Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-279

Joint Light Tactical Vehicle (JLTV)

As of FY 2016 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

Table of Contents

Common Acronyms and Abbreviations for MDAP Programs

Acq O&M - Acquisition-Related Operations and Maintenance
ACAT - Acquisition Category
ADM - Acquisition Decision Memorandum
APB - Acquisition Program Baseline
APPN - Appropriation
APUC - Average Procurement Unit Cost
$B - Billions of Dollars
BA - Budget Authority/Budget Activity
Blk - Block
BY - Base Year
CAPE - Cost Assessment and Program Evaluation
CARD - Cost Analysis Requirements Description
CDD - Capability Development Document
CLIN - Contract Line Item Number
CPD - Capability Production Document
CY - Calendar Year
DAB - Defense Acquisition Board
DAE - Defense Acquisition Executive
DAMIR - Defense Acquisition Management Information Retrieval
DoD - Department of Defense
DSN - Defense Switched Network
EMD - Engineering and Manufacturing Development
EVM - Earned Value Management
FOC - Full Operational Capability
FMS - Foreign Military Sales
FRP - Full Rate Production
FY - Fiscal Year
FYDP - Future Years Defense Program
ICE - Independent Cost Estimate
IOC - Initial Operational Capability
Inc - Increment
JROC - Joint Requirements Oversight Council
$K - Thousands of Dollars
KPP - Key Performance Parameter
LRIP - Low Rate Initial Production
$M - Millions of Dollars
MDA - Milestone Decision Authority
MDAP - Major Defense Acquisition Program
MILCON - Military Construction
N/A - Not Applicable
O&M - Operations and Maintenance
ORD - Operational Requirements Document
OSD - Office of the Secretary of Defense
O&S - Operating and Support
PAUC - Program Acquisition Unit Cost

PB - President’s Budget
PE - Program Element
PEO - Program Executive Officer
PM - Program Manager
POE - Program Office Estimate
RDT&E - Research, Development, Test, and Evaluation
SAR - Selected Acquisition Report
SCP - Service Cost Position
TBD - To Be Determined
TY - Then Year
UCR - Unit Cost Reporting
U.S. - United States
USD(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)

Program Information

Program Name

Joint Light Tactical Vehicle (JLTV)

DoD Component

Army

Joint Participants

United States Marine Corps

Responsible Office

COL John Cavedo, Jr.
43087 Lake Street
Building 301 NE
Harrison Township, MI 48045-4941

john.r.cavedo2.mil@mail.mil

Phone: 586-239-2985
Fax:
DSN Phone: 273-2985
DSN Fax:
Date Assigned: October 8, 2012

References

SAR Baseline (Development Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 23, 2012

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 23, 2012

Mission and Description

The primary mission of the Joint Light Tactical Vehicle (JLTV) is to provide protected, sustained, and networked light tactical mobility to the Joint Forces, capable of worldwide deployment across the full spectrum of military operations and mission profiles under all weather and terrain conditions.

The JLTV will be transportable over long distances within any theater of operations through numerous lift assets and options, from sealift and amphibious shipping to airlift (both fixed and rotary wing) and low velocity aerial delivery. It will provide mobility to reconnaissance units and direct fire in support of combat maneuver, with substantial payload for personnel, equipment, and supplies.

The JLTV will support command, control, and communication in both stationary and on-the-move modes, enabling interoperability with Joint and coalition forces in decentralized operations over extended ranges in complex and dynamic operational environments.

System Description: the JLTV Family of Vehicles is comprised of two variants based upon a common automotive platform, a two-seat Combat Support Vehicle (CSV) and a four-seat Combat Tactical Vehicle (CTV), as well as a companion trailer. The two-seat CSV variant has a payload capacity of 5,100-pounds. The four-seat CTV variant has a payload capacity of 3,500-pounds. Variant may be further equipped with multiple mission package configurations, such as the CSV Shelter Carrier and the CTV Heavy Guns Carrier.

Executive Summary

Program Highlights Since Last Report:

The JLTV is a Joint Army/Marine Corps program, of which the Army is the lead service.

The EMD phase testing is 100-percent complete and the period of performance for all three EMD contracts is complete. Reliability, Availability, and Maintainability testing finished in July 2014. Performance, Ballistic, and Limited User Testing ended in November 2014. Final test reports are expected by the end of 2nd Quarter FY 2015. An assessment of this test data is in progress by the Army Evaluation Center; however the assessment is not due for release until after the receipt of the final test report.

At Knowledge Point Four, Protection Level (PL) 1 was recommended to be eliminated from the Force Protection KPP requirements. Based on EMD phase test results, mobility and transportability thresholds can be achieved simultaneously with PL 2 protection. Joint Program Office (JPO) JLTV assessed that this change will not create additional program risk and will enable the reduction of up to 40-percent of Production and Deployment (PD) phase live fire testing and avoidance of up to $20M in Joint test costs. The CPD was updated to reflect this change and officially approved through the Joint Capabilities Integration Development System process on November 21, 2014. The current cost estimate reflects this change.

The program was successful in receiving an approved Justification and Approval (J&A) which enabled the JPO to solicit and award the LRIP/FRP contract under a limited competition between the three EMD vendors. The J&A was approved on May 8, 2014 by the Army Acquisition Executive. On June 26, 2014 an initial draft Request for Proposal (RFP) was released followed by a revised second draft on October 9, 2014. JPO JLTV made further adjustments to the draft RFP as directed by the DAE and the OSD peer review. As a result of the changes, a third draft RFP was released on December 3, 2014 and one-on-one meetings were held with the three EMD vendors shortly afterwards. The final RFP was released on December 12, 2014 and the solicitation closed on February 10, 2015. The Milestone C DAB is anticipated for the 4th Quarter of FY 2015 followed by a LRIP/FRP contract award.

