U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Report to the Committee on Armed Services, House of Representatives

DOD Munitions

Planning and Leadership Needed to Address Persistent Shortages



November 19, 2026 | GAO-27-109420

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A report to the Committee on Armed Services, House of Representatives

For more information, contact Diana Moldafsky at MoldafskyD@gao.gov.

What GAO Found

In 2025, the Department of Defense (DOD) Acting Assistant Secretary of Defense for Sustainment testified that DOD had a shortage of several key munitions. DOD has taken steps to improve its munitions inventory shortages by, among other things, establishing munitions working groups focused on identifying ways to increase munition production. The 2026 conflict with Iran has heightened the importance of addressing munitions stockpile and industrial base challenges.

Examples of Department of Defense Guided Missile Systems



Source: U.S. Army/Capt. F. Spatt, U.S. Marine Corps/Sgt. P. Rawlins, and Missile Defense Agency/L. Garton. | GAO-27-109420

However, DOD does not have an overarching plan that links munitions production and funding to requirements. According to DOD officials, in lieu of a plan, DOD and the services can be reactive to global events rather than driven by total requirements. For example, the Army's ramp up in production of 155 millimeter artillery shells to address shortages exacerbated by U.S. support to allies and partners was not driven by DOD's total munitions requirement. Without developing an overarching munitions plan that identifies long-term goals, strategies for achieving such goals, and metrics to gauge progress, DOD and the services are not well-positioned to address persistently low munitions inventories or risk, for example, investing in munitions that are projected to exceed the total munition requirement.

The department also has not designated an office or entity to direct and assess munition inventory improvement actions. Joint Staff and officials from the Air Force, Army, Navy, and Marine Corps noted that there could be a benefit to developing an overarching plan and assigning leadership for its implementation. Service officials stated that without an office with dedicated leadership to address munitions challenges, it may be difficult to realize progress in addressing munitions shortages at any level.

DOD maintains a department-wide munitions data tool to track munitions. However, GAO found that DOD has limited oversight over this tool and does not fulfill some responsibilities. For example, DOD has not regularly conducted inventory reconciliations with the services. By establishing consistent, regular timelines for reconciling information about changes to munitions, DOD and the services can ensure senior leaders are regularly receiving high-quality data on which to base their decisions.

What GAO Recommends

GAO is making four recommendations including that DOD develop an overarching munitions plan to improve inventory levels and identify an office or entity and empower its leadership with the authority to implement the plan, and that DOD set regular timelines for inventory reconciliation. DOD generally concurred with the recommendations.

Why GAO Did This Study

According to DOD, to ensure readiness, the department must maintain ready, reliable, and lethal munitions, such as bombs, missiles, and torpedoes.

House Report 118-529, accompanying a bill for the National Defense Authorization Act for Fiscal Year 2025, includes a provision for GAO to review DOD's munitions levels and requirements, including actions taken to mitigate any munitions shortfalls. This report assesses the extent to which (1) DOD and the services have taken steps to improve munitions shortages, and (2) DOD and the services track munitions inventory data.

GAO analyzed service munitions data and DOD plans, and conducted site visits to four Army ammunition facilities. GAO also interviewed relevant officials across DOD, including from the Office of the Under Secretary of Defense for Acquisition and Sustainment, the Joint Staff, and the military services.

This report is a public version of a classified report GAO issued September 24, 2026. GAO omitted information DOD deemed classified or sensitive, such as trends in DOD munitions inventories, persistent shortfalls, and how these shortfalls have affected DOD's support to war plans.

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Recommendations for Executive Action

We are making the following four recommendations to DOD:

The Secretary of Defense, in consultation with the Chairman of the Joint Chiefs of Staff and the Secretaries of the military departments, should develop an overarching munitions plan to improve inventory levels that links munitions production and funding to total munitions requirements and includes long-term goals, strategies to achieve goals, and metrics to gauge progress in addressing munitions shortages. (Recommendation 1)

The Secretary of Defense should identify an office or entity and empower its leadership with the authority to implement the munitions plan to address munitions challenges once the plan is developed. (Recommendation 2)

The Secretary of Defense should ensure that the Under Secretary of Defense for Acquisition and Sustainment, in coordination with the Secretaries of the military departments, sets regular timelines for inventory reconciliation designed to facilitate the identification and resolution of data related issues, such as the accurate aggregation of inventory data between the Munitions Readiness Initiative tool and the services' munition databases. (Recommendation 3)

The Secretary of Defense should ensure that DOD's Chief Digital and Artificial Intelligence Officer develops a data management plan that documents the standards and processes used to aggregate munitions data and a data dictionary to define data sources. (Recommendation 4)

Introduction

The Department of Defense (DOD) recognizes that it must be prepared and ready to deter peer adversaries through strength.[1] According to DOD, to ensure military readiness and to support national security and the department's mission, the department must maintain ready, reliable, and lethal munitions.[2] However, the department has encountered challenges in ensuring that the military services have sufficient inventories of munitions—including bombs, missiles, and torpedoes—in the event a conflict should arise with a peer competitor.

In 2025, the Acting Assistant Secretary of Defense for Sustainment testified that DOD had a shortage of several key munitions.[3] Moreover, the 2026 conflict with Iran has heightened the importance of addressing challenges with the U.S. munitions stockpile and industrial base.

Objectives

House Report 118-529 accompanying a bill for the National Defense Authorization Act for Fiscal Year 2025 includes a provision for us to assess DOD's and the military services' munitions levels and requirements, including actions taken to mitigate any munitions shortfalls.[4]

This report is a public version of a classified report that we issued September 24, 2026. This report assesses the extent to which (1) DOD and the services have taken steps to improve munitions shortages and (2) DOD and the services track munitions inventory data.

The classified report included an objective on trends in the DOD munitions inventories, persistent shortfalls, and how these shortfalls have affected DOD's ability to support war plans. DOD deemed this information to be classified or sensitive, which must be protected from loss, compromise, or inadvertent disclosure. Consequently, this public version excludes that information.

