Congressional Research Service
Informing the legislative debate since 1914

IN FOCUS

Updated January 30, 2026

Defense Primer: Research, Development, Test, and Evaluation

Advanced technologies play a critical role in ensuring U.S. national security. To maintain technological superiority on the battlefield, the Department of Defense (DOD)—which is "using a secondary Department of War designation" under Executive Order 14347 dated September 5, 2025—relies on scientific and technical knowledge developed in large measure through research, development, test, and evaluation (RDT&E) efforts funded by the department and performed by industry, universities, federal laboratories, and others. DOD is the largest supporter of federally funded research and development (R&D)—accounting for 50% of federal R&D in FY2024. DOD also relies increasingly on technology developed by the private sector for commercial markets. This In Focus describes DOD's RDT&E appropriations structure, FY2025 enacted funding levels for DOD RDT&E, and congressional considerations.

RDT&E Appropriations Structure

DOD appropriations are provided annually through the defense appropriations act. RDT&E funding is generally appropriated into high-level accounts in three of the act's titles (see text box). In FY2025, the total obligational authority enacted for RDT&E through regular appropriations was $143.7 billion.

Defense Appropriations Act Titles That Fund RDT&E

Title IV: Research, Development, Test, and Evaluation
- Army
- Navy
- Air Force
- Space Force
- Defense-Wide
- Operational Test and Evaluation

Title V: Revolving and Management Funds
- National Defense Sealift Fund

Title VI: Other Defense Programs
- Chemical Agents and Munitions Destruction
- Defense Health Program
- Inspector General

Most of DOD's RDT&E funding is appropriated into organization-related accounts in Title IV (Research, Development, Test, and Evaluation), which includes appropriations accounts for the Army, Navy, Air Force, Space Force, a Defense-wide account, and the Director of Operational Test and Evaluation. The Defense-wide account includes the Missile Defense Agency, the Defense Advanced Research Projects Agency, the Office of the Secretary of Defense, and 15 other DOD organizations, as well as classified funding. Within these accounts are program elements that provide funding for particular activities.

RDT&E funds are also appropriated in Titles V and VI of the defense appropriations act. For example, in Title VI, RDT&E funds are part of the Chemical Agents and Munitions Destruction Program, the Defense Health Program, and the Office of the Inspector General. In some years, RDT&E funds have been provided in Title V as part of the National Defense Sealift Fund.

Congress can also provide RDT&E funding through supplemental appropriations acts. For example, P.L. 118-158, the American Relief Act, 2025, included $110.7 million in supplemental disaster relief funding for two RDT&E accounts—the Army and the Air Force. In addition, P.L. 119-21, the FY2025 reconciliation law, provided $156.2 billion in mandatory defense funding available for expenditure until September 30, 2029. DOD's FY2026 budget request indicates that $37 billion of such reconciliation funding is for RDT&E.

RDT&E by Character of Work

While DOD Title IV funds are appropriated into organization-related accounts, DOD budget justifications and congressional appropriations reports and explanatory statements typically describe RDT&E funding by the character of the work to be performed. This characterization consists of eight categories, each with a budget activity code (6.1-6.8) and a description (**Table 1**).

Table 1. DOD RDT&E Budget Activity Codes

Code	Description
6.1	Basic Research
6.2	Applied Research
6.3	Advanced Technology Development
6.4	Advanced Component Development and Prototypes
6.5	System Development and Demonstration
6.6	RDT&E Management Support
6.7	Operational System Development
6.8	Software and Digital Technology Pilot Programs

Source: Department of Defense, *Financial Management Regulation (DoD 7000.14-R),* Volume 2B, September 2022.

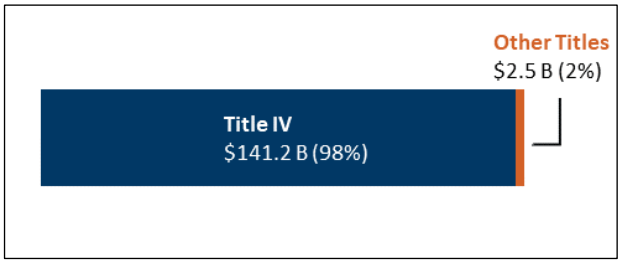
Funding in Codes 6.1 to 6.3 is referred to by DOD and others as the defense science and technology (S&T) budget. This portion of DOD RDT&E is seen as the pool of knowledge necessary for the development of future military systems. In contrast, 6.4, 6.5, and 6.7 funds are focused on the application of existing scientific and technical knowledge to meet current or near-term operational needs. The funds in 6.6 are for RDT&E management and support work in the other RDT&E budget activity codes. DOD added Budget Activity Code 6.8 as part of the FY2021 budget request to support the acquisition, sustainment, and

modernization of software and digital applications and services.

Funding Profile of DOD RDT&E

In FY2025, total RDT&E funding was $143.7 billion. The share of RDT&E funds appropriated into Title IV was 98%, or $141.2 billion (**Figure 1**).

