Joint Light Tactical Vehicle (JLTV): Background and Issues for Congress

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Summary

The Joint Light Tactical Vehicle (JLTV) is being developed by the Army and the Marine Corps as a successor to the 11 different versions of the High Mobility, Multi-Wheeled Vehicle (HMMWV) that have been in service since 1985. On October 28, 2008, three awards were made for the JLTV Technology Development (TD) Phase, which is scheduled to conclude in the June 2011 timeframe to three industry teams: (1) BAE Systems, (2) the team of Lockheed Martin and General Tactical Vehicle, and (3) AM General and General Dynamics Land Systems. Once testing was completed and technology requirements established, a full and open competition was expected to be conducted in the late summer, 2011 for the Engineering and Manufacturing Development (EMD) Phase and the Department of Defense (DOD) planned to award two contracts for the EMD phase, which was scheduled to last 24 months.

In February 2011, it was announced that the award of the EMD contract would be delayed until January 2012 because the Army changed requirements for the JLTV. DOD had planned to award two contracts for the EMD phase, which was scheduled to last 24 months, but instead proposed a 48-month-long EMD. In addition, the Category B variant was eliminated because it proved to be too heavy to meet the required transportability weight. Now there will be two variants—a Combat Tactical Vehicle (CTV) that can transport four passengers and carry 3,500 pounds and a Combat Support Vehicle (CSV) that can transport two passengers and carry 5,100 pounds.

The FY2012 Budget Request for JLTVs is $172.1 million for Army Research, Development, Test and Evaluation (RDT&E) and $71.8 million for Marine Corps RDT&E, for a program total of $243.9 million. The House Armed Services Committee has recommended decreased funding levels—$147.1 million for the Army and $46.8 million for the Marine Corps. The House Appropriations also recommended cutting Army and Marine Corps JLTV funding by $25 million for each service and using these funds for HMMWV survivability initiatives.

The Senate Appropriations Committee Defense Subcommittee recommended terminating the JLTV program, noting “excessive cost growth, constantly changing requirements, and existing alternatives.” In response, Army and Marine leadership seemingly put aside past differences by relaxing transportability requirements and setting a goal for a lower per-unit cost of $225,000 per vehicle. In addition, the EMD phase would be cut by 16 months—now 32 months as opposed to the previous 48 months.

Potential issues for Congress include affordability of the JLTV in relation to HMMWV and MRAP and in the overall context of an anticipated “challenging economic environment.” Another concern is even though the Army and Marines have dropped some requirements to lower per-vehicle costs, that requirement might be added in the future, driving up the program cost. The Army and Marines have both noted that, despite emphasis on recapitalizing HMMWVs and MRAPs in lieu of developing JLTVs, there are limitations concerning the degree to which these vehicles can be upgraded and still be operationally effective. Another possible issue for consideration is the new lower JLTV per-vehicle cost target might be close to that of recapitalized HMMWVs, bringing into question if it is better and more cost effective to procure “new” JLTVs versus “old” recapitalized HMMWVs.
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Background

The JLTV is an Army-led, multi-service initiative to develop a family of future light tactical vehicles to replace many of the 160,000 HMMWVs used by the armed services today. HMMWVs, which first entered service in 1985, were developed during the Cold War when improvised explosive devices (IEDs) and other anti-vehicle explosive devices were not a major factor in military planning. The HMMWV’s demonstrated vulnerability to IEDs and the difficulties and costs experienced in “up-armoring” HMMWVs already in the inventory have led to renewed emphasis on vehicle survivability. With more than 50% of the Army’s total tactical wheeled vehicle fleet nearing the end of its useful life, and with the need of the services to repair equipment, the JLTV, with its scalable armor protection, is intended to replace a large portion of the HMMWV fleet. DOD officials have emphasized that JLTVs are not intended to replace HMMWVs “one for one.” The Army plans to divest its older HMMWVs and through means of recapitalization, intends to have approximately 85,000 HMMWVs still in service as of 2025 and to fill other light tactical vehicle requirements.