Background

DOD Munitions

Military munitions include rockets, guided missiles, bombs, artillery ammunition, and torpedoes, among other things.[5] Over the years, the military has become reliant on missiles, especially precision guided, to execute military operations, according to Joint Staff officials.[6] Missiles are used in ground, air, and naval operations and some can be launched at long ranges to attack the enemy without risking U.S. forces. Munitions are tracked in many different

ways, including by DOD Identification Code (DODIC) assigned by the Defense Logistics Agency. DOD has thousands of individual DODICs, unique alphanumeric codes to identify specific items of supply and essential to inventory management, according to officials from the Defense Logistics Agency. The services use DODICs as well as other unique identifiers to track munitions items. For example, officials told us that a DODIC can be assigned to a bullet type, like a 9 millimeter pistol ammunition, a complete munition system like an AIM-9X, or to a component of a munition, such as a rocket motor.

Munitions Industrial Base

Munitions production is comprised of the commercial and organic industrial base. The commercial industrial base constitutes the largest element of the defense industrial base, both in terms of resources, facilities and personnel employed as well as the value of the products and services provided to the U.S. government. The commercial industrial base is dominated by five large, publicly traded U.S. private companies.[7] They produce many of the most advanced munitions necessary to support the National Defense Strategy and associated war plans. See table 1 for examples of DOD munitions, the prime contractor, and the service managing the munition.

Table 1: Munitions, Munitions Prime Contractors, and Service Managing the Munition

Example of munition	Prime contractor	Service managing the munition
GBU-57 Massive Ordnance Penetrator	Boeing	Air Force
155mm Artillery	American Ordnance	Army
Advanced Anti-Radiation Guided Missile-Extended Range	Northrup Grumman	Navy
Guided Multiple Launch Rocket System (GMLRS)	Lockheed Martin	Army
Tomahawk	Raytheon	Navy

Source: GAO analysis of Department of Defense (DOD) and Congressional Research Service information. I GAO-27-109420

The organic industrial base includes (1) government owned-government operated and (2) government owned-contractor operated facilities (see call out box). The Army is DOD's Single Manager for Conventional Ammunition and is responsible for centrally managing the lifecycle of conventional munitions across DOD.[8] In this role, the Army leads the strategic planning of DOD's organic (i.e., government-owned) and commercial industrial bases for conventional munitions. According to officials, the Single Manager for Conventional Ammunitions mission is closely tied to the organic industrial base as it leverages the capabilities and capacity of government-owned facilities to manufacture, maintain, and sustain ammunition stocks, thereby contributing to national security and the supply chain.



Army's Organic Industrial Base

The Army's Organic Industrial Base (OIB) is a network of government owned-sites, including ammunition plants storage depots, and arsenals.

The Army established many OIB facilities during the lead-up to World War II to meet the military's munition demands. According to officials, many of these OIB facilities continue to use original buildings, equipment, and production processes established during that era. As a result, the Army has multiple ongoing modernization efforts to improve efficiency and increase safety at these facilities.

The facilities are key to meeting munitions demands. According to officials, DOD uses the OIB facilities to maintain direct control over critical production, protect sensitive technologies, and aid rapid response to urgent military needs. Army officials described the OIB as the nation's "insurance policy," as these facilities preserve unique manufacturing processes, produce specialized or low-volume items, employ skilled personnel, and reduce dependency on commercial suppliers.

The Army is also responsible for developing modernization plans for organic facilities to address munition production deficiencies and infrastructure improvements.[9] For example, the Army produces an annual *Ammunition Plant Modernization Plan* that is provided to Congress and delivers a strategy to modernize production facility infrastructure and capability.[10] This yearly modernization plan provides information on ongoing and planned infrastructure modernization investment projects for the organic industrial base (see fig. 1). We have ongoing work examining Army munitions organic industrial base modernization efforts and plan to report on this work next year.

Figure 1: Examples of Organic Industrial Base Investment Projects



Government Owned, Contractor Operated

Holston Army Ammunition Plant is a government owned, contractor operated ammunition plant in Kingsport, Tennessee. The plant is owned by the Army's Joint Munitions Command and operated by BAE Industries.



Government Owned, Government Operated

Letterkenny Munitions Center is a government owned, government operated facility that distributes, stores, demilitarizes and maintains high end munitions. These munitions include the Army Tactical Missile System and Guided Multiple Launch Rocket Systems, both of which have been provided to Ukraine in response to the Russian invasion.

Source: GAO analysis of Department of Defense information; U.S. Army and Joint Munitions Command/D. Whipple (photos). | GAO-27-109420

Gaps in Planning and Leadership Hinder DOD and the Services' Efforts to Address Munitions Shortages

DOD has multiple plans and efforts to improve munitions shortages, but we found it does not have an overarching munitions plan that identifies long-term goals, strategies to achieve its goals, and metrics to gauge progress in improving munitions production to meet total munitions requirements. Moreover, it has not identified an office and empowered leadership to direct such efforts, which hinders DOD's and the services' efforts to address long-standing munitions shortages.

DOD Has No Department-Wide Plan to Establish Long-Term Goals and Measure Progress

DOD does not have an overarching munitions plan that identifies long-term goals, strategies to achieve its goals, and metrics to gauge progress in improving munitions production to meet total munitions requirements. Instead, there are several munitions-related plans across the department intended to address specific aspects of munition challenges, such as inventory shortages and production capacity. Since 2016, DOD has released three strategic plans that address specific aspects of munitions, such as the defense industrial base and production of munitions. These three plans are the *Single Manager for Conventional Ammunition Industrial Base Strategic Plan* (2016), the *National Defense Industrial Strategy* (2023), and the *Army*

Ammunition Plant Modernization Plan (2025).[11] However, our analysis of these documents shows that these plans do not link munitions production plans and funding to operationally required munitions inventory levels and have other key gaps.[12] For example, the 2023 *National Defense Industrial Strategy* focuses on strengthening the defense industrial base by addressing challenges in many areas, including supply chains and workforce.[13] However, the strategy does not provide specific guidance on how DOD should increase the production of munitions to meet requirements.

