The Army Modernization Challenge
A Historical Perspective
Rhys McCormick

During the most recent defense drawdown, the Army elected to prioritize funding for readiness and limit reductions in force structure, and it has been willing to trade off modernization funding in favor of these other priorities. As shown in Figure 1, since 2008, Army modernization ([1] Procurement; and [2] Research, Development, Testing, and Evaluation (RDT&E) accounts) funding has fallen precipitously. Since 2008, Army modernization total obligation authority (TOA) has fallen by 74 percent in real terms. As a result of both declining obligations for the Mine-Resistant Ambush Protected (MRAP) vehicle and the cancellation of several Major Defense Acquisition Programs (MDAPs) prior to entering the production phase, Army procurement has fallen 78 percent since 2008. Simultaneously, Army RDT&E funding has fallen 52 percent as a result of the winding down of Future Combat System R&D efforts, as well as the Army’s inability to start or sustain new development programs, “either due to budgetary pressures or to programmatic difficulties.”

Figure 1: Army Modernization Total Obligation Authority, 2008–2015

Sources: Department of Defense, National Defense Budget Estimates for Fiscal Year 2016 (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2015; CSIS Analysis.

In absolute terms, this decline seems substantial, but how does the current Army modernization trajectory compare to the challenges faced in previous defense drawdowns? Following the end of previous conflicts (Korea, Vietnam, and the Cold War), the U.S. defense budget has shrunk to historically similar levels, as has happened since 2008 with the withdrawal and drawdowns in Iraq and Afghanistan. Are the trends seen in Army modernization today similar in nature to trends of the previous drawdowns, or is this time different?

Figure 2: Army Modernization Total Obligation Authority, 1948–2020

![Figure 2: Army Modernization Total Obligation Authority, 1948–2020](chart)


Figure 2 shows that the recent sharp decline in Army modernization is not a new phenomenon. Just as in previous defense drawdowns, Army modernization funding historically falls in response to declining defense budgets. Historically, the decline in army modernization follows the same general pattern: After a period of growth, Army modernization TOA peaks between 27 percent and 31 percent of overall Army TOA. After hitting that peak, the Army modernization budget rapidly declines for the next few years, before leveling off. The Army modernization budget then generally holds relatively steady for a few years at that new budget level, before once again increasing.
Army Modernization Decline 1: 1969–1975

**Figure 3: Army Modernization Total Obligation Authority, 1969–1975**

The first major Army drawdown occurred between 1969 and 1975, following the Vietnam War and the shift in U.S. policy from massive nuclear retaliation to flexible response. During this period, Army modernization TOA fell 64 percent in absolute terms. As a share of overall Army TOA, modernization fell from 24 percent in 1969 to 16 percent in 1975.

Army procurement TOA fell from $35.23 billion in 1969 to $9.32 billion in 1975, a 74 percent decline.

RDT&E funding saw smaller, but still significant cuts over this six-year period, falling from $9.58 billion to $6.82 billion, a 29 percent decline.


Figure 4: Army Modernization Total Obligation Authority, 1985–1998

The second Army drawdown occurred between 1985 and 1998 in the shadows of the Reagan defense buildup and end of the Cold War era. Over those 14 years, Army modernization TOA fell 59 percent from $42.53 billion in 1985 to $17.31 billion in 1998. As a share of Army TOA, modernization was just 18 percent in 1998 as compared to 26 percent in 1985.

During this second drawdown, Army procurement TOA fell 70 percent from $33.90 billion in 1985 to $10.11 billion in 1998.

As compared to the first Army modernization drawdown, Army RDT&E TOA fell much more slowly during this drawdown. In 1985, Army RDT&E TOA totaled $8.63 billion; by 1998, Army RDT&E TOA had fallen to $7.20 billion, a 17 percent decline.