JLTV Program

What Is the JLTV?

The JLTV program is a joint Army/Marine Corps effort to develop and produce three categories of vehicles and associated trailers. Category A JLTVs were intended for general purpose mobility and would carry a 3,500 pound payload. Category Bs were intended to serve as infantry carriers, command and control and reconnaissance vehicles, and weapons carriers and would accommodate a 4,000 to 4,500 pound payload. Category Cs were intended to serve as shelter carriers, prime movers, and ambulances and would carry a 5,100 pound payload. JLTVs are to be designed with scalable armor, enhanced suspension, and drive train capability to accommodate future load carrying capacity. In February 2011, the Category B variant was eliminated because it proved to be too heavy to meet required transportability weights. There are now two planned JLTV variants, a four-passenger Combat Tactical Vehicle (CTV) and a two-passenger Combat Support Vehicle (CSV). As planned, JLTVs would be more mechanically reliable, maintainable (with on-board diagnostics), all-terrain mobile, and equipped to link into current and future tactical data nets. Survivability and strategic and operational transportability by ship and aircraft are also key JLTV design requirements.

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3 Headquarters, Department of the Army, “Army Truck Program (Tactical Wheeled Vehicle Acquisition Strategy) Report to the Congress,” June 2010, p. 5.
Program Structure

The JLTV is an Acquisition Category (ACAT) 1D program. The Army bears the overall responsibility for developing the JLTV through its Joint Program Office within the Army’s Tank, Automotive, and Armament Command (TACOM) in Warren, MI. Marine participation is centered on a program office under the supervision of the Program Executive Officer Land Systems (PEO LS) Marine Corps at Quantico, VA.

Program History

In November 2006, the Joint Chief of Staff’s Joint Requirement Oversight Council (JROC) approved the JLTV program. On December 22, 2007, the Under Secretary of Defense for Acquisition, Technology, and Logistics USD (AT&L) signed an Acquisition Decision Memorandum (ADM) directing the JLTV Program to move from the Concept Refinement Phase into the Technology Development (TD) Phase of the DOD System Acquisition Process. The Army and Marines had intended to issue a Request for Proposal (RFP) for Technology Development Phase as early as October 2007. Concerned with funding adequacy, technical maturity, and shifting requirements, the Pentagon’s acquisition executive, John Young, disapproved the issuance of the RFP and directed the Army and Marines to “go back to the drawing board and develop a robust technology development phase.” On February 5, 2008, an RFP for Technology Development Phase was issued to industry. The RFP stated that the government desired to award three contracts for the JLTV Technology Development Phase. The RFP stipulated that proposals would be due April 7, 2008, and the TDP would last 27 months. Contractors would build four test sub-configurations during the first 15 months, followed by 12 months of testing.

Technology Development Contracts Awarded

On October 28, 2008, three awards were made for the JLTV TD Phase for a total of $166 million. The three industry teams were (1) BAE Systems Land and Armaments, Ground Systems Division, Santa Clara, CA, and NAVISTAR Defense, Warrenville, IL; (2) General Tactical Vehicles, Sterling Heights, MI—a joint venture between General Dynamics Land Systems and AM General; and (3) Lockheed Martin Systems Integration, Oswego, NY, BAE Systems, Alcoa Defense, Pittsburgh, PA, and JWF Defense Systems, Johnstown, PA.


6 The 12th Edition of the Defense Acquisition University Glossary, July 2005, defines an ACAT 1D program as “a Major Defense Acquisition Program (MDAP) which is estimated by the Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD (AT&L)) to require the eventual expenditure for Research, Development, Test, and Evaluation (RDT&E) of more than $365 million (FY2000 constant dollars) or the procurement of more than $2.19 billion (FY2000 constant dollars).”