On August 20, 2012, the USD(AT&L) certified (with one waiver) the provisions set forth in section 2366b of title 10, United States Code (USC). Provision (a)(1)(D) of that section was waived in accordance with subsection (d) of the statute. On July 7, 2014, the USD(AT&L) certified that the JLTV program met the certification requirement for provision (a)(1)(D) pursuant to section 2366b of title 10, USC. There are no remaining 2366b waivers associated with this program.

There are no significant software-related issues with this program at this time.

History of Significant Developments Since Program Initiation:

Item of note: JLTV is one of the first programs to fully implement OSD’s September 2007 Competitive Prototyping policy which calls for two or more competing teams producing prototypes through Milestone B, with the goal of reducing risk and synchronizing requirements.

December 22, 2007: JLTV had an approved Milestone A decision initiating the Technology Development (TD) phase.

October 2008: Three cost reimbursable contracts with a total value of $239.8M were awarded under full and open competition to BAE Systems Land & Armaments, General Tactical Vehicles, LLC, and Lockheed Martin Corporation. TD efforts included the design, development, modeling, simulation, fabrication, test, and test support of 24 prototype JLTVs and companion trailers. The initial requirements proved very challenging for the TD prototypes. Consequently, the requirements evolved to incorporate lessons learned, and are closely aligned with the capabilities and performance demonstrated by the TD vendors.

January 26, 2012: A full and open competition solicitation was issued, using a best value tradeoff source selection process.

August 9, 2012: The Milestone B decision authorized entry into the EMD phase.

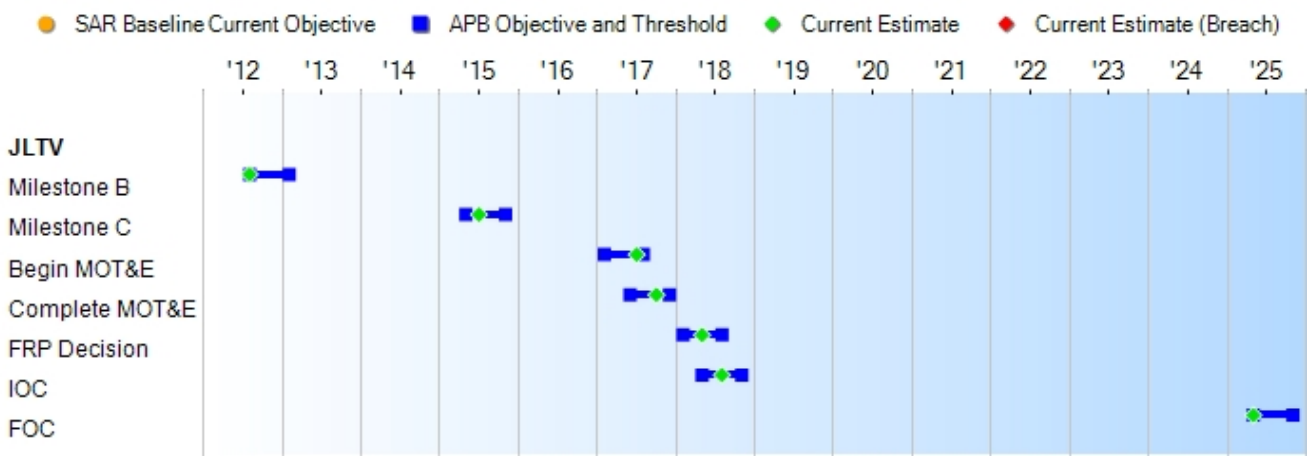
August 22, 2012 to present: Three firm-fixed price contracts with a total value of $184.8M were awarded to the AM General LLC, Lockheed Martin Corporation, and Oshkosh Defense LLC for a 27-month period of performance. The EMD phase includes 14-months of performance, reliability, and ballistic testing in order to validate that JLTV prototype vehicles achieve KPP and Key System Attribute thresholds and support the source selection process for the PD phase. Each EMD vendor fabricated, assembled, tested, and delivered a total of 66 prototype vehicles and 18 trailers (22-vehicles and six-trailers from each vendor), along with ballistic structures, armor coupons, and other test assets, vendor-furnished kits, trailers, and data requirements.

Threshold Breaches

APB Breaches		
Schedule		☐
Performance		☐
Cost	RDT&E	☐
	Procurement	☐
	MILCON	☐
	Acq O&M	☐
O&S Cost		☐
Unit Cost	PAUC	☐
	APUC	☐

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None

Schedule



Schedule Events					
Events	**SAR Baseline Development Estimate**	**Current APB Development Objective/Threshold**		**Current Estimate**	
Milestone B	Aug 2012	Aug 2012	Feb 2013	Aug 2012	
Milestone C	May 2015	May 2015	Nov 2015	Jul 2015	
Begin MOT&E	Feb 2017	Feb 2017	Aug 2017	Jul 2017	(Ch-1)
Complete MOT&E	Jun 2017	Jun 2017	Dec 2017	Oct 2017	(Ch-2)
FRP Decision	Feb 2018	Feb 2018	Aug 2018	May 2018	(Ch-3)
IOC	May 2018	May 2018	Nov 2018	Aug 2018	(Ch-4)
FOC	May 2025	May 2025	Nov 2025	May 2025	

