

## Why GAO Did This Study

The Department of Defense (DOD) is acquiring two new tactical wheeled vehicles (TWV): the Mine Resistant Ambush Protected (MRAP) All Terrain Vehicle (M-ATV) and the Joint Light Tactical Vehicle (JLTV). The \$12.5 billion M-ATV is for use in Afghanistan; JLTV is the future replacement for vehicles like the High Mobility Multi-purpose Wheeled Vehicle (HMMWV).

GAO was asked to assess (1) DOD's progress in rapidly acquiring and fielding M-ATVs, (2) JLTV's expected features and cost compared to other TWV, and (3) the extent to which the current plans for M-ATV and JLTV are consistent with the services' TWV investment strategies.

GAO reviewed documents and held discussions with key officials to determine program strategies, costs, performance, and anticipated features; and compared M-ATV and JLTV plans with service strategies.

## What GAO Recommends

GAO recommends that DOD (1) ensure that the JLTV program clearly demonstrates a match between requirements and resources; (2) stage the timing of the DOD-wide TWV strategy so that it captures key knowledge; and (3) include in the strategy a cost-benefit analysis that could minimize the collective acquisition and support costs of the various TWV programs, and reduce the risk of unplanned overlap or duplication. DOD concurred with our recommendations.

## DEFENSE ACQUISITIONS

### Issues to Be Considered as DOD Modernizes Its Fleet of Tactical Wheeled Vehicles

## What GAO Found

The M-ATV program has been successful, delivering well-performing vehicles ahead of schedule at an estimated cost of \$12.5 billion. No major issues have been identified in testing and early fielding. In developing the M-ATV acquisition strategy, lessons learned from the acquisition of MRAPs in Iraq were applied. Like the earlier MRAPs, the M-ATVs did not require technology development, a key factor in the program's success. As of late August 2010, 7,488 vehicles had been delivered to the government and 4,379 had been fielded to units in Afghanistan. Fielding is expected to be completed in December 2010. The urgent need for these vehicles resulted in their fielding and testing at the same time; however, source selection testing was conducted, and no vehicles were fielded until their safety was verified.

Jointly managed by the Army and Marine Corps, JLTV is expected to provide protection levels that are comparable to the M-ATV but without loss of payload or automotive performance. JLTV's acquisition costs are yet to be determined but are expected to be substantial. Unit costs could be over \$800,000—somewhat less than M-ATV, with mission equipment making up more than half of the costs. Unlike M-ATV and earlier MRAPs, JLTV has demanding projected requirements that necessitate technological and engineering advances. Key challenges are whether the vehicle can provide the performance and reliability required yet stay within the weight limits for helicopter transport. Difficult tradeoffs in requirements may be necessary. At this point, it is a well-structured program with desirable features like a competitive technology development phase. This phase is scheduled to be completed by late fiscal year 2011, when DOD will decide if the program should enter the engineering and manufacturing development phase. That is the point where JLTV should clearly demonstrate that its projected requirements can be met with available resources. Evidence of that match would include a completed preliminary design review and a technology readiness assessment that shows all technologies to be fully mature.

Current plans for M-ATV and JLTV dovetail with the objectives of the most recent Army and Marine Corps investment strategies. The implementation of those strategies, however, will be influenced by (1) the decision to continue producing new HMMWVs, recapitalize the existing HMMWV fleet, or both; (2) long-term funding for MRAP and M-ATV sustainment, and (3) specific cost and capabilities of JLTV. The departmentwide strategy for TWVs that DOD plans to prepare would benefit greatly from the resolution of these issues. To the extent this strategy captures the knowledge gained by the services, the strategy can reconcile the aggregate affordability and other implications of the various tactical wheeled vehicle programs with the competing demands of the department. For example, at this point, the service strategies consider MRAP vehicles to be additive to the force structure, not offsetting quantities of HMMWVs or JLTVs. Any potential offsets between the MRAP vehicles and JLTVs, to the extent they are supported by cost-benefit analyses, could save both acquisition and support costs.