

Highlights of [GAO-12-181T](#), a testimony before the Subcommittee on Tactical Air and Land Forces, Committee on Armed Services, House of Representatives

Why GAO Did This Study

After the Army canceled the Future Combat System in June of 2009, it began developing modernization plans, including developing a new Ground Combat Vehicle (GCV) and additional network capability. At the same time, the Army was considering options on how to improve its light tactical vehicles.

This statement addresses potential issues related to developing (1) the new GCV, (2) a common information network, and (3) the Joint Light Tactical Vehicle (JLTV) in a constrained budget environment. The statement is based largely on previous GAO work conducted over the last year in response to congressional requests and results of other reviews of Army modernization.

To conduct this work, GAO analyzed program documentation, strategies, and test results; interviewed independent experts and Army and Department of Defense (DOD) officials; and witnessed demonstrations of current and emerging network technologies.

DOD reviewed the facts contained in this statement and provided technical comments, which were incorporated as appropriate.

What GAO Recommends

GAO is not making any recommendations with this statement; however, consistent with previous work, this statement underscores the importance of developing sound requirements and focusing up front on what modernization efforts will deliver and at what cost.

View [GAO-12-181T](#). For more information, contact Belva Martin at (202) 512-4841 or martinb@gao.gov.

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DEFENSE ACQUISITIONS

Future Ground-Based Vehicles and Network Initiatives Face Development and Funding Challenges

What GAO Found

Delivering a feasible, cost-effective, and executable GCV solution presents a major challenge to the Army, with key questions about the robustness of the analysis of alternatives, the plausibility of its 7-year schedule, and cost and affordability. DOD and the Army have taken steps to increase oversight of the program, but resolving these issues during technology development will remain a challenge. For example, the Army has already reduced some requirements and encouraged contractors to use mature technologies in their proposals, but the 7-year schedule remains ambitious, and delays would increase development costs. Independent cost estimates have suggested that 9 to 10 years is a more realistic schedule. Over the next 2 years during the technology development phase, the Army faces major challenges in deciding which capabilities to pursue and include in a GCV vehicle design and determine whether the best option is a new vehicle or modifications to a current vehicle.

The Army's new information network strategy moves away from a single network development program to an incremental approach with which feasible technologies can be developed, tested, and fielded. The new strategy has noteworthy aspects, such as using periodic field evaluations to assess systems that may provide potential benefit and getting soldier feedback on the equipment being tested. However, the Army has not articulated requirements, incremental objectives, or cost and schedule projections for its new network. It is important that the Army proceed in defining requirements and expected capabilities for the network to avoid the risk of developing individual capabilities that may not work together as a network. With the cancellation last week of its ground mobile radio and continuing problems in developing technology to provide advanced networking capability, the Army will still need to find foundational pieces for its network.

The Army is reworking earlier plans to develop and acquire the JLTV and is planning to recapitalize some of its High Mobility, Multipurpose Wheeled Vehicles (HMMWV). These efforts have just begun, however, and their results are not yet assured. To reduce risk in the JLTV program, the services relied on multiple vendors during technology development to increase their knowledge of the needed technologies, determine the technology maturity level, and determine which requirements were achievable. As a result, the services identified trades in requirements to drive down the cost of the vehicle. For example, the services found that JLTV could not achieve both protection level and transportability goals, so the services are accepting a heavier vehicle. A potential risk for the services in allowing industry to build vehicles for testing is that the prototypes may not be mature; the Army will need to keep its options open to changes that may result from these tests. Both the Army and the Marine Corps have articulated a significant future role for their Up-Armored HMMWV fleets, yet the fleets are experiencing reduced automotive performance, the need for better protection as threats have evolved, and other issues. The Army is planning to recapitalize a portion of its Up-Armored HMMWV fleet to increase automotive performance and improve blast protection. The Marine Corps' plans to extend the service life of some of its HMMWVs used in light tactical missions are not yet known.