Change Explanations

(Ch-1) The current scheduled start of MOT&E changed from February 2017 to July 2017 to address manufacturing, performance, and test risks. Based on market research conducted by Joint Program Office JLTV, it was determined that the assumed vehicle fabrication time of seven months would induce program risk. EMD contractors indicated that extending the initial vehicle deliveries to ten months would result in the delivery of higher quality production representative vehicles and incorporate EMD lessons learned. For additional risk reduction, during LRIP test planning, it was determined that MOT&E should not start until priority Production Qualification Testing, as much Reliability Qualification Testing, and Logistics products could be completed as possible while still maintaining the current IOC and FRP milestone dates. Conducting MOT&E later in the test phase will ensure that final configuration production vehicles will be available for MOT&E testing. Through anticipated efficiencies, potential schedule impacts may be reduced, subject to winning vendor design, proposed solution, and EMD Government Test Performance.
(Ch-2) The current estimate for MOT&E completion changed from June 2017 to October 2017 to address manufacturing, performance, test risks, and the MOT&E risk reduction action (see Ch-1). Through anticipated efficiencies, potential schedule impacts may be reduced subject to the winning vendor design, proposed solution, and EMD Government Test Performance.
(Ch-3) The current estimate for FRP Decision changed from February 2018 to May 2018 to address manufacturing, performance, test risks, and the MOT&E risk reduction action (see Ch-1). Through anticipated efficiencies, potential schedule impacts may be reduced subject to the winning vendor design, proposed solution, and EMD Government Test Performance.
(Ch-4) The current estimate for IOC changed from May 2018 to August 2018 to address manufacturing, performance, test risks, and the MOT&E risk reduction action (see Ch-1). Through anticipated efficiencies, potential schedule impacts may be reduced subject to the winning vendor design, proposed solution, and EMD Government Test Performance.

Notes

The above IOC is for the Army. The IOC for the United States Marine Corps is scheduled for March 2018.

The above FOC is for the Army. The FOC for the United States Marine Corps is scheduled for August 2021.

Acronyms and Abbreviations

MOT&E - Multiservice Operational Test and Evaluation

Performance

Performance Characteristics				
SAR Baseline Development Estimate	**Current APB Development Objective/Threshold**		**Demonstrated Performance**	**Current Estimate**
Survivability KPP				
The JLTV FoV (at GVW) should provide a crashworthy vehicle structure capable of maintaining structural integrity in a rollover; quantified as a crush resistant roof structure capable of supporting 150% of its own GVW after a dynamically applied impact load.	The JLTV FoV (at GVW) should provide a crashworthy vehicle structure capable of maintaining structural integrity in a rollover; quantified as a crush resistant roof structure capable of supporting 150% of its own GVW after a dynamically applied impact load.	The JLTV FoV (at GVW) shall provide a crashworthy vehicle structure capable of maintaining structural integrity in a rollover; quantified as a crush resistant roof structure capable of supporting 100% of its own GVW after a dynamically applied impact load.	TBD	The JLTV FoV (at GVW) should provide a crashworthy vehicle structure capable of maintaining structural integrity in a rollover; quantified as a crush resistant roof structure capable of supporting 150% of its own GVW after a dynamically applied impact load.
Net-Ready KPP				
The capability, system, and/or service must fully support execution of all operational activities and information exchanges identified in DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net-Centric military operations to include: 1) Solution architecture products compliant with DoD Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges, 2) Compliant with Net-Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules	The capability, system, and/or service must fully support execution of all operational activities and information exchanges identified in DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net-Centric military operations to include: 1) Solution architecture products compliant with DoD Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges, 2) Compliant with Net-Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules	The capability, system, and/or service must fully support execution of joint critical operational activities and information exchanges identified in the DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net-Centric military operations to include: 1) Solution architecture products compliant with DoD Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges, 2) Compliant with Net-Centric Data Strategy	TBD	The capability, system, and/or service must fully support execution of all operational activities and information exchanges identified in DoD Enterprise Architecture and solution architectures based on integrated DoDAF content, and must satisfy the technical requirements for transition to Net-Centric military operations to include: 1) Solution architecture products compliant with DoD Enterprise Architecture based on integrated DoDAF content, including specified operationally effective information exchanges, 2) Compliant with Net-Centric Data Strategy and Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA,

identified in the DoD IEA, excepting tactical and non-IP communica -tions, 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs, necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views, 4) Information assurance requirements including availability, integrity, authenticat-ion, confidential-ity, and non -repudiation, and issuance of an ATO by the DAA, and 5) Supportabil-ity requirements to include SAASM, Spectrum and JTRS require-ments.	identified in the DoD IEA, excepting tactical and non-IP communica -tions, 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs, necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views, 4) Information assurance requirements including availability, integrity, authenticat-ion, confidential-ity, and non -repudiation, and issuance of an ATO by the DAA, and 5) Supportabil-ity requirements to include SAASM, Spectrum and JTRS require-ments.	and Net-Centric Services Strategy, and the principles and rules identified in the DoD IEA, excepting tactical and non-IP communica-tions, 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views, 4) Information assurance requirements including availability, integrity, authenticat-ion, confidential-ity, and non-repudiation, and issuance of an IATO or ATO by the DAA, and 5) Supportabil-ity requirements to include SAASM, Spectrum and JTRS require-ments.		excepting tactical and non-IP communica-tions, 3) Compliant with GIG Technical Guidance to include IT Standards identified in the TV-1 and implementation guidance of GESPs, necessary to meet all operational requirements specified in the DoD Enterprise Architecture and solution architecture views, 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO by the DAA, and 5) Supportability requirements to include SAASM, Spectrum and JTRS requirements.
Sustainment KPP				
JLTV FoV (vehicle only) should have an Ao 98%. JLTV FoV (vehicle only) should have a Am of 85%.	JLTV FoV (vehicle only) should have an Ao 98%. JLTV FoV (vehicle only) should have a Am of 85%.	JLTV FoV (vehicle only) shall have an Ao of 95%. JLTV FoV (vehicle only) shall have a Am of 80%.	TBD	JLTV FoV (vehicle only) should have an Ao 98%. JLTV FoV (vehicle only) should have a Am of 85%.
System Training KPP				
The JLTV shall have training for operators and maintainers that incorporates and leverages existing training techniques, methods, resources and licensing requirements of each Service. JLTV training shall include in-vehicle training to encompass	The JLTV shall have training for operators and maintainers that incorporates and leverages existing training techniques, methods, resources and licensing requirements of each Service. JLTV training shall include in-vehicle training to encompass	The JLTV shall have training for operators and maintainers that incorporates and leverages existing training techniques, methods, resources and licensing requirements of each Service. JLTV training shall include in-vehicle training to encompass	TBD	The JLTV shall have training for operators and maintainers that incorporates and leverages existing training techniques, methods, resources and licensing requirements of each Service. JLTV training shall include in-vehicle training to encompass