Our prior work on evidence-based policymaking defines a strategic goal as an outcome-oriented statement of purpose that articulates what the organization wants to achieve to advance its mission and address relevant problems, needs, and challenges.[14] We have found that sound planning can enhance an agency's efforts to identify and achieve its objectives through the implementation of key elements, such as developing long-term goals, strategies to achieve goals, and metrics to gauge progress.[15]

DOD has taken steps in trying to address specific aspects of munitions, such as developing the *National Defense Industrial Strategy*. However, these plans are not focused on munition challenges and do not provide long-term goals and metrics to assess progress in meeting the goals. Further, our analysis of the strategies and discussions with DOD officials demonstrates DOD does not have munitions related goals and strategies that take into account current global events. Munitions shortages persist and officials from the Joint Staff, U.S. Indo-Pacific Command (INDOPACOM), the Office of the Secretary of Defense, and the Air Force, Army, Navy, and Marine Corps told us that DOD does not have an overarching plan to address munitions challenges and achieve department-wide munitions requirement goals.

According to service and the Office of the Under Secretary of Defense for Acquisition and Sustainment (OUSD (A&S)) officials, in lieu of a plan, DOD and the services can be reactive to global events rather than driven by total munitions requirements. For example, the Army's ramp up in production of 155 millimeter artillery shells to address shortages exacerbated by U.S. support to allies and partners was not driven by a need to address DOD's total munitions requirement.

Without developing an overarching munitions plan that links munitions production and funding to munitions total requirements and identifies long-term goals, strategies for achieving such goals, and metrics to gauge progress, DOD and the services are not well-positioned to effectively address persistently low munitions inventories or risk investing in munitions that are projected to exceed the total munition requirement. Such a plan could also help guide key investment decisions as the department determines how to allocate at least $25 billion appropriated by Congress in 2025, intended to enhance DOD resources for munitions.[16]

DOD Does Not Have a Dedicated Entity with Authority to Improve Munitions Inventories

DOD does not have a dedicated office or entity with authority to improve munitions inventories. Instead, leadership and authority on these issues are diffused across many entities throughout the department from specific offices to working groups. For example:

- OUSD (A&S) has a dedicated office for **Platform and Weapon Portfolio Management**, which includes munitions. However, as OUSD (A&S) officials describe, it does not have production and budgetary authority across DOD entities, such as combatant commands and services, responsible for munitions.

- OUSD (A&S)'s **Office of Industrial Base Resilience** analyzes the industrial base to identify critical gaps among many capabilities, including munitions.

- The **Capability Program Executive, Ammunition and Energetics** office handles development, procurement, and fielding of conventional munitions, like the 155 millimeter, as well as energetic components for missiles and long-range precision missiles which are managed by other offices within DOD.

- The services' respective **program offices**, such as the Navy's Tomahawk Weapon System Program Office, manage their own munitions inventories for their own services.

According to DOD, it has also established several working groups with multiple offices to address munition shortages and production challenges, such as supply chain risk assessments. While these working groups bring decision makers together to coordinate and build consensus on various munition issues, we found the working groups do not have decision making authority or empowered leaders to address and be held accountable for improving the munition inventory shortages or for meeting the total munition requirements. For example:

- **The Munitions Acceleration Council**, according to officials, was established by the Under Secretary of Defense for Acquisition and Sustainment in July 2025. It intends to accelerate the production of missiles, including precision guided missiles, through novel contracting approaches including the use of multi-year procurement funding, according to DOD officials. However, according to a senior OUSD (A&S) official, as of November 2026, the Council does not have a formal signed charter.

- **The Joint Industrial Base Working Group**, established in December 2019, is DOD's primary mechanism for exchanging information about industrial base matters across the department. The Joint Industrial Base Working Group is co-chaired by the Industrial Base Policy office and the Defense Contract Management Agency. According to OUSD (A&S), dozens of offices are focused on specific aspects of the defense industrial base, which feeds information to the Joint Industrial Base Working Group.

This information is intended to provide senior leaders with a holistic view of the industrial base. For example, the group shares information from multiple offices within DOD about emerging technologies and critical sectors of the industrial base. However, this working group is focused on addressing challenges throughout the defense industrial base, and munitions production and inventories are not the group's singular focus.

Standards for Internal Control in the Federal Government states that agency management should establish an organizational structure, assign responsibility, and delegate authority to achieve the entity's objectives.[17] Further, our prior work on an integrated portfolio management approach to product development states that successful management requires committed leadership that empowers managers to make decisions, and holds them accountable for the outcomes achieved at all levels of an organization.[18]

However, DOD has not identified an office or entity and delegated to it authority that empowers the leadership to make decisions that improve munitions inventories department-wide and hold them accountable for the outcomes achieved, such as improving munitions inventory levels. Joint Staff and officials from the Air Force, Army, Navy, and Marine Corps told us that there could be a benefit to developing an overarching plan and assigning an office or entity to lead its implementation. Further, service officials noted that identifying an office and delegating leadership and authority to it to assess munitions improvement actions would be valuable to providing oversight to ensure progress is made. Service officials stated that without an office with dedicated leadership to address munitions challenges, it may be difficult to realize progress in addressing munitions shortages at any level.

Without identifying and empowering an office to lead the implementation of a munitions plan to address munition challenges, DOD is not well-positioned to address persistently low munitions inventories and risks being unprepared for future conflicts.

