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

Andrew Feickert
Specialist in Military Ground Forces

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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 or February 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. There will be two JLTV 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 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.

The FY2012 National Authorization Act (H.R. 1540) decreased the Army's JLTV budget request by $64.8 million and the Marine's request by $24.9 million due to the delay of the awarding for the EMD contract. The FY2012 Department of Defense Appropriations Bill (H.R. 2055, P.L. 112-74) provides $87.3 million for Army JLTV RDT&E and $46.7 million for the Marines in recognition that the Services have made changes to the program to simplify the JLTV design, ease requirements, and decrease per-vehicle costs.

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 requirements 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[1]

The JLTV is an Army-led, multi-service initiative to develop a family of future light tactical vehicles to replace many of the 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. DOD officials have emphasized that JLTVs are not intended to replace HMMWVs "one for one."[2]

JLTV Program

What Is the JLTV?[3]

The JLTV program is a joint Army/Marine Corps effort to develop and produce both vehicles and associated trailers. Originally, there were three variants, but now there are 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.

Program Structure[4]

The JLTV is an Acquisition Category (ACAT) 1D program.[5] 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

[1] Alan L. Gropman, "Combat Vehicle Sector Could be Headed for Turbulent Times," *National Defense*, April 25, 2008, and James P. Miller, "Race is On to Replace Humvee," *Chicago Tribune*, June 21, 2008.

[2] Kris Osborn, "DOD's JLTV Becoming an International Effort," *Defense News*, August 4, 2008. Headquarters, Department of the Army, "Army Truck Program (Tactical Wheeled Vehicle Acquisition Strategy) Report to the Congress," June 2010, p. 5.

[3] Information in this section is taken from the Army Product Manager, Joint Light Tactical Vehicle website, http://peocscss.tacom.army.mil/pmJLTV.html, last visited March 2, 2011, and Marine Corps PEO Land Systems Joint Light Tactical Vehicle website, http://www.marcorsyscom.usmc.mil/peolandssystems/jltv.aspx, last visited March 2, 2011, and Tony Bertuca, "PMs: JLTV Still Too Heavy, Changing Schedule and Losing Six-Man Variant," *InsideDefense.com,* February 11, 2011.

[4] CRS Report RL34026, *Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process*, by Moshe Schwartz, provides an extensive discussion of the defense acquisition process.

[5] 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)."

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."[6] On February 5, 2008, an RFP for Technology Development Phase was issued to industry.[7] 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[8]

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.

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.[9] As a result

[6] Jason Sherman, "Pentagon Halts JLTV Competition, Directs Revised Strategy," *InsideDefense.com*, September 24, 2007.

[7] JLTV Request for Proposal, W56HZV-08-R-0210, February 5, 2008, and Marjorie Censer, "JLTV Solicitation Calls for Three Contractors: Officials Say More are Possible," *InsideDefense.com*, February 5, 2008.

[8] Unless otherwise noted, information in this section is taken from TACOM's JLTV Program website, http://contracting.tacom.army.mil/MAJORSYS/JLTV/jltv.htm,, accessed March 2, 2011, and the Marine Corps PEO Land Systems JLTV website, https://www.marcorsyscom.usmc.mil/peolandsystems/jltv.aspx, accessed March 2, 2011.

[9] Marjorie Censer, "Following Northrop's Lead, Boeing-Textron Team Files JLTV Protest," *InsideDefense.com,* November 12, 2008 and Ann Roosevelt, "Textron-Team Protests Army JLTV Awards," *Defense Daily,* November 13, 2008; and Daniel Wasserbly, "U.S. GAO Rejects JLTV Protests," Jane's Defence Weekly, February 25, 2009, p. 12 .

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) Phase[10] of acquisition which was originally scheduled to conclude in the June 2011 timeframe.[11] 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.[12] Changing requirements, as detailed in the next section, resulted in the delay of concluding the TD phase until January 2012.

Program Developmental Issues

Change in Requirements, Program Schedule, and Variants[13]

In February 2011, the JLTV Program Office announced that the award of the EMD contract would be delayed until January or February 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 months[14] 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 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.

[10] 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.

[11] Matthew Cox, "Prototypes for JLTV to Undergo Testing Over Next 12 Months," *Marine Corps Times,* June 21, 2010, p. 32 and Ann Roosevelt, "JLTV TD Phase Deliveries Continue, Army Fleshing Out JLTV EMD," *Defense Daily,* July 23, 2010.

[12] 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.

[13] 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.

[14] DOD Briefing: "JLTV EMD Industry Day," April 26, 2010.

Performance Issues During the Technology Development Phase[15]

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[16]

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.[17]

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.[18] 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.

Northrop Grumman Added to BAE/NAVISTAR JLTV Team[19]

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 or February 2012. Northrop

[15] 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.