demonstrat-ing a capability to negotiate operationally relevant terrain profiles, which include basic organic vehicle instrumenta-tion, controls and crew drills.	demonstrat-ing a capability to negotiate operationally relevant terrain profiles, which include basic organic vehicle instrumenta-tion, controls and crew drills.	demonstrat-ing a capability to negotiate operationally relevant terrain profiles, which include basic organic vehicle instrumenta-tion, controls and crew drills.		demonstrating a capability to negotiate operationally relevant terrain profiles, which include basic organic vehicle instrumentation, controls and crew drills.
Mobility KPP				
The JLTV mobility shall support continuous operation across worldwide terrains, climatic conditions, and soil types at speeds consistent with conducting fast-paced military operations. This includes paved primary road networks, gravel/dirt secondary roadways, single track trails with no manmade improve-ments, & cross-country terrain with no roads, routes, or well-worn trails. The JLTV at GVW should be capable of traversing fine grain soils with an RCI of 22 in a single pass and also ascend and descend coarse grained, dry sand (less than 1% moisture content) 40% longitudinal slopes. The threshold applies within the confidence bounds of established soft soil test procedures.	The JLTV mobility shall support continuous operation across worldwide terrains, climatic conditions, and soil types at speeds consistent with conducting fast-paced military operations. This includes paved primary road networks, gravel/dirt secondary roadways, single track trails with no manmade improve-ments, & cross-country terrain with no roads, routes, or well-worn trails. The JLTV at GVW should be capable of traversing fine grain soils with an RCI of 22 in a single pass and also ascend and descend coarse grained, dry sand (less than 1% moisture content) 40% longitudinal slopes. The threshold applies within the confidence bounds of established soft soil test procedures.	The JLTV mobility shall support continuous operation across worldwide terrains, climatic conditions, and soil types at speeds consistent with conducting fast-paced military operations. This includes paved primary road networks, gravel/dirt secondary roadways, single track trails with no manmade improve-ments, & cross-country terrain with no roads, routes, or well-worn trails. The JLTV at GVW shall be capable of traversing fine grain soils with an RCI of 25 in a single pass and also ascend and descend coarse grained, dry sand (less than 1% moisture content) 30% longitudinal slopes. The threshold applies within the confidence bounds of established soft soil test procedures.	TBD	The JLTV mobility shall support continuous operation across worldwide terrains, climatic conditions, and soil types at speeds consistent with conducting fast-paced military operations. This includes paved primary road networks, gravel/dirt secondary roadways, single track trails with no manmade improve-ments, & cross -country terrain with no roads, routes, or well-worn trails. The JLTV at GVW should be capable of traversing fine grain soils with an RCI of 22 in a single pass and also ascend and descend coarse grained, dry sand (less than 1% moisture content) 40% longitudinal slopes. The threshold applies within the confidence bounds of established soft soil test procedures.
Transportability KPP				
The JLTV FoV shall be transportable worldwide by air and sea modes to support strategic deployment and operational maneuver in accordance with	The JLTV FoV shall be transportable worldwide by air and sea modes to support strategic deployment and operational maneuver in accordance with	The JLTV FoV shall be transportable worldwide by air and sea modes to support strategic deployment and operational maneuver in	TBD	The JLTV FoV shall be transportable worldwide by air and sea modes to support strategic deployment and operational maneuver in accordance with service