JLTV Contracts Protested

On November 7 and November 12, 2008, protests were filed with the Government Accountability Office (GAO) against the TD contract awards by the Northrop Grumman-Oshkosh team and the Textron-Boeing-SAIC team alleging that there were “unintended discrepancies” in how the government rated bids in terms of the criteria of systems maturity, logistics, and costs.10 As a result of this protest, work on the JLTV program by the three winning teams was suspended. On February 17, 2009, GAO rejected the JLTV protests and the stop work orders were lifted.

JLTV Phase of Development

The JLTV Program is currently in the Technology Development (TD) Phase11 of acquisition which was scheduled to conclude in the June 2011 timeframe.12 Prototypes from BAE Systems, and the teams of Lockheed Martin and General Tactical Vehicle, and AM General and General Dynamics Land Systems for each of the three JLTV categories are being tested at Aberdeen Test Center in Maryland and the Yuma Proving Ground in Arizona. Once testing was completed and technology requirements established, a full and open competition was expected to be conducted in the late summer of 2011 for the Engineering and Manufacturing Development (EMD) Phase.13

Program-Related Issues

Change in Requirements, Program Schedule, and Variants14

In February 2011, the JLTV Program Office announced that the award of the EMD contract would be delayed until January 2012 because the Army changed requirements for the JLTV to have the same level of under body protection as the Mine-Resistant, Ambush-Protected All-Terrain Vehicle (M-ATV). DOD had planned to award two contracts for the EMD phase, which was scheduled to last 24 months15 but instead opted for a 48 month-long EMD phase before awarding Production and Deployment contracts in the second quarter of FY2016. In addition, the Category B variant was eliminated because it proved to be too heavy to meet the required weight

11 From the November 2009 Defense Acquisition University Glossary of Defense Acquisition Acronyms & Terms, the Technology Development (TD) Phase is the second phase of the Defense Acquisition Management System and the purpose of this phase is to reduce technology risk and to determine the appropriate set of technologies to be integrated into the full system.
13 The EMD phase for the JLTV program will focus on reducing program risk, ensuring operational supportability, designing for producibility, maximizing affordability, ensuring critical program information protection, and demonstrating system integration, interoperability, transportability, fuel efficiency, reliability, and utility.
14 Information in this section, unless otherwise noted is taken from a briefing from the Project Manager Joint Combat Support Systems on the Joint Light Tactical Vehicle given on February 7 and 8, 2011 and Tony Bertuca, “PMs: JLTV Still Too Heavy, Changing Schedule and Losing Six-Man Variant,” InsideDefense.com, February 11, 2011.
of approximately 15,639 pounds to make it transportable by Army CH-47F and Marine Corps CH-53K helicopters. Now there will be two variants—a Combat Tactical Vehicle (CTV) that can transport four passengers and carry 3,500 pounds and a Combat Support Vehicle (CSV) that can transport two passengers and carry 5,100 pounds.

**Performance Issues During the Technology Development Phase**

According to the JLTV Program Office, the testing of the three manufacturers technology demonstrators was described as “generally meeting requirements with exceptions” and “current force protection requirements appear achievable.” The Program Office further noted the technology demonstrator vehicles were “several hundred to a thousand pounds overweight, that even though the technology demonstrator vehicles had not been tested; they appeared to be very close to the maximum envelopes for aircraft transportability; and there were problems meeting both reliability and mobility requirements. The technology demonstrator vehicles also exhibited limited space to accommodate both mission essential equipment and payloads.

**Marines’ Concerns with the JLTV Program**

The Marines have expressed reservations with the JLTV program because it did not lend itself to Marine Corps expeditionary operations. Marine leadership was concerned industry prototypes were too heavy to be transported by helicopters and faulted industry for failing to stay “apace of the vision” for the JLTV. The Marines did not rule out removing themselves from the program and modifying HMMWVs if developers could not address their specific requirements. The Army appeared less concerned than the Marines that final JLTV versions might not be CH-47 and CH-53 helicopter and C-130 cargo aircraft transportable. Some described the Army and Marines as “striking out on a separate path” with the Army more concerned with survivability and the Marines concerned that heavier JLTVs could cause weight problems on the Navy’s amphibious ships.