[16] Marjorie Censer, "Citing Weight, Commandant Says Marines May Have to Depart JLTV Program," *InsideDense.com,* April 29, 2009 and Dan Lamothe, "Weight Issues Aside, Army Sticks With JLTV," *Army Times,* May 18, 2009.

[17] Unless otherwise noted, information in this section is taken from Kate Brannen, "Mobility Vs. Survivability: JLTV Could Suffer as U.S. Army, Marines Diverge," *Defense News,* June 7, 2010.

[18] Cid Standifer, "Marines: JLTV Faces Uncertain Future," *InsideDefense.com,* February 16, 2011 and "JLTV Requirements Could Be Trimmed to Bring Down Price Tag," *InsideDefense.com,* November 29, 2010.

[19] Tony Bertuca, "BAE, Navistar Add Northrop Grumman to Joint Light Tactical Vehicle Team," *InsideDefense.com,* April 29, 2011.

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[20]

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."[21]

Recent Program Activities

Senate Appropriations Committee Defense Subcommittee Recommends JLTV Termination[22]

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.

The Army and Marines' Response to Recommended Program Termination[23]

In what has been characterized as a response to the Senate Appropriation's Committee recommendation to terminate the JLTV, the Army and Marines apparently put aside past differences and 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.

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[20] Tony Bertuca, "Army Releases RFI for Joint Light Tactical Vehicle "Off The-Shelf" Solutions," *InsideDefense.com,* May 6, 2011.

[21] Ibid.

[22] Report 112-77, Department of Defense Appropriations Bill, 2012 (H.R. 2219), September 15, 2011, p. 162 and Michael Hoffman, "JLTV Loses More Support on Capitol Hill," *Defense News,* September 19, 2011.

[23] Information in this section is taken from Tony Bertuca, "Army Digs in on JLTV, Touts New Acquisition Strategy and Price Tag," *InsideDefense.com,* September 23, 2011 and "Army and Marines Agree on Requirement Changes for Embattled JLTV," *InsideDefense.com,* September 30, 2011 and Michael Hoffman, "U.S.: JLTV to Beat Cost Prediction," *Defense News,* October 3, 2011.

Draft Engineering and Manufacturing Development Request for Proposal[24]

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.

Army and Marines Revising Draft EMD RFP[25]

Reportedly based on input from a number of potential industry bidders, the Army and Marines will likely delay release on the EMD RFP until January-February 2012. These meetings with industry, in addition to soliciting interest for the RFP bid, were intended to determine cost drivers during production and what actions could be taken to speed up production and drive down cost. Ford Motor company, the second largest automaker who left the military tactical vehicle business in the early 1980s, is said to be interested in competing to build the JLTV. The possible entry of Ford, along with other industry teams, could serve to further reduce vehicle costs. The high per-vehicle cost has been a point of contention with DOD, Congress, and program critics. The draft RFP states that a production phase contract solicitation is envisioned for FY2015 and would be awarded as a single fixed-price contract for three years for low-rate initial production.

Marines Might Defer JLTV Acquisition Until Late 2020s[26]

Marine leaders reportedly testified to the House Armed Services Subcommittee on Tactical Air and Land Forces on November 16, 2011, that if significant budget cuts are enacted due to sequestration of the defense budget under the provisions of the Budget Control Act of 2011, P.L. 112-25, the Marines would defer acquisition of the JLTV until the late 2020s. The Marines would instead develop and procure the Amphibious Combat Vehicle (ACV) before acquiring any JLTVs. Experts suggest that if the Marines defer until the late 2020s that the per vehicle cost for the Army's JLTVs—that it hopes to begin procuring in 2015—would increase and possibly endanger the overall program.

[24] Draft JLTV EMD Request for Proposal, October 3, 2011 and Michael Hoffman, "U.S.: JLTV to Beat Cost Prediction," *Defense News,* October 3, 2011.

[25] Information in this section is taken from Tony Bertuca and Jason Sherman, " Army, Marine Corps Reworking JLTV Plans Based on Industry Input," *InsideDefense.com,* December 2, 2011, and "Ford Eying Entry into JLTV Competition, Influenced DOD Move to Lower Cost Target," *InsideDefense.com,* December 9, 2011.

[26] Information in this section is taken from Roxana Tiron and Brendan McGarry, "Marines May Delay Light Combat Vehicles Program to Late 2020s," *Bloomberg.com,* November 6, 2011, and Michael Hoffman, "Cuts Could Delay U.S. Marines' JLTV," *Defense News,* November 21, 2011.

Foreign Participants

United States and Australia Agree on Joint JLTV Development[27]

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.[28]

Ramifications If the JLTV Is Terminated[29]

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[30]

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.