service concepts and programs. Rotary Wing: General Purpose – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Heavy Guns Carrier – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Close Combat Weapons Carrier – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Utility (2 Seat) – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Shelter Carrier – Not a KPP Note: Range, Temperature, and Pressure Data: 1) CH-53K: Navy High Hot: 91.5 deg F/33 deg C, 3000ft. 40 nm; sea-level take off & landing 2) CH-47F high hot: 95 F / 35 deg C, 4,000 ft, 50nm 3) CH-47F SL/SD: Sea Level / Standard Day (70 F), 50 nm Sealift: Transport by sea is an essential part of force deployment and a hallmark aspect of USMC Expedi-tionary capabilities. The USMC JLTV (CTV variants and the CSV Utility) shall be capable of being loaded into all deck spaces of the preposition-ing and amphibious ships force	service concepts and programs. Rotary Wing: General Purpose – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Heavy Guns Carrier – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Close Combat Weapons Carrier – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Utility (2 Seat) – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Shelter Carrier – Not a KPP Note: Range, Temperature, and Pressure Data: 1) CH-53K: Navy High Hot: 91.5 deg F/33 deg C, 3000ft. 40 nm; sea-level take off & landing 2) CH-47F high hot: 95 F / 35 deg C, 4,000 ft, 50nm 3) CH-47F SL/SD: Sea Level / Standard Day (70 F), 50 nm Sealift: Transport by sea is an essential part of force deployment and a hallmark aspect of USMC Expedi-tionary capabilities. The USMC JLTV (CTV variants and the CSV Utility) shall be capable of being loaded into all deck spaces of the preposition-ing and amphibious ships force	accordance with service concepts and programs. Rotary Wing: General Purpose – USMC: 2x CH-53K 40nm high-hot @ ECC, USA: 1x CH-47F 50nm SL/SD @ ECC Heavy Guns Carrier – USMC: 2x CH-53K 40nm high-hot @ ECC, USA: 1x CH-47F 50nm SL/SD @ ECC Close Combat Weapons Carrier – USMC: 2x CH-53K 40nm high-hot @ ECC, USA: 1x CH-47F 50nm SL/SD @ ECC Utility (2 Seat) – USMC: 2x CH-53K 40nm high-hot @ ECC, USA: 1x CH-47F 50nm SL/SD @ ECC Shelter Carrier – Not a KPP Note: Range, Temperature, and Pressure Data: 1) CH-53K: Navy High Hot: 91.5 deg F/33 deg C, 3000ft. 40 nm; sea-level take off & landing 2) CH-47F high hot: 95 F / 35 deg C, 4,000 ft, 50nm 3) CH-47F SL/SD: Sea Level / Standard Day (70 F), 50 nm Sealift: Transport by sea is an essential part of force deployment and a hallmark aspect of USMC Expedi-tionary capabilities. The USMC JLTV (CTV variants and the CSV Utility) shall be capable of being loaded into all deck spaces of the preposition-ing and amphibious ships force projection naval ships where current HMMWVs are loaded,		concepts and programs. Rotary Wing: General Purpose – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Heavy Guns Carrier – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Close Combat Weapons Carrier – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Utility (2 Seat) – USMC: 2x CH-53K 40nm high-hot @ GVW, USA: 1x CH-47F 50nm 4k/95F @ GVW, USA: 1x MH-47 30nm IAT 4k/95F @ ECC Shelter Carrier – Not a KPP Note: Range, Temperature, and Pressure Data: 1) CH-53K: Navy High Hot: 91.5 deg F/33 deg C, 3000ft. 40 nm; sea-level take off & landing 2) CH-47F high hot: 95 F / 35 deg C, 4,000 ft, 50nm 3) CH-47F SL/SD: Sea Level / Standard Day (70 F), 50 nm Sealift: Transport by sea is an essential part of force deployment and a hallmark aspect of USMC Expeditionary capabilities. The USMC JLTV (CTV variants and the CSV Utility) shall be capable of being loaded into all deck spaces of the preposition-ing and amphibious ships force

projection naval ships where current HMMWVs are loaded, including height restricted deck spaces of the MPF MPS and amphibious class ships.	projection naval ships where current HMMWVs are loaded, including height restricted deck spaces of the MPF MPS and amphibious class ships.	including height restricted deck spaces of the MPF MPS and amphibious class ships.		projection naval ships where current HMMWVs are loaded, including height restricted deck spaces of the MPF MPS and amphibious class ships.
Payload KPP				
Combat Tactical Vehicles (CTVs including GP, HGC, and CCWC) should have an on vehicle payload of 5100. CSVs including Utility/Prime Movers and Shelter Carriers: 11,000; Trailers: 6,000. Shelter carrier variants shall transport the S250 LWMS, S-788 SICPS RWS, SECM, and other Data Interchange shelters within the payload capabilities of the variant, current as of June 2011.	Combat Tactical Vehicles (CTVs including GP, HGC, and CCWC) should have an on vehicle payload of 5100. CSVs including Utility/Prime Movers and Shelter Carriers: 11,000; Trailers: 6,000. Shelter carrier variants shall transport the S250 LWMS, S-788 SICPS RWS, SECM, and other Data Interchange shelters within the payload capabilities of the variant, current as of June 2011.	Combat Tactical Vehicles (CTVs including GP, HGC, and CCWC) shall have an on vehicle payload of 3500lbs. CSVs including Utility/Prime Movers and Shelter Carriers: 5100; Trailers: 3500 for CTV variants; 5100 for CSV variants. Shelter carrier variants shall transport the S250 LWMS, S-788 SICPS RWS, SECM, and other Data Interchange shelters within the payload capabilities of the variant, current as of June 2011.	TBD	Combat Tactical Vehicles (CTVs including GP, HGC, and CCWC) should have an on vehicle payload of 5100. CSVs including Utility/Prime Movers and Shelter Carriers: 11,000; Trailers: 6,000. Shelter carrier variants shall transport the S250 LWMS, S-788 SICPS RWS, SECM, and other Data Interchange shelters within the payload capabilities of the variant, current as of June 2011.

Classified Performance information is provided in the classified annex to this submission.

Requirements Reference

Capability Development Document (CDD) dated March 15, 2012

Change Explanations

None

Notes

Joint Program Office JLTV will report demonstrated performance following the selection of the LRIP vendor.