DOD and the Services Track Munitions Inventory Data, but Oversight of Department-Wide Munitions Data Is Limited

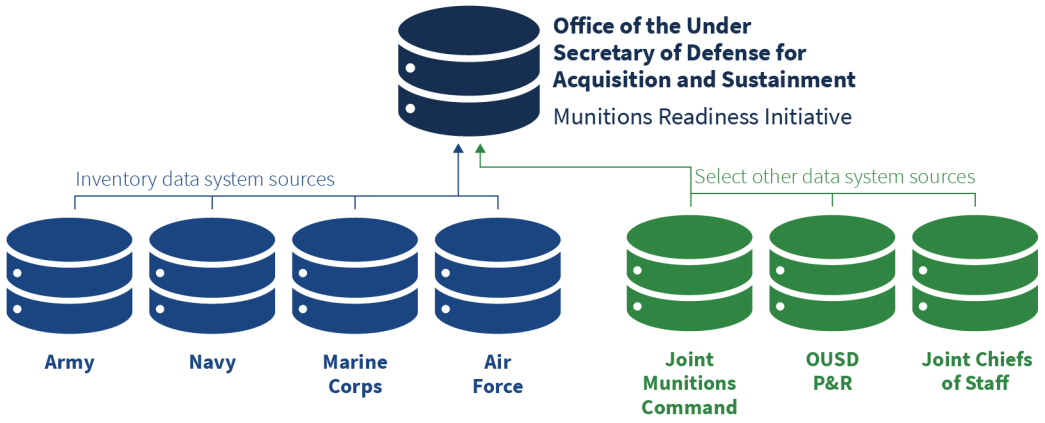
The military services maintain separate data systems to track their munitions inventories, which feed into a department-wide munitions data tool. However, we found that DOD has limited oversight over this tool and does not fulfill some related responsibilities. For example, we found that DOD has not regularly conducted inventory reconciliations with the military services and has not developed a data management plan that describes the methodology used to aggregate data across the services into this tool.

DOD and the Military Services Have Separate Data Systems to Track Munitions Inventory

The military services use their own data systems to track their munitions inventories and DOD, specifically OUSD (A&S), integrates the services' data into a single system that decision-makers use to identify DOD-wide munitions inventory. Each military service is responsible for maintaining authoritative and accountable records of its worldwide munitions inventories. DOD sets various requirements related to the maintenance of these records, such as maintaining specific data elements and completing monthly physical inventory inspections of certain items.[19]

The Munitions Readiness Initiative (MRI) is the department-wide munitions data tool managed by OUSD (A&S) and contained on DOD's Advana platform.[20] MRI aggregates the services' munitions data systems' information into a near real-time, department-wide inventory view through a variety of dashboards. In addition to reporting munitions inventories, MRI displays related information, such as munitions readiness and supply chain links between specific munitions types and the industrial base. In total, MRI pulls from 37 DOD data sources through a mix of automated connections and some manually updated data (see fig. 2).

Figure 2: Munitions Readiness Initiative (MRI) Tool Data Sources



Data sources	• SAAS • LMP • GCSS-A	• OIS	• OIS-Marine Corps	• TICMS	• IBAT, which produces supply chain analysis and risk assessment of critical ammunition end items and components to enhance planning and preparedness.	• DRRS, classified.	• MRP, whose spreadsheets contain numerical breakdowns of munition requirements by service.

DRRS	Defense Readiness Reporting System	OIS	Ordnance Information System
GCSS-A	Global Combat Support System – Army	OIS-MC	Ordnance Information System – Marine Corps
IBAT	Industrial Base Assessment Tool	OUSD P&R	Office of the Under Secretary of Defense for Personnel & Readiness
LMP	Logistics Management Program	SAAS	Standard Army Ammunition System
MRP	Munitions Requirements Process	TICMS	Theater Integrated Combat Munitions System

Source: GAO analysis of Department of Defense (DOD) information. | GAO-27-109420
Note: This figure reflects MRI data sources as of September 18, 2025. According to an Acquisition & Sustainment official, DOD is continuing to add data sources to improve MRI.

In 2022, USD (A&S) published a memorandum stating that the MRI tool will be used to provide the Secretary of Defense and other senior leaders with access to near real-time munitions inventories, rather than the individual service data systems.[21] According to a senior OUSD (A&S) official, prior to publication of the memorandum, DOD officials would request munitions inventory data manually from each service, which could take several days to obtain and aggregate into a worldwide view.

DOD Has Limited Oversight of the Department-Wide Munitions Data System

We found two factors that limit OUSD (A&S)'s oversight over the MRI tool used by senior leaders across DOD. First, OUSD (A&S) does not consistently reconcile MRI munitions inventory data against the services' own data systems. Second, OUSD (A&S) does not have a data management plan detailing how data is aggregated in the MRI tool from across the services.

Inconsistent Munitions Inventory Reconciliation

The Office of the Deputy Assistant Secretary of Defense for Logistics has primary responsibility for reconciling munition inventories with the services.[22] Additionally, DOD's *Data Product Management* guidance outlines best practices and guidance for building and managing data products.[23] This guidance highlights the importance of updating information to ensure freshness and relevance, such as regularly handling revisions or changes.

However, we found there has not been a consistent reconciliation of munitions inventory data between OUSD (A&S) and the services to assist in the identification and resolution of any data related issues, such as the accurate aggregation of inventory data between MRI and the services' munition databases. According to a senior OUSD (A&S) official, the office was reluctant to impose additional responsibilities on the services for maintaining data to meet MRI's needs because they recognize that the services already face numerous responsibilities in managing their own munitions inventory data.

By establishing consistent, regular timelines for reconciling information about changes to munitions, OUSD (A&S) and the services can ensure senior leaders are regularly receiving high-quality data on which to base their decisions. A senior OUSD (A&S) official told us that it would be helpful to reconcile changes across the services on a more consistent basis, particularly for high-priority munitions, to ensure the correct display of service information in MRI. In addition, officials from all four services said more regular reconciliations related to munition inventory changes would help ensure the accuracy of their information being displayed by MRI.

Lack of a Data Management Plan

The MRI tool standardizes the services' unique data in order to aggregate munitions inventory into a single department-wide view, but we found the MRI tool does not have a data management plan that documents this process and DOD has not developed a data dictionary for the tool. As previously noted, MRI pulls munitions-related data from systems owned and managed by components across DOD. MRI also captures munitions inventory data obtained from each of the services' data sources and standardizes these data to aggregate the munitions inventory into a single department-wide view. For example, MRI standardizes each munition's unique identifier to allow for cross-service comparisons.[24] OUSD (A&S) officials told us that although subject matter experts make data aggregation decisions based on several factors, including ad-hoc service inventory reconciliation discussions, the aggregation process has not been documented in a data management plan (see call out box) and a data dictionary that provides information on services' unique munitions identifiers.