After the release of the FY2012 Budget Request, Marine leadership reportedly suggested the future of the JLTV was “up in the air” largely due to continuing concerns about cost and weight, as well as the delay in the EMD contract. Marine leadership maintained unless the price of the JLTV came down from around $300,000 the Marines would focus on upgrading their 22,000 HMMWVs. Another possibility discussed to bring down the JLTV price was to eliminate some of the vehicle’s requirements such as the number of vehicles needing classified communications systems or those that could generate external power.

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16 Information in this section is from a briefing from the Project Manager Joint Combat Support Systems on the Joint Light Tactical Vehicle given on February 7 and 8, 2011.
Northrop Grumman Added to BAE/NAVISTAR JLTV Team

Northrop Grumman has reportedly been added to the BAE/NAVISTAR JLTV team competing for one of two EMD contracts expected to be awarded in January 2012. Northrop Grumman has been designated as the team’s command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) lead, responsible for integrating command and control systems and software, computers, and sensors to gather intelligence and protect the vehicle occupants.

Army Releases Request for Information (RFI) for JLTV “Off the Shelf” Alternatives

On May 4, 2011, the Army issued a request for information (RFI) for “off the shelf” commercially available vehicles that could compete with JLTV prototypes already being developed by three industry teams. The Army characterized this as a part of market research that will support a potential Milestone B decision and will permit the Army to “see if there are any other ‘off-the-shelf’ vehicle solution(s) that we may not have already explored to ensure that we understand the ‘art of the possible’ that industry has to offer.”

Recent Program Activities

Senate Appropriations Committee Defense Subcommittee Recommends JLTV Termination

On September 13, 2011, the Senate Appropriations Defense Subcommittee recommended the termination of JLTV program, noting “excessive cost growth and constantly changing requirements” suggesting that “alternatives exist today to meet the Army and Marine Corps’ requirements to recapitalize and competitively upgrade the HMMWV fleet.” The subcommittee expressed concern that early program cost growth and projected acquisition costs will make the program unaffordable in a challenging economic environment.

22 Ibid.
The Army and Marines’ Response to Recommended Program Termination

In what has been characterized as a response to the Senate Appropriation’s Committee recommendation to terminate the JLTV, the Army and Marines have apparently put aside past differences and have developed a new acquisition strategy that relaxes transportability requirements and sets a goal for a lower per-unit cost of $225,000. The Army notes this lower price tag is a result of requirement trade-offs but crew survivability remains of paramount importance.

Draft Engineering and Manufacturing Development Request for Proposal

On October 3, 2011, the Army issued a draft Request for Proposal (RFP) for the Engineering and Manufacturing Development (EMD) phase. Key provisions include:

- a $230,000 to $270,000 per vehicle cost target;
- an additional add-on armor kit (called a B kit) can cost no more than $50,000;
- EMD phase cut by 16 months—will now be 32 versus 48 months; and
- Army intends to procure at least 20,000 JLTVs with options to procure more.

Foreign Participants

United States and Australia Agree on Joint JLTV Development

In February 2009, the Pentagon and the Australian Department of Defense signed an agreement to coordinate the technology development for the JLTV. Under this agreement, 30 JLTV prototypes will be developed, with the United States funding the development of 21 prototypes and Australia funding nine. Australia reportedly has a need for about 1,300 to 1,400 vehicles with requirements similar to the JLTV, although Australian defense officials note that Australia’s participation in JLTV technology development does not automatically mean that they will eventually procure JLTVs. At February 2011 conference, Australian defense officials noted that their current planned procurement quantity for right-hand drive JLTVs was 1,300 with about 900 for general purposes and 400 for utility missions.