Acronyms and Abbreviations

@ - at
Am - Materiel Availability
Ao - Operational Availability
ATO - Approval to Operate
C - Celsius
CCWC - Close Combat Weapons Carrier
CSV - Combat Support Vehicle
CTV - Combat Tactical Vehicle
DAA - Designated Approval Authority
Deg - Degree
DoD IEA - DoD Information Enterprise Architecture
DoDAF - DoD Architecture Framework
ECC - Essential Combat Configuration
F - Fahrenheit
FoV - Family of Vehicles
ft - Feet
GESP - GIG Enterprise Service Profiles
GIG - Global Information Grid
GP - General Purpose
GVW - Gross Vehicle Weight
HGC - Heavy Guns Carrier
HMMWV - High Mobility Multi-Purpose Wheeled Vehicle
IAT - Internal Air Transport
IATO - Interim Authorization to Operate
IP - Internet Protocol
IT - Information Technology
JTRS - Joint Tactical Radio System
k - Thousand
lbs - Pounds
LWMS - Light Weight Multipurpose Shelter
MPF - Maritime Pre-positioning Force
MPS - Maritime Pre-Positioning Squadron
nm - Nautical Miles
RCI - Rating Cone Index
SAASM - Selective Availability Anti-Spoofing Module
SECM - Shop Equipment Contact Maintenance
SICPS RWS - Standardized Integrated Command Post System Rigid Wall Shelter
SL/SD - Sea Level / Standard Day
TV-1 - Technical Standards Profile
USA - U.S. Army
USMC - U.S. Marine Corps

Track to Budget

RDT&E

Appn	BA	PE	
Navy	04	0603635M	
Project		Name	
3209		Marine Corps Grnd Cmbt/Supt Sys	(Sunk)
Notes:		Funding line used through FY 2012	
Navy	04	0605812M	
Project		Name	
3209		Joint Light Tactical Vehicle	
Notes:		Funding line FY 2013 and beyond	
Army	04	0603804A	
Project		Name	
L04		Joint Light Tactical Vehicle (JLTV) - Advanced Development (AD)	(Sunk)
Notes:		Funding line used from FY 2008-FY 2011	
Army	05	0604804A	
Project		Name	
L50		Joint Light Tactical Vehicle (JLTV) - System Development and Demonstration (SDD)	(Sunk)
Notes:		Funding line used FY 2012	
Army	05	0605812A	
Project		Name	
VU9		Joint Light Tactical Vehicle - Engineering and Manufacturing Development (EMD)	
Notes:		Funding line FY 2013 and beyond	

Procurement

Appn	BA	PE	
Navy	05	0206211M	
Line Item		Name	
5095		Joint Light Tactical Vehicle	
Notes:		Funding starts FY 2015	
Army	01	0216300A	
Line Item		Name	
D15603		Joint Light Tactical Vehicle	
Notes:		Funding starts FY 2015	

Cost and Funding

Cost Summary

Total Acquisition Cost							
Appropriation	BY 2012 $M			BY 2012 $M	TY $M		
	SAR Baseline Development Estimate	Current APB Development Objective/Threshold		Current Estimate	SAR Baseline Development Estimate	Current APB Development Objective	Current Estimate
RDT&E	962.3	962.3	1058.5	935.9	1009.8	1009.8	986.4
Procurement	21782.0	21782.0	23960.2	21635.5	29359.4	29359.4	29587.6
Flyaway	--	--	--	20562.8	--	--	28197.3
Recurring	--	--	--	18907.5	--	--	25936.2
Non Recurring	--	--	--	1655.3	--	--	2261.1
Support	--	--	--	1072.7	--	--	1390.3
Other Support	--	--	--	919.1	--	--	1187.4
Initial Spares	--	--	--	153.6	--	--	202.9
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	35.9	35.9	39.5	0.0	39.5	39.5	0.0
Total	22780.2	22780.2	N/A	22571.4	30408.7	30408.7	30574.0

Confidence Level

Confidence Level of cost estimate for current APB: 50%

The JLTV Joint Cost Position (JCP), approved July 12, 2012 by Assistant Secretary of the Army for Financial Management & Comptroller (ASA FM&C), was used to establish the APB. Costs are reflected at the 50% Confidence Level in accordance with Army Cost Guidance, Army Regulation 11-18.

Procurement does not include recurring production for government furnished equipment and non-Program Manager (PM) funded modifications.

Operations and Support includes training ammunition, non-PM funded modifications (Procurement), Military Personnel, and all Operations and Maintenance (minus demilitarization / demilitarization second destination tranportation repairable and consumerable parts associated with government furnished equipment / end-item supply and maintenance of government furnished equipment).

Cost Notes

For the JLTV program, the unit of measure for APUC and PAUC calculations is one vehicle.

Total Quantity			
Quantity	**SAR Baseline Development Estimate**	**Current APB Development**	**Current Estimate**
RDT&E	131	131	121
Procurement	54599	54599	54599
Total	54730	54730	54720

Quantity Notes

Estimate was updated to reflect the latest test plan. As a result of EMD testing, it was determined that fewer Live Fire Tests were required, therefore RDTE quantities were reduced.

Due to the effects of the new inflation indices, the program is able to buy additional quantities throughout the FYDP years. Therefore, the Procurement quantities shown are different than the program budget documents.

Cost and Funding

Funding Summary

Appropriation Summary									
FY 2016 President's Budget / December 2014 SAR (TY$ M)									
Appropriation	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
RDT&E	686.8	55.1	69.2	49.2	5.3	6.0	5.1	109.7	986.4
Procurement	0.0	172.1	387.7	753.8	1377.8	1707.8	1791.7	23396.7	29587.6
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2016 Total	686.8	227.2	456.9	803.0	1383.1	1713.8	1796.8	23506.4	30574.0
PB 2015 Total	689.9	229.3	454.4	796.3	1369.8	1725.2	1924.9	23836.1	31025.9
Delta	-3.1	-2.1	2.5	6.7	13.3	-11.4	-128.1	-329.7	-451.9

Quantity Summary										
FY 2016 President's Budget / December 2014 SAR (TY$ M)										
Quantity	Undistributed	Prior	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Development	121	0	0	0	0	0	0	0	0	121
Production	0	0	191	570	1111	2678	3270	3360	43419	54599
PB 2016 Total	121	0	191	570	1111	2678	3270	3360	43419	54720
PB 2015 Total	131	0	181	503	1098	2567	3204	3536	43510	54730
Delta	-10	0	10	67	13	111	66	-176	-91	-10