Data Management Plans

Department of Defense data management plans cover multiple aspects of data asset management, including the standards and methodology used to aggregate data.

Data management plans can also include

- a description of the data to be collected,
- plans for data sharing and access, and
- a strategy for long-term preservation of the data.

DOD's *Data Stewardship Guidebook* describes roles, responsibilities, and best practices for governing and managing data.[25] For example, DOD chief data officers are responsible for managing the data assets of an agency, including developing and overseeing the implementation of data-related strategies and plans, such as data management plans.[26] According to OUSD (A&S) and DOD's Chief Digital and Artificial Intelligence Office officials, the Chief Digital and Artificial Intelligence Officer executes the responsibilities of the Chief Data Officer for DOD. Further, the *Data Stewardship Guidebook* identifies producing management policies, such as a comprehensive data dictionary that thoroughly defines and describes all data fields, as among the responsibilities of data managers. [27]

According to OUSD (A&S) officials, the department rolled out the system without a data management plan, as it was developing the system iteratively to respond to senior leader needs. Without developing a data management plan to document this process for the MRI tool and a data dictionary to define data sources, DOD is limited in its ability to monitor how data is aggregated or whether certain data quality standards are met, potentially affecting the accuracy of information in MRI. This is particularly important given the breadth of information compiled in MRI, sourced from across the department, and managed by other data stewards.[28]

Conclusions

Meeting munition requirements and rebuilding munition inventories is a highly complex challenge that will require a department-wide solution. While DOD is taking steps to focus on munitions shortages, it is not positioned to address these gaps. DOD does not have an overarching plan or designated and empowered leadership to improve munition inventories and meet its munitions requirements. By not identifying long-term goals, strategies to achieve them, and metrics to gauge progress, DOD cannot be sure that its actions will address its munition shortfalls.

DOD relies on the MRI tool as its department-wide inventory tool, but it has neither consistently conducted data reconciliations nor developed a data management plan. Without

implementing these steps, DOD decision-makers who use the MRI tool cannot ensure that it is providing the most accurate view of current munitions inventory to determine which munitions are available in the event of a conflict.

We are making four recommendations to DOD, as listed in our Recommendations section.

Agency Comments and Our Evaluation

In June 2026, we provided a draft of the classified version of this report to DOD for review and comment. That draft contained the same recommendations as this unclassified version. In September 2026, DOD verbally concurred with the recommendations but did not provide written comments. We issued the classified version of this report in September 2026 with those verbal comments. In October 2026, DOD provided written unclassified comments on our recommendations. DOD's written comments are reproduced in their entirety in appendix I.

DOD concurred with 3 of our recommendations and partially concurred with 1 recommendation. DOD partially concurred with recommendation 4, stating that OUSD (A&S) should lead efforts to develop a data management plan because they are munition subject matter experts. We agree, however, as noted above, the Chief Digital and Artificial Intelligence Officer is responsible for implementing data-related strategies and plans and should be part of the development of a data management plan. DOD also provided technical comments, which we incorporated as appropriate.

How GAO Did This Study

House Report 118-529 accompanying a bill for the National Defense Authorization Act for Fiscal Year 2025 includes a provision for us to assess the Department of Defense's (DOD) and the military services' munitions levels and requirements, including actions taken to mitigate any munitions shortfalls.[29] This report is a public version of a classified report that we issued September 24, 2026. This report assesses the extent to which (1) DOD and the services have taken steps to improve munitions shortages, and (2) DOD and the services track munitions inventory data. The classified report included an objective on trends in the DOD munitions inventories, persistent shortfalls, and how these shortfalls have affected DOD's ability to support war plans. DOD deemed this information to be classified or sensitive, which must be protected from loss, compromise, or inadvertent disclosure. Consequently, this public version excludes that information.

Although the information provided in this report is more limited, it uses the same methodology as the classified report. For both objectives, we reviewed and analyzed relevant DOD information, such as the Joint Staff and services munitions data, munitions related strategic plans, and Under Secretary of Defense for Acquisition and Sustainment memorandum on munitions accountability.

We also interviewed relevant officials from the following organizations:

- Office of the Under Secretary of Defense, Acquisition and Sustainment; Office of the Deputy Assistant Secretary of Defense for Logistics; Chief Digital and Artificial Intelligence Officer, Industrial Base Resilience, Policy, Analysis, and Transition;
- Joint Chiefs of Staff, J8, Force Structure, Resource & Assessment;
- Department of the Army Military Operations, Training and Ammunition; Army Joint Munitions Command, and Army's Joint Program Executive Office, Armaments and Ammunition;
- U.S. Navy, Integrated Warfare, Office of the Chief of Naval Operations;
- U.S. Marine Corps, Capabilities Development Directorate, Logistics Combat Element;
- U.S. Air Force, Air Force Life Cycle Management Center, Armament Directorate, Munitions Division; and
- Office of the Secretary of Defense, Cost Assessment and Program Evaluation.

In addition, we conducted site visits to U.S. Indo-Pacific Command (INDOPACOM) and service component commands in Hawaii where we reviewed classified documents and interviewed officials. We also conducted site visits to observe Army munitions facilities and equipment, and interviewed officials from the following Army Ammunition Plants and a Munitions Center: McAlester Army Ammunition Plant, Holston Army Ammunition Plant, Radford Army Ammunition Plant, and Letterkenny Munitions Center. We selected these Army ammunition facilities based on several criteria, including the type of munitions and components produced at each location, as well as if the facility was government owned and operated or if it was government owned and contractor operated.

To address our first objective, we interviewed officials from the Joint Staff, OUSD (A&S), and the military services to discuss actions DOD and the services have taken to address munitions shortages. We asked OUSD (A&S), the Joint Staff, and each of the services to identify any strategic plans related to munitions. Based on those discussions, officials told us that there are three primary strategic plans related to munitions. The plans are the 1) *Single Manager for Conventional Ammunition Industrial Base Strategic Plan (2016)*, 2) *National Defense Industrial Strategy (2023)*, and 3) *Army Ammunition Plant Modernization Plan (2025)*.[30] We analyzed these three strategic plans to determine if they included an overarching munitions improvement plan for DOD with metrics and milestones. We also interviewed officials from the Joint Staff, OUSD (A&S), the Joint Program Executive Office, Armaments and Ammunition to discuss these strategic plans.