[27] Daniel Wasserbly, "U.S. and Australia to Join Forces on JLTV Programme," Jane's Defence Weekly, March 4, 2009, p. 12 and Marjorie Censer, "DOD Inks Formal JLTV Agreement with Australia; More Partnerships Planned," *InsideDefense.com,* February 26, 2009.

[28] 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.

[29] Brendan Nicholson, "Canberra Loses $40 M on U.S. Army Project, " *The Australian,* September 16, 2011.

[30] Ibid.

Possible Acquisition Targets[31]

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 vehicles, 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.

Budgetary Issues

Program Cost and Funding[32]

DOD has not publically 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.[33] 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.

[31] 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 and the Army Tactical Wheeled Vehicle Strategy, undated but obtained from the Army in September 2010 and Michael Hoffman, "U.S.: JLTV to Beat Cost Prediction," *Defense News,* October 3, 2011.

[32] Jason Sherman and Daniel G. Dupont, "JLTV Price Tag Drives New Three Step Tactical Vehicle Plan for the Army," *InsideDefense.com*, August 8, 2008 and Michael Hoffman, "U.S.: JLTV to Beat Cost Prediction," *Defense News,* October 3, 2011.

[33] Andrea Shalal-Esa, "Companies Jockey for Huge U.S. Military Truck Program," *Reuters*, November 12, 2007.

FY2012 JLTV Budget Request[34]

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 or February 2012.

Legislative Activity

National Defense Authorization Act for FY2012 (H.R. 1540) Conference Report (H.Rept. 112-329)[35]

The conference recommended reducing the Army's $172.1 million budget request by $64.8 million due to "schedule slip" (delay of awarding the EMD contract) and reducing the Marines' $71.8 million request by $24.9 million for the same reason.

Department of Defense Appropriations Bill, FY2012 (H.R. 2055, P.L. 112-74), Conference Report (H.Rept. 112-331)[36]

> The budget request includes $243,940,000 within Army and Marine Corps accounts for the development of the Joint Light Tactical Vehicle (JLTV). The JLTV program has undergone significant changes since its inception and the submission of the fiscal year 2012 budget request. The principal reason for the changes is the discovery that the plan to acquire multiple variants of a limited number of vehicles with demanding performance specifications would result in an unaffordable program for both the Army and Marine Corps. As a result, the program will now pursue a competitively-selected single vehicle with a less complex design on a significantly accelerated timeline.
>
> The conferees are encouraged to see the Army and Marine Corps taking definitive action to change their approach in evaluating requirements, technology, key performance parameters, and costs as they apply to this acquisition program. Continuing on the nine year path of studies, development, and testing to field a lightweight tactical vehicle that will carry four passengers and 3,500 pounds of cargo onto the battlefield was unacceptable.
>
> Recognizing the renewed focus and approach, the conference agreement provides $87,300,000 in Research, Development, Test and Evaluation, Army and $46,700,000 in Research, Development, Test and Evaluation, Navy for continued JLTV development, in accordance with revised estimates for the program. The conferees strongly encourage the Army and Marine Corps, in conjunction with the Under Secretary of Defense (Acquisition, Technology and Logistics), to examine the feasibility of accelerating a competition for

[34] United States Department of Defense Fiscal Year 2012 Budget Request Program Acquisition Costs by Weapon System, February 2011, p. 3-2.

[35] National Defense Authorization Act for FY2012 (H.R. 1540) Conference Report, H.Rept. 112-329, December 12, 2011, p. 4 and p. 8.

[36] Military Construction and Veterans Affairs and Related Agencies Appropriations Act, 2012, Conference Report to Accompany H.R. 2055, December 15, 2011, pp. 688-689.

production through more efficient testing and acquisition practices and by embracing off-the-shelf technology demonstrated by industry so that improved vehicles are delivered to the warfighter as soon as possible. Accordingly, the Army and Marine Corps are encouraged to acquire, test, and evaluate, as necessary, available of the-shelf systems that meet the essential program requirements.

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[37]—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 or February 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.

[37] The National Commission on Fiscal Responsibility and Reform: $200 Billion in Illustrative Savings, November 12, 2010 (Draft Document), p. 24.

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.[38] 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.[39] 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.

The Cost of a Recapitalized HMMWV vs. a New JLTV[40]

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.[41]

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.

[38] Yochi J. Dreazen, "Desperate Measures," *National Journal,* July 9, 2011.

[39] Ibid.

[40] Lee Hudson, "Marine Corps Will Not Release Humvee Recap Request for Proposal," *InsideDefense.com,* October 14, 2011.

[41] Ibid.

Author Contact Information

Andrew Feickert
Specialist in Military Ground Forces
afeickert@crs.loc.gov, 7-7673