Cost and Funding

Annual Funding By Appropriation

Annual Funding 2040 | RDT&E | Research, Development, Test, and Evaluation, Army							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	105.2
2009	--	--	--	--	--	--	20.5
2010	--	--	--	--	--	--	26.3
2011	--	--	--	--	--	--	33.4
2012	--	--	--	--	--	--	84.5
2013	--	--	--	--	--	--	59.2
2014	--	--	--	--	--	--	81.4
2015	--	--	--	--	--	--	45.7
2016	--	--	--	--	--	--	32.5
2017	--	--	--	--	--	--	25.6
2018	--	--	--	--	--	--	3.2
2019	--	--	--	--	--	--	3.1
2020	--	--	--	--	--	--	3.1
2021	--	--	--	--	--	--	2.1
2022	--	--	--	--	--	--	4.3
2023	--	--	--	--	--	--	5.4
2024	--	--	--	--	--	--	7.3
2025	--	--	--	--	--	--	4.6
2026	--	--	--	--	--	--	4.6
2027	--	--	--	--	--	--	4.7
2028	--	--	--	--	--	--	5.8
2029	--	--	--	--	--	--	8.0
2030	--	--	--	--	--	--	5.0
2031	--	--	--	--	--	--	5.1
2032	--	--	--	--	--	--	5.2
2033	--	--	--	--	--	--	6.4
2034	--	--	--	--	--	--	8.9
2035	--	--	--	--	--	--	5.6
2036	--	--	--	--	--	--	5.7
2037	--	--	--	--	--	--	5.8
2038	--	--	--	--	--	--	7.1
2039	--	--	--	--	--	--	6.0
Subtotal	69	--	--	--	--	--	631.3

Annual Funding 2040 | RDT&E | Research, Development, Test, and Evaluation, Army							
Fiscal Year	Quantity	BY 2012 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	110.3
2009	--	--	--	--	--	--	21.2
2010	--	--	--	--	--	--	26.8
2011	--	--	--	--	--	--	33.4
2012	--	--	--	--	--	--	83.2
2013	--	--	--	--	--	--	57.3
2014	--	--	--	--	--	--	77.0
2015	--	--	--	--	--	--	42.4
2016	--	--	--	--	--	--	29.8
2017	--	--	--	--	--	--	23.1
2018	--	--	--	--	--	--	2.8
2019	--	--	--	--	--	--	2.7
2020	--	--	--	--	--	--	2.6
2021	--	--	--	--	--	--	1.7
2022	--	--	--	--	--	--	3.5
2023	--	--	--	--	--	--	4.3
2024	--	--	--	--	--	--	5.7
2025	--	--	--	--	--	--	3.5
2026	--	--	--	--	--	--	3.5
2027	--	--	--	--	--	--	3.5
2028	--	--	--	--	--	--	4.2
2029	--	--	--	--	--	--	5.7
2030	--	--	--	--	--	--	3.5
2031	--	--	--	--	--	--	3.5
2032	--	--	--	--	--	--	3.5
2033	--	--	--	--	--	--	4.2
2034	--	--	--	--	--	--	5.7
2035	--	--	--	--	--	--	3.5
2036	--	--	--	--	--	--	3.5
2037	--	--	--	--	--	--	3.5
2038	--	--	--	--	--	--	4.2
2039	--	--	--	--	--	--	3.5
Subtotal	69	--	--	--	--	--	586.8

Annual Funding 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	38.7
2009	--	--	--	--	--	--	40.7
2010	--	--	--	--	--	--	47.8
2011	--	--	--	--	--	--	18.2
2012	--	--	--	--	--	--	45.1
2013	--	--	--	--	--	--	35.5
2014	--	--	--	--	--	--	50.3
2015	--	--	--	--	--	--	9.4
2016	--	--	--	--	--	--	36.7
2017	--	--	--	--	--	--	23.6
2018	--	--	--	--	--	--	2.1
2019	--	--	--	--	--	--	2.9
2020	--	--	--	--	--	--	2.0
2021	--	--	--	--	--	--	2.1
Subtotal	52	--	--	--	--	--	355.1

Annual Funding 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	BY 2012 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	40.7
2009	--	--	--	--	--	--	42.2
2010	--	--	--	--	--	--	48.9
2011	--	--	--	--	--	--	18.2
2012	--	--	--	--	--	--	44.3
2013	--	--	--	--	--	--	34.3
2014	--	--	--	--	--	--	48.2
2015	--	--	--	--	--	--	8.9
2016	--	--	--	--	--	--	34.0
2017	--	--	--	--	--	--	21.5
2018	--	--	--	--	--	--	1.9
2019	--	--	--	--	--	--	2.5
2020	--	--	--	--	--	--	1.7
2021	--	--	--	--	--	--	1.8
Subtotal	52	--	--	--	--	--	349.1