We assessed these plans and compared them to GAO's *Standards for Internal Control* and leading practices for sound planning.[31] Specifically, significant to this audit was the call for agency management to define goals that articulate what the organization wants to achieve to

advance its mission and to implement key elements of sound planning such as developing long-term goals, strategies to achieve goals, and metrics to gauge progress. We also applied GAO's best practices for integrated portfolio management, which states that successful management requires committed leadership that empowers managers to make decisions, and holds them accountable for the outcomes achieved at all levels of an organization.[32] We also assessed documentary and testimonial evidence on DOD's munitions governing entities and compared it to federal internal control standards and our best practices for integrated portfolio management to determine if DOD had assigned responsibility, and delegated authority to achieve the entity's objectives.[33] Moreover, we assessed if DOD had empowered an office to make decisions and hold others accountable for the outcomes achieved.

To address our second objective, we interviewed officials from the Joint Staff, Army, Navy, Marine Corps, Air Force, and the OUSD (A&S) to discuss DOD's department-wide munitions data tools. We reviewed policies from OUSD (A&S) and the services regarding the tracking of munitions. Specifically, significant to this audit was OUSD (A&S)'s *Munitions Accountability Reporting* Memorandum for the Munitions Readiness Initiative (MRI).[34] We compared the requirements within the memo, specifically the requirement for Office of the Deputy Assistant Secretary of Defense for Logistics to reconcile munition inventories with the services, to the actions that DOD and the services had taken when discrepancies were identified. We interviewed knowledgeable officials within OUSD (A&S), Joint Staff, and each of the services about any challenges or shortcomings regarding the way MRI displays data compared to the services authoritative data systems information. We also requested MRI's data management plan to compare to the guidance outlined by the Chief Digital and Artificial Intelligence Officer in *Data Stewardship Guidebook* regarding the development and oversight of a plan.[35] DOD had not developed a plan for MRI and therefore we could not conduct an assessment.

We conducted the performance audit upon which this report is based from September 2024 to September 2026 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. We worked with DOD to prepare this unclassified version of the report for public release. This public version was also prepared in accordance with these standards.

List of Addressees

The Honorable Mike Rogers
Chairman

The Honorable Adam Smith
Ranking Member

Committee on Armed Services
United States House of Representatives

We are sending copies of this report to the appropriate congressional committees, the Secretaries of the Army, Air Force, and Navy, the Commandant of the Marine Corps, and other interested parties.

Staff Acknowledgments

This performance audit was completed under the direction of

Diana Moldafsky
Director, Defense Capabilities and Management

Other key contributors to this report were: Chris Watson (Assistant Director), Nicole Volchko (Analyst in Charge), David Ballard, Michele Fejfar, Chad Hinsch, Eric Inumerable, Amie Lesser, Alexia Lipman, Lillian Ofilli, and Lillian Moyano Yob.

APPENDIX I

Comments from Agency

Comments from the Department of Defense

OFFICE OF THE ASSISTANT SECRETARY OF WAR
3600 DEFENSE PENTAGON
WASHINGTON, DC 20301-3600

ACQUISITION

Ms. Diana Moldafsky
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G St. N.W.
Washington, DC 20548

Dear Ms. Moldafsky:

We appreciate your reaching out to request our review and comment. As requested, this letter serves as the Department of War (DoW) response to the recommendations set forth in Government Accountability Office (GAO) Draft Report GAO-26-107800C, titled "DOD Munitions: Planning and Leadership Needed to Address Persistent Shortages," dated August 2026.

Enclosed is the DoW's formal response to the subject report recommendations including a security classification review of the contents. For further information, please contact Dr. Dion Serben, who may be reached at dion.f.serben.civ@mail.mil or (703) 695-1772.

Sincerely,

CADMAN.DAVID.S.1229303615
Digitally signed by CADMAN.DAVID.S.1229303615
Date: 2026.10.14 10:41:01 -04'00'

David S. Cadman
Acting Principal Deputy Assistant Secretary
of War for Acquisition

Enclosure:
As stated

UNCLASSIFIED

GAO DRAFT REPORT 26-107800C (DATED AUGUST 2026)
"DOD MUNITIONS: PLANNING AND LEADERSHIP NEEDED TO ADDRESS PERSISTENT SHORTAGES"

DEPARTMENT OF WAR COMMENTS
TO THE GAO RECOMMENDATIONS

RECOMMENDATION 1: The Secretary of Defense, in consultation with the Chairman of the Joint Chiefs of Staff and the Secretaries of the military departments, should develop an overarching munitions plan to improve inventory levels that links munitions production and funding to total munitions requirements and includes long-term goals, strategies to achieve goals, and metrics to gauge progress in addressing munitions shortages.

RESPONSE: DoW Concurs

DoW concurs. We agree with the need for an overarching framework that better integrates munitions requirements, inventory levels, production, resources, and long-term objectives. However, the Department of War (DoW) already executes many elements contemplated by the recommendation through established processes. The Munitions Requirements Process (MRP) develops Total Munitions Requirements (TMRs), which inform the Program Objective Memorandum (POM) and resource decisions; projected inventory and sufficiency assessments and identifying gaps. The Munitions Readiness Initiatives (MRI) provides enterprise inventory visibility; and the acceleration mechanism governed by the Department's oversight body, the Munitions Acceleration Council (MAC) addresses priority production and industrial base challenges. Therefore, the principal issue is not the absence of these functions, but the lack of a single overarching framework that integrates functions, establishes long-term objectives, and measures progress toward closing critical munitions gaps, including investment strategies, and resourcing considerations. The Department will enhance their current structure for a clearer overarching framework that integrates requirements, inventory, production, resources, and long-term objectives.

RECOMMENDATION 2: The Secretary of Defense should identify an office or entity and empower its leadership with the authority to implement the munitions plan to address munitions challenges once the plan is developed.