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27 Information is from a briefing from the Project Manager Joint Combat Support Systems on the Joint Light Tactical Vehicle given on February 7 and 8, 2011.
Ramifications If the JLTV Is Terminated

The Australian press reports that if the JLTV program is terminated, Australia will lose $40 million that it has contributed to the JLTV program. Australian defense officials suggested that even if the JLTV program is terminated, they would benefit from knowledge gained through research and testing conducted to date.

Additional Foreign Participants

According to the JLTV Program Office, in addition to Australia, Israel, Great Britain, and Canada are participating in various extents in the TD phase. The Program Office has established working groups with Israel, Great Britain, and Canada, although the extent of the participation as well as the number of JLTVs that they might consider procuring was not made public.

Possible Acquisition Targets

Army

The new draft EMD RFP calls for at least 20,000 JLTVs for the Army with the option to procure additional vehicles.

Marines

The Marines’ procurement quantity is planned for 5,500 vehicle with 4,650 being CTVs and 850 CSVs. This procurement quantity is likely dependent upon reducing vehicle cost and weight.

Navy

The Navy has recently expressed a desire to participate in the JLTV program. If the Navy does participate, it would require from 400 to 500 CTVs and from 150 to 200 CSVs.

Air Force and Special Operations Command (USSOCOM)

The Air Force and USSOCOM might also participate in the JLTV program, but USSOCOM’s participation might be limited as it has its own Family of Special Operations Vehicles Program to develop a wide range of special operations-unique vehicles, including light tactical vehicles.

29 Ibid.
Budgetary Issues

Program Cost and Funding

DOD has not publicly assigned a definitive cost to the JLTV program, suggesting that it is too early in the development process to determine an accurate cost estimate. Some defense and trade analysts suggest that the JLTV program will cost well over $10 billion and possibly as much as $30 billion to $70 billion, depending on the final cost of the vehicles chosen and the number of vehicles procured. The Army originally estimated that each fully equipped JLTV will cost $418,000, almost 70% higher than the target cost of $250,000 per vehicle that would have enabled the Army to replace all of its HMMWV’s with JLTVs. The Army’s current draft EMD RFP calls for a per-vehicle cost between $230,000 to $270,000.

FY2012 JLTV Budget Request

The FY2012 Budget Request for JLTVs is $172.1 million for Army Research, Development, Test and Evaluation (RDT&E) and $71.8 million for Marine Corps RDT&E, for a program total of $243.9 million. The significant increase from the FY2011 Budget Request of $84.7 million reflects the anticipated award of the EMD contracts in January 2012.

Legislative Activity


The House Armed Services Committee (HASC) expressed a number of concerns with the JLTV program. The first concern was that initial test results suggest that the JLTV may face a number of operational and technical challenges. The HASC also noted with concern that JLTV cost estimates are not yet available but base vehicle costs have been projected to be at least $350,000 per vehicle. The committee also noted the delays in the JLTV program. The HASC concluded that there must be discernable match between JLTV requirements and resources and believes that the program will be challenged by fiscally constrained budget requirements. In light of these concerns, the HASC recommends reducing Army JLTV funding to $147.1 million—a $25 million or 15% reduction—and Marine Corps JLTV funding to $46.8 million—a $25 million or 35% reduction.

National Defense Authorization Act for FY2012 (S. 1253) Report of the Committee on Armed Services, United States Senate\textsuperscript{35}

The Senate Armed Services Committee made no recommendations regarding JLTV funding.

