: fraudnet@gao.gov

Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Ralph Dawn, Managing Director, dawnr@gao.gov, (202) 512-4400
U.S. Government Accountability Office, 441 G Street NW, Room 7125
Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548