Annual Funding 2035 | Procurement | Other Procurement, Army							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2015	184	93.7	--	56.2	149.9	14.7	164.6
2016	459	195.4	--	93.4	288.8	19.5	308.3
2017	838	446.0	--	89.5	535.5	63.0	598.5
2018	1459	685.1	--	52.7	737.8	99.2	837.0
2019	1879	875.0	--	60.8	935.8	156.3	1092.1
2020	1825	863.9	--	57.4	921.3	191.7	1113.0
2021	2200	1025.6	--	57.6	1083.2	51.1	1134.3
2022	2200	1038.3	--	77.4	1115.7	47.2	1162.9
2023	2200	1045.6	--	73.3	1118.9	54.2	1173.1
2024	2200	1053.9	--	80.0	1133.9	46.6	1180.5
2025	2200	1050.8	--	84.2	1135.0	41.7	1176.7
2026	2200	1016.9	--	76.3	1093.2	38.2	1131.4
2027	2200	977.2	--	82.5	1059.7	34.8	1094.5
2028	2200	984.2	--	79.6	1063.8	36.2	1100.0
2029	2200	996.2	--	86.4	1082.6	34.3	1116.9
2030	2200	1015.2	--	91.5	1106.7	35.0	1141.7
2031	2200	1020.4	--	82.0	1102.4	35.8	1138.2
2032	2200	1037.9	--	89.3	1127.2	36.3	1163.5
2033	2200	1064.1	--	82.5	1146.6	37.1	1183.7
2034	2200	1071.4	--	91.8	1163.2	37.9	1201.1
2035	2200	1084.4	--	97.4	1181.8	38.4	1220.2
2036	2200	1100.0	--	85.9	1185.9	39.4	1225.3
2037	2200	1118.7	--	87.9	1206.6	40.2	1246.8
2038	2200	1146.5	--	87.2	1233.7	40.7	1274.4
2039	1959	1041.7	--	80.9	1122.6	37.1	1159.7
2040	896	504.3	--	81.1	585.4	17.5	602.9
2041	--	--	--	25.0	25.0	1.0	26.0
2042	--	--	--	24.0	24.0	2.0	26.0
Subtotal	49099	23552.4	--	2113.8	25666.2	1327.1	26993.3

Annual Funding 2035 | Procurement | Other Procurement, Army							
Fiscal Year	Quantity	BY 2012 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2015	184	86.8	--	52.0	138.8	13.6	152.4
2016	459	178.5	--	85.3	263.8	17.8	281.6
2017	838	399.7	--	80.2	479.9	56.4	536.3
2018	1459	601.9	--	46.3	648.2	87.2	735.4
2019	1879	753.7	--	52.4	806.1	134.6	940.7
2020	1825	729.6	--	48.5	778.1	161.8	939.9
2021	2200	849.1	--	47.7	896.8	42.3	939.1
2022	2200	842.8	--	62.8	905.6	38.3	943.9
2023	2200	832.1	--	58.3	890.4	43.1	933.5
2024	2200	822.2	--	62.4	884.6	36.4	921.0
2025	2200	803.7	--	64.4	868.1	31.9	900.0
2026	2200	762.6	--	57.1	819.7	28.7	848.4
2027	2200	718.4	--	60.7	779.1	25.6	804.7
2028	2200	709.4	--	57.3	766.7	26.1	792.8
2029	2200	704.0	--	61.0	765.0	24.2	789.2
2030	2200	703.3	--	63.5	766.8	24.2	791.0
2031	2200	693.1	--	55.7	748.8	24.3	773.1
2032	2200	691.1	--	59.5	750.6	24.2	774.8
2033	2200	694.7	--	53.8	748.5	24.2	772.7
2034	2200	685.7	--	58.7	744.4	24.3	768.7
2035	2200	680.4	--	61.1	741.5	24.1	765.6
2036	2200	676.7	--	52.9	729.6	24.2	753.8
2037	2200	674.7	--	53.1	727.8	24.2	752.0
2038	2200	677.9	--	51.5	729.4	24.1	753.5
2039	1959	603.9	--	46.9	650.8	21.5	672.3
2040	896	286.6	--	46.1	332.7	9.9	342.6
2041	--	--	--	13.9	13.9	0.6	14.5
2042	--	--	--	13.1	13.1	1.1	14.2
Subtotal	49099	16862.6	--	1526.2	18388.8	1018.9	19407.7

Annual Funding 1109 | Procurement | Procurement, Marine Corps							
Fiscal Year	Quantity	TY $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2015	7	3.3	--	3.2	6.5	1.0	7.5
2016	111	51.8	--	26.6	78.4	1.0	79.4
2017	273	117.8	--	31.0	148.8	6.5	155.3
2018	1219	511.3	--	22.8	534.1	6.7	540.8
2019	1391	578.8	--	23.7	602.5	13.2	615.7
2020	1535	641.0	--	23.7	664.7	14.0	678.7
2021	964	479.8	--	14.9	494.7	12.3	507.0
2022	--	--	--	0.6	0.6	7.2	7.8
2023	--	--	--	0.3	0.3	1.3	1.6
2024	--	--	--	0.5	0.5	--	0.5
Subtotal	5500	2383.8	--	147.3	2531.1	63.2	2594.3

Annual Funding 1109 | Procurement | Procurement, Marine Corps							
Fiscal Year	Quantity	BY 2012 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2015	7	3.1	--	3.0	6.1	0.9	7.0
2016	111	47.4	--	24.3	71.7	0.9	72.6
2017	273	105.7	--	27.8	133.5	5.8	139.3
2018	1219	449.8	--	20.0	469.8	5.9	475.7
2019	1391	499.2	--	20.4	519.6	11.4	531.0
2020	1535	542.0	--	20.1	562.1	11.8	573.9
2021	964	397.7	--	12.4	410.1	10.2	420.3
2022	--	--	--	0.5	0.5	5.8	6.3
2023	--	--	--	0.2	0.2	1.1	1.3
2024	--	--	--	0.4	0.4	--	0.4
Subtotal	5500	2044.9	--	129.1	2174.0	53.8	2227.8

Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	8/20/2012	8/20/2012
Approved Quantity	3100	3100
Reference	Milestone B ADM	Milestone B ADM
Start Year	2015	2015
End Year	2017	2017

Foreign Military Sales

None

Nuclear Costs

None