Why This Drawdown Is Different: The Army’s Triple Whammy Problem

Table 1: Comparison of Army Modernization Drawdowns

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<tr>
<th>Drawdown 1: 1969–1975</th>
<th>Procurement</th>
<th>RDT&amp;E</th>
<th>Total Army Modernization</th>
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<tr>
<td>-74%</td>
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<tr>
<th>Drawdown 2: 1985–1998</th>
<th>Procurement</th>
<th>RDT&amp;E</th>
<th>Total Army Modernization</th>
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<tbody>
<tr>
<td>-70%</td>
<td>-17%</td>
<td>-59%</td>
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<th>Drawdown 3: 2008–2015</th>
<th>Procurement</th>
<th>RDT&amp;E</th>
<th>Total Army Modernization</th>
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<td>-78%</td>
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This most recent Army modernization drawdown is a triple whammy for the Army; not only have they taken a larger percentage cut than previous cuts, but those two previous drawdowns came after the Army had already modernized much of the force. In the 1960s, the Army modernized the force to meet the requirements of the new flexible response doctrine; in the 1980s, the Army largely completed production of the “Big Five”—M1 Abrams, M2 Bradley, Apache AH-64 Helicopter, UH-60 Black Hawk Helicopter, and the MIM-104 Patriot Missile System. The 2000s however constituted a largely “lost decade” in Army acquisition as billions of dollars were spent on MDAPs, which were ultimately cancelled before they ever reached the war fighter. Notable cancelled programs included, but were not limited to: Future Combat System, the Ground Combat Vehicle, the RAH-66 Comanche Armed Reconnaissance and Attack Helicopter, the XM 2001 Crusader Self-Propelled Howitzer, and the Armed Reconnaissance Helicopter (ARH-70 Arapaho).

While the Army did field new platforms such as the MRAP, Stryker, and Gray Eagle, it did not complete the large-scale procurement of new weapon systems as in previous drawdowns. Moreover, these acquisition programs were suited for meeting immediate wartime demands, not necessarily the future strategic operating environment. Since producing more than 27,000 MRAPs to counter the improvised explosive device (IED) threat in Iraq and Afghanistan, a significant portion of that inventory has since been sold to international partners, sold for scrap metal, or given to U.S. law enforcement. The Stryker, originally procured in the early 2000s as an interim armored vehicle until Future Combat Systems (FCS) delivered additional capabilities, has been enhanced with up-gunning to meet operational needs today.\(^2\)

The third whammy confounding those issues is the historically large decline in RDT&E funding accounts, as shown in Table 1 above. Whereas in previous drawdowns RDT&E TOA did decline, it did not do so at the sharp rates seen in this most recent drawdown. Additionally, the most recent decline in RDT&E differs from the previous drawdowns in the rate at which the decline occurred. During the first two drawdowns, RDT&E TOA held relatively steady at the start of the period and only began to notably decline near the end of the drawdown period. In this most period, the decline in RDT&E TOA was immediate.

**Conclusion: The Challenge Today and Into the Future**

Barring a radical shift in priorities, the modernization challenge will not get any easier for the Army in the future. Army leaders have repeatedly made clear that modernization remains a distant third priority behind rebuilding readiness and maintaining force structure at the Army’s current target levels. As the debate begins on halting the Army’s current end-strength drawdown, modernization will only face increasing competition for resources.\(^3\)

The Army should not count on defense budget increases as the solution to its modernization problem. As noted by CSIS expert Todd Harrison, the Department of Defense (DoD) currently faces a MDAP modernization bow wave at the end of the current Future Years Defense Program (FYDP). Funding this modernization bow wave requires an additional $130 billion beyond the 2011 Budget Control Act caps by 2022. While Army modernization funding for MDAPs is projected to increase by 28 percent during this bow


wave, not a single Army program makes the list of DoD’s Top Ten Acquisition programs by projected funding.\(^4\)

The implications for Army modernization are twofold: First, even if the defense budget increases in the coming years, the Army will face stiff competition for that increase from the Air Force and Navy to fund the acquisition programs driving the modernization bow wave. Second, the “hollow” buildup of 2000–2008 and the unusually large reduction in R&D in this drawdown means that the Army’s recovery will be much more difficult than in previous drawdowns.

Army modernization today sits at a precipice. Continued failure to fund modernization will leave the United States with an army unsuited to handle the future geostrategic environment. Yet, budgetary relief to modernization accounts remains unlikely for at least the near future. Given these realities, maximizing the utility of the Army’s modernization efforts in an era of limited budgets is critical for its future. The Army can ill afford to repeat the acquisition experiences of the past 20 years.

Over the next year, CSIS will continue to explore this issue in more depth in order to formulate recommendations for the future of Army modernization.

**About the Author**

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**Acknowledgments**

This report is made possible by the generous support of General Dynamic and DRS Technologies.

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