Department of Defense Appropriations Bill, 2012, House Committee on Appropriations\textsuperscript{36}

The House Appropriations Committee had a number of JLTV provisions, including funding cuts:

Light Tactical Wheeled Vehicle (pp. 205-207)

The Army began fielding High Mobility Multi-Purpose Wheeled Vehicles (HMMWV) in the mid 1980s. The vehicle was a significant improvement over the Quarter Ton Truck. The HMMWV featured increased ground clearance, greater maneuverability, and more load carrying capacity. The Committee is aware that the HMMWV fleet was used for base operations support and for rear area support in combat zones. HMMWVs were not armored until the beginning of Operation Iraqi Freedom. As the tactics in Iraq evolved to include extensive combat patrolling, often in congested urban areas, HMMWVs were employed as patrol vehicles or scout vehicles, and a series of progressively better, heavier armor kits were installed on HMMWVs. Generally, the kits were shipped to the combat theater and installed there. Eventually, the assembly line began to produce armored HMMWVs. These armored patrol vehicles provided greatly improved force protection as compared to unarmored HMMWVs. However, the increase in protection afforded by the additional armor was limited and the additional weight reduced vehicle performance and displaced critical payloads. The Committee notes that the Army operates a fleet of approximately 150,000 HMMWVs. The Marine Corps has 24,000 HMMWVs. The Navy and Air Force have smaller numbers. Based on the expected service life of the vehicles, the Services will continue to operate significant numbers of HMMWVs for at least another 20 years. The Army and Marine Corps perform a maintenance reset on their HMMWVs when the vehicles return from deployment, restoring the HMMWVs to a fully operational capability. In addition to post-deployment reset, 46,000 of the Army’s older, unarmored HMMWVs have been recapitalized through a program of rebuilds, repairs, and upgrades that restored those vehicles to a zero hours, zero miles status. The Army continues the recapitalization program with attention focused on the armored HMMWVs. Additionally, the Army is researching the feasibility and affordability of modernizing armored HMMWVs to achieve an increased level of crew protection, through an effort known as the Competitive Recapitalization program. As combat continued in Iraq, the numbers of Soldiers and Marines wounded and maimed by Improvised Explosive Devices (IEDs) increased. Based on urgent needs statements from Marine Corps and Army commanders in Iraq, a joint program office was established to qualify and field armored transports that were larger and more survivable than the armored HMMWVs. Designated as Mine Resistant Ambush Protected (MRAP) vehicles, nearly 27,000 have been produced, including over 8,000 MRAP All Terrain Vehicles (MATV). The all terrain variants are designed to provide better off-road performance in Afghanistan, while providing excellent survivability and significant ground clearance. The


MATVs provide a level of armor protection that is approximately equivalent to the protection found in the smaller of the original MRAPs, which is a significant increase in protection above that of an armored HMMWV. The Committee commends the Department for continuing to improve, test, and field survivability enhancements for all of the HMMWVs, MRAPs, and MATVs. The Committee is aware that in a separate effort, the Army, Marine Corps, and Special Operations Command began a program to produce a Joint Light Tactical Vehicle (JLTV) to eventually replace the HMMWV. The JLTV has been designed and developed as an armored vehicle from the inception of the program. The JLTV is expected to provide MRAP-like armor protection, good off-road maneuverability, and substantial payload capability.