RESPONSE: DoW Concurs

DoW concurs with this recommendation. The Department agrees that clear leadership, accountability, and governance are necessary to implement an overarching munitions plan. OUSW (A&S), through the MAC, already provides a means to coordinate actions addressing priority munitions production, acquisition, defense industrial base, and supply chain challenges. However, implementation of an enterprise munitions plan involves authorities and responsibilities distributed across OSW, the Joint Staff, Military Departments, including

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requirements, programming and budgeting, acquisition, inventory management, and operational prioritization. The DoW should continue to establish clear implementation leadership and escalation mechanisms without unnecessarily transferring or duplicating authorities appropriately assigned to other Department organizations.

RECOMMENDATION 3: The Secretary of Defense should ensure that the Under Secretary of Defense for Acquisition and Sustainment, in coordination with the Secretaries of the military departments, sets regular timelines for inventory reconciliation designed to facilitate the identification and resolution of data related issues, such as the accurate aggregation of inventory data between the MRI tool and the services' munition databases.

RESPONSE: DoW Concurs

The DoW concurs with this recommendation. In addition, the Department recommends including the review of the MRI business rules as part of the inventory reconciliation to ensure they are in line with the Services' expectations.

RECOMMENDATION 4: The Secretary of Defense should ensure that DOD's Chief Digital and Artificial Intelligence Officer develops a data management plan that documents the standards and processes used to aggregate munitions data and a data dictionary to define data sources.

RESPONSE: DoW Partially Concurs

DoW partially concurs with this recommendation. Recommend that OUSW (A&S) leads the effort to develop the data management plan as they have the munition subject matter experts and data managers that are best to develop the data management plan.

Appendix II

References

Abbreviations

DOD	Department of Defense
DODIC	Department of Defense Identification Code
INDOPACOM	U.S. Indo-Pacific Command
MRI	Munitions Readiness Initiative
OIB	Organic Industrial Base
OUSD (A&S)	Office of the Under Secretary of Defense for Acquisition and Sustainment

Sources

This appendix contains credit, copyright, and other source information for images, tables, or figures in this product when that information was not listed adjacent to the image, table, or figure.

Page 3: GAO analysis of Department of Defense information; U.S. Army/D.Whipple (photo) (call out box).

Page 11: GAO analysis of Department of Defense information (call out box).

Citing This Report

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GAO, *DOD Munitions: Planning and Leadership Needed to Address Persistent Shortages*, GAO-27-109420 (Washington, D.C.: November 19, 2026).

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Endnotes

[1]Department of War, *2026 National Defense Strategy* (Jan. 23, 2026).

[2]Department of Defense Inspector General Report No. DODIG 2025-153, *Summary Report Lessons Learned from DODOIG Reports on Munitions* (Sept. 5, 2025).

[3]Steven J. Morani, Acting Assistant Secretary of Defense for Sustainment, *Army Munition Industrial Base Modernization*, testimony before the House Armed Services Subcommittee on Tactical Air and Land Forces, 119th Cong., 1st sess., June 11, 2025.

[4]H. R. Rep. No. 118-529, at 114-15 (2024). For the purposes of this report, the military services are the Army, Navy, Marine Corps, and Air Force. We did not include the Space Force in this assessment because it does not have a munitions inventory requirements process or a munitions inventory system.

[5]10 U.S.C. § 101(f)(4). DOD guidance defines conventional ammunition as an end item, complete round, or materiel component charged with ammunition explosives, propellants, pyrotechnics, or initiating composition for use in connection with defense or offense as well as ammunition used for training, ceremonial, or non-operational purposes, but does not include in this definition any guided missiles, such as Standard Missile-6. Department of Defense Instruction 5160.68, *Single Manager for Conventional Ammunition* (Mar. 15, 2022). In this report, we refer to conventional ammunition and missiles collectively as munitions and do not include small arms or nuclear weapons.

[6]DOD Dictionary defines Precision Guided Munitions as a guided weapon intended to destroy a point target and minimize collateral damage. Department of Defense, *Dictionary of Military and Associated Terms* (Mar. 2026).

[7]According to a report by the Congressional Research Service, *The U.S. Defense Industrial Base: Background and Issues for Congress*, updated September 23, 2024, there are five major firms are Lockheed Martin, RTX, Northrop Grumman, General Dynamics, and Boeing.

[8]The single manager is not responsible for guided missiles or nuclear munitions, among other things. The military services are responsible for providing support to the Army in its role as single manager. DOD Instruction 5160.68, *Single Manager for Conventional Ammunition* (Mar. 15, 2022). We have previously reported on the Army's management of conventional munitions in GAO, *Army Ammunition: Actions Needed to Improve Management of Procurement and Production Practices,* GAO-23-105352 (Washington, D.C.: Oct. 13, 2022).

[9]National Defense Authorization Act for Fiscal Year 2022, Pub. L. No. 117-81, § 2834 (2021); National Defense Authorization Act for Fiscal Year 2024, Pub. L. No. 118-31, § 2888 (2023); S. Rep. No. 118-81, at 108 (2023).

[10]Department of the Army, *Army Ammunition Plant Modernization Plan* (Apr. 2025). The Army defines production base (what we refer to in this report as production facility infrastructure) as the total privately-owned and government-owned facilities available to manufacture items required by the military services. DOD Instruction 5160.68*, Single Manager for Conventional Ammunition* (Mar. 15, 2022).

[11]Single Manager for Conventional Ammunition (SMCA), *United States Army Ammunition Industrial Base Strategic Plan: 2025* (Feb. 2016); (U) Department of Defense, *National Defense Industrial Strategy* (Nov.16, 2023).

[12]Our classified report included a more detailed discussion of key planning gaps that we omitted as DOD deemed this information to be sensitive.

[13]Department of Defense, *National Defense Industrial Strategy* (Nov. 16, 2023).

[14]GAO, *Evidence Based Policymaking: Practices to Help Manage and Assess the Results of Federal Efforts*, GAO-23-105460 (Washington, D.C.: July 20, 2023).