Figure 1. Title IV Share of Total DOD RDT&E, FY2025

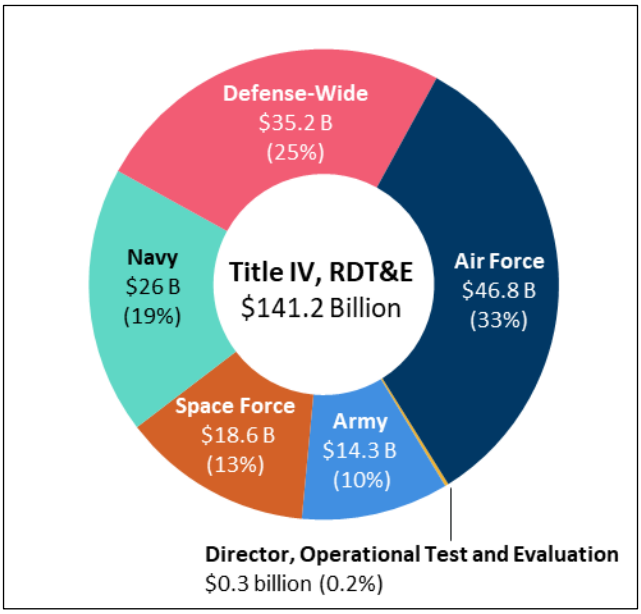


Source: CRS analysis of Office of the Under Secretary of Defense (Comptroller), *Department of Defense Budget, Fiscal Year 2026: RDT&E Programs (R-1)*, June 2025.

Notes: B = billion.

Figure 2 shows Title IV FY2025 RDT&E funds by organization. The Air Force received the largest share of Title IV RDT&E funding—$46.8 billion, or 33%—followed by the defense-wide account at $35.2 billion, or 25%.

Figure 2. Title IV RDT&E Funds by Organization, FY2025

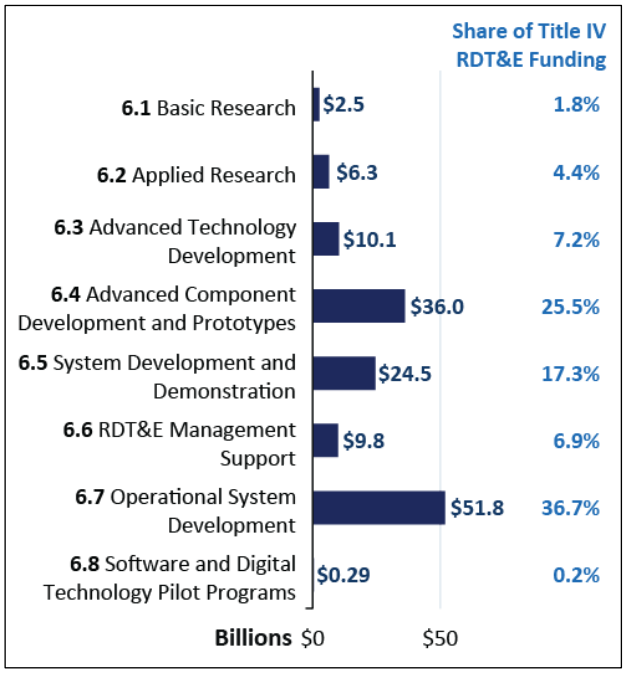


Source: CRS analysis of Office of the Under Secretary of Defense (Comptroller), *Department of Defense Budget, Fiscal Year 2026: RDT&E Programs (R-1)*, June 2025.

Notes: B = billion.

Figure 3 illustrates Title IV FY2025 RDT&E funding by character of work. Most of the funding—$51.8 billion, or 37%—supported work under Budget Activity Code 6.7, operational system development. These funds support efforts to upgrade systems that have been fielded or have received approval for full-rate production and are likely to receive production funding in the current or subsequent fiscal year. Defense S&T funding (6.1-6.3) accounted for $18.9 billion, or 13%, of RDT&E funding in FY2025.

Figure 3. Title IV DOD RDT&E by Character of Work, FY2025



Source: CRS analysis of Office of the Under Secretary of Defense (Comptroller), *Department of Defense Budget, Fiscal Year 2026: RDT&E Programs (R-1)*, June 2025.

Notes: Amounts do not sum to total because of rounding.

Considerations for Congress

A wide range of factors influence congressional decisionmaking in regards to the magnitude, allocation, and strategic direction of defense RDT&E spending. Such factors include current military engagements and international commitments; near-term national security threats; the perceived need for technological capabilities to address emerging threats; RDT&E funding and capabilities of adversaries, potential adversaries, and allies; competing demands for resources to support non-RDT&E activities (e.g., personnel); other federal non-defense activities; prior funding levels, anticipated government revenues; and appropriations constraints (e.g., budget caps).

Defense S&T funding (Codes 6.1-6.3) is a frequent focus of Congress because of its potential impact on future defense technologies. Defense experts and others have recommended the goal of funding defense S&T at 3% of DOD's topline budget. According to a 2023 analysis from the National Defense Industrial Association's Emerging Technologies Institute (ETI), this goal has not been met "any year during the twenty-first century," and Congress has not appropriated DOD S&T funding at the 3% level since FY2005. In FY2025, S&T funding was 2.5% of DOD's overall budget. ETI suggests that consistent levels of RDT&E funding may be more helpful to the development of future defense technologies than the 3% target and that other goals, such as increasing S&T funding at a specified rate or protecting it from inflation, should be considered.

Marcy E. Gallo, Analyst in Science and Technology Policy

Disclaimer