The Committee notes that the JLTV program is intended to begin fielding in 2016. The Committee is aware that while the JLTV program continues development, the Services operate thousands of HMMWVs and MRAPs. Any calculation regarding how many, when, and at what price the Services would purchase JLTVs should consider the worth of the battle-tested vehicles that have been bought and paid for and on which the Soldiers and Marines have trained and fought. Additionally, the military Services and manufacturers continue to improve the survivability of the MRAPs, MATVs, and HMMWVs. The Committee understands that HMMWVs have been made more survivable, but have grown in weight, and efforts continue to make MATVs lighter and more maneuverable while sustaining survivability. The Committee notes that the operational niche to be filled by the JLTV appears to be shrinking. The Committee believes that the Department of Defense should continue to develop, test, and field survivability upgrades to the HMMWV, MRAP, and MATV fleets to counter the challenges presented by small arms, improvised explosive devices, and other weapons. The Committee recommends that the Department of Defense continue to evaluate the roles and requirements of the JLTV in the tactical wheeled vehicle fleet, seeking advances in technology for armor, propulsion, off-road maneuverability, and other areas, until such time as it becomes clear that there is a threat to be countered for which the JLTV is better suited than HMMWVs, MRAPs, or MATVs, or the current fleets of HMMWVs and MRAPs are judged to be not economically repairable. The fiscal year 2012 budget request for Research, Development, Test and Evaluation, Army includes $172,093,000 for development of the JLTV. The Committee recommendation is $147,093,000, a reduction of $25,000,000. For the Marine Corps, the budget request in Research, Development, Test and Evaluation, Navy includes $39,954,000 for JLTV development. The Committee recommendation is $14,954,000, a reduction of $25,000,000. Additionally, the Committee recommendation includes an increase of $50,000,000 in Research, Development, Test and Evaluation, Army, to support continued development and testing for HMMWV survivability enhancements. The Committee is aware that significant improvements in survivability appear to be feasible by the application of blast venting technology, such as the so-called blast chimney. These improvements could lead to a HMMWV with survivability equal to or better than the MRAP, weight considerably less than predicted for the JLTV, and at a cost significantly less than either. The Committee expects that future requests for funding for the HMMWV and JLTV programs, and the accompanying budget justification material, will describe the capabilities to be provided by the various light tactical vehicles.
Joint Light Tactical Vehicle (JLTV) Background and Issues for Congress

Department of Defense Appropriations Bill, 2012, Senate Appropriations Committee

Joint Light Tactical Vehicle [JLTV].—The fiscal year 2012 budget request includes $172,093,000 in Research, Development, Test and Evaluation, Army and $71,847,000,000 in Research, Development, Test and Evaluation, Navy to continue the Joint Light Tactical Vehicle’s Engineering and Manufacturing Development Phase [EMD]. The Committee notes that as a result of increasing requirements, the scheduled EMD phase has doubled from 24 months to 48 months, and projected EMD costs have more than doubled to $669,600,000, which are not currently fully budgeted. The Committee further notes the Services’ limited acquisition objectives for JLTV: the Army intends to procure 50,000 vehicles to replace only one-third of its High Mobility Multipurpose Wheeled Vehicle [HMMWV] fleet, and the Marine Corps intends to procure 5,000 JLTVs, roughly one-quarter of its future tactical vehicle fleet. Furthermore, the JLTV program, which was initially launched as a model for a revised acquisition approach, has already had significant changes in requirements and cost growth. The JLTV was originally intended to replace the Services’ entire HMMWV fleet, yet the Services have decided to retain significant portions of their respective HMMWV fleets and have launched comprehensive HMMWV reset and competitive recapitalization programs. Consequently, the JLTV would now replace only a fraction of HMMWVs, thus adding instead of reducing the Services’ logistics burden. Moreover, the inability to keep program requirements stable has resulted in significant cost growth early in the program’s development phase, and projected acquisition costs will make the program unaffordable in this challenging economic environment.

In addition, the Committee understands that the first vehicles would not be produced until 2017 at the earliest, while it appears that several industrial solutions that address most of the JLTV requirements currently exist. As such, the Committee sees no role for the JLTV in the Services’ future programs and budgets and recommends its termination. The Committee recommends transferring $20,000,000 from the JLTV program to the competitive Modernized Expanded Capability Vehicle [MECV] program to fully fund its requirements and allow the Services to rapidly field light tactical vehicles with greater capabilities sooner and at a lower cost.