[15]GAO, *Military Readiness: DOD's Readiness Rebuilding Efforts May Be at Risk without a Comprehensive Plan,* GAO-16-534C (Washington, D.C.: June 30, 2016).

[16]An Act to provide for reconciliation pursuant to title II of H. Con. Res. 14, Pub. L. No. 119-21, § 20004 (2025).

[17]GAO, *Standards for Internal Control in the Federal Government*, GAO-25-107721 (Washington, D.C.: May 15, 2025).

[18]GAO, *Best Practices: An Integrated Portfolio Management Approach to Weapon System Investments Could Improve DOD's Acquisition Outcomes*, GAO-07-388, (Washington, D.C.: Mar. 30, 2007) and *Leading Practices: Agile Portfolio Management and Iterative Business Cases Drive Innovative Product Development*, GAO-25-107130 (Washington, D.C.: Sept. 17, 2025).

[19]Department of Defense Manual 5100.76, *Physical Security of Sensitive Conventional Arms, Ammunition, and Explosives (AA&E)* (Apr. 17, 2012) (incorporating change 2, effective Oct. 5, 2020).

[20]Under Secretary of Defense for Acquisition and Sustainment Memorandum, *Munitions Accountability Reporting* (July 5, 2022). Advana is DOD's official enterprise data and analytics environment, providing users with data from more than 400 DOD systems and tools to enable data-based decision-making.

[21]Under Secretary of Defense for Acquisition and Sustainment Memorandum, *Munitions Accountability Reporting* (July 5, 2022). According to OUSD (A&S) officials, MRI began development in 2018.

[22]Under Secretary of Defense for Acquisition and Sustainment Memorandum, *Munitions Accountability Reporting* (July 5, 2022).

[23]Department of Defense, Chief Digital and Artificial Intelligence Officer, *DOD Data Product Management Playbook* (Dec.2024).

[24]According to service officials, each service uses a different unique identifier; the Army and Marine Corps use Department of Defense Identification Codes (DODICs), the Navy uses Control Numbers, and the Air Force uses Master Subsidiary Relationship Groups (MSRGs).

[25]Department of Defense, Chief Digital and Artificial Intelligence Officer, *DOD Data Stewardship Guidebook Version 2.0* (Feb. 2025). Although some of these roles are optional, the guidance states that the responsibilities of these roles are essential to effective data management and required to be carried out within DOD components.

[26]The guidance defines data management plans as a plan that documents how specific data is collected, processed, used, and curated in order to facilitate long-term data management decisions and actions.

[27]The law requiring heads of agencies to designate a nonpolitical appointee employee in the agency as the Chief Data Officer of the agency was passed in 2019. Pub. L. No. 115-435, § 202(e)(1) (2019). The statutory functions and responsibilities of the Chief Data Officer are codified at 44 U.S.C. § 3520.

[28]Data stewards are involved in governance and data management activities, such as data quality management.

[29]H. R. Rep. No. 118-529, at 114-15 (2024).

[30]Single Manager for Conventional Ammunition (SMCA)*, United States Army Ammunition Industrial Base Strategic Plan: 2025*, Department of Defense*, National Defense Industrial Strategy*, Headquarters, Department of the Army, *Army Ammunition Plant Modernization Plan*.

[31]GAO, *Standards for Internal Control in the Federal Government*, GAO-25-107721 (Washington, D.C.: May 15, 2025) and *Military Readiness: DOD's Readiness Rebuilding Efforts May Be at Risk without a Comprehensive Plan,* GAO-16-534C (Washington, D.C.: June 30, 2016).

[32]GAO, *Best Practices: An Integrated Portfolio Management Approach to Weapon System Investments Could Improve DOD's Acquisition Outcomes*, GAO-07-388 (Washington, D.C.: Mar. 30, 2007).

[33]GAO, *Standards for Internal Control in the Federal Government*, GAO-25-107721 (Washington, D.C.: May 15, 2025), and *Best Practices: An Integrated Portfolio Management Approach to Weapon System Investments Could Improve DOD's Acquisition Outcomes*, GAO-07-388 (Washington, D.C.: Mar. 30, 2007).

[34]Under Secretary of Defense for Acquisition and Sustainment Memorandum, *Munitions Accountability Reporting* (July 5, 2022).

[35]Department of Defense, Chief Digital and Artificial Intelligence Officer, *DOD Data Stewardship Guidebook Version 2.0* (February 2025).

Appendix III

Accessible Data for Figures

Accessible Data for Figure 1: Examples of Organic Industrial Base Investment Projects

Type of Facility	Example of Investment Project
Government Owned, Contractor Operated	Holston Army Ammunition Plant is a government owned, contractor operated ammunition plant in Kingsport, Tennessee. The plant is owned by the Army's Joint Munitions Command and operated by BAE Industries.
Government Owned, Government Operated	Letterkenny Munitions Center is a government owned, government operated facility that distributes, stores, demilitarizes and maintains high end munitions. These munitions include the Army Tactical Missile System and Guided Multiple Launch Rocket Systems, both of which have been provided to Ukraine in response to the Russian invasion.

Source: GAO analysis of Department of Defense information. | GAO-27-109420

Accessible Data for Figure 2: Munitions Readiness Initiative (MRI) Tool Data Sources

Type of Data Source	Owner of Data Source	Data Sources
Inventory data system sources	Army	• Standard Army Ammunition System • Logistics Management Program • Global Combat Support System – Army
	Navy	• Ordnance Information System
	Marine Corps	• Ordnance Information System – Marine Corps
	Air Force	• Theater Integrated Combat Munitions System
Select other data sources	Joint Munitions Command	• Industrial Base Assessment Tool, which produces supply chain analysis and risk assessment of critical ammunition end items and components to enhance planning and preparedness.
	Office of the Under Secretary of Defense for Personnel & Readiness	• Defense Readiness Reporting System, classified.
	Joint Chiefs of Staff	• Munitions Requirements Process, whose spreadsheets contain numerical breakdowns of munition requirements by service.

Source: GAO analysis of Department of Defense information. | GAO-27-109420

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