Potential Issues for Congress

JLTV Affordability

It can be argued that the Army’s per unit cost target of between $230,000 to $270,000 under the provisions of the draft EMD RFP are a “step in the right direction” in terms of addressing the issue of JLTV affordability, but there are other factors that must also be considered. HMMWVs and MRAPs—primarily M-ATVs—constitute competing programs that arguably have a degree of political support for their continuation. Both House and Senate appropriators have acknowledged the roles that MRAPs and recapitalized HMMWVs will be expected to play in the future and have expressed doubts that the JLTV can meet affordability targets. Aside from congressional concern is the notion of a “challenging economic environment” that will confront not only the JLTV program, but also other current and future DOD weapon systems programs.

A number of think tanks and commissions—including the presidentially appointed Bowles-Simpson Fiscal Commission—who are proposing ways to decrease DOD spending have recommended the JLTV program be cancelled or deferred. Given this wide-ranging opposition to the JLTV program on the basis of affordability, even a $230,000 per copy JLTV variant might prove to be difficult to justify.

**Changing Requirements**

As previously discussed, the Army’s decision to change requirements for the JLTV to have the same level of under body protection as M-ATVs resulted in delaying the award of the EMD contract until January 2012 and will undoubtedly add to the program’s overall duration and cost. Changing requirements during a system’s development cycle has often been cited as one of the major reasons why defense programs take many more years than planned as well as why they exceed their budgets. Even though the Army and Marines have reportedly reduced a number of vehicle requirements to reach a $230,000 to $270,000 per-vehicle target cost, there is no guarantee that if funding is provided for FY2012 that requirements might be added on in the future, thereby driving up the per vehicle cost. Given this possibility, Congress might choose to closely monitor the Army and Marines during the rest of the TD phase and EMD phase—if the program makes it to that phase—to ensure that the Services do not make significant requirements changes/additions that could adversely affect the JLTV development timeline and program cost.

**Limitations on Upgrading HMMWVs and MRAPs**

The Army has countered the argument that upgrading HMMWVs and MRAPs is a viable substitute for JLTVs by suggesting that these vehicles have reached the point where additional upgrades (primarily additional armor) are no longer technically feasible and might negate mobility benefits. In the case of HMMWVs, the Army contends that adding additional armor puts significant stress on engine, suspension, and transmission equipment, requiring extensive and costly modification to these vehicles. While M-ATVs initially enjoyed success in Afghanistan, reports suggest that insurgents have increased the size of IEDs, thereby negating much of the protective value of M-ATVs resulting in increased U.S. casualties. In response to the enhanced IED threat, two additional layers of Israeli-made armor plates are being installed to the M-ATV’s underside and new padding and crew harnesses inside the vehicle which reportedly will enable the M-ATVs to withstand explosions twice as large as their current classified capability. While additional armor and interior improvements could improve M-ATV survivability up to a point, there are concerns that additional armor might have an adverse impact on vehicle mobility, which was the prime consideration for the development of the M-ATV. As Congress works with DOD to find both an effective and affordable strategy to modernize and recapitalize the tactical wheeled vehicle fleet, these considerations might merit additional examination.

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40 Ibid.
The Cost of a Recapitalized HMMWV vs. a New JLTV\textsuperscript{41}

With the proposed target cost for the JLTV in the $230,000-$270,000 range, some defense officials suggest that the JLTV could reach cost parity with recapitalized HMMWVs. The Marine Corps is reportedly not releasing a Request for Proposal (RFP) for HMMWV recapitalization (recap) noting that:

> When you start trying to bring those capabilities back into the [HMMWV] recap, your price goes up to the $240,000 to $250,000 range, and now you’re at [the price of] a JLTV vehicle, which has so much more payload and so much more capability.\textsuperscript{42}

Army program officials contend that some recapitalized HMMWV versions could cost as much as $500,000 per vehicle. Analysts also suggest that a new JLTV will have a much greater operational life than a “used” recapitalized HMMWV. Given these considerations, Congress might decide to further examine how the new proposed target cost for the JLTV in the $230,000-$270,000 range affects current and future HMMWV recapitalization efforts.

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\textsuperscript{42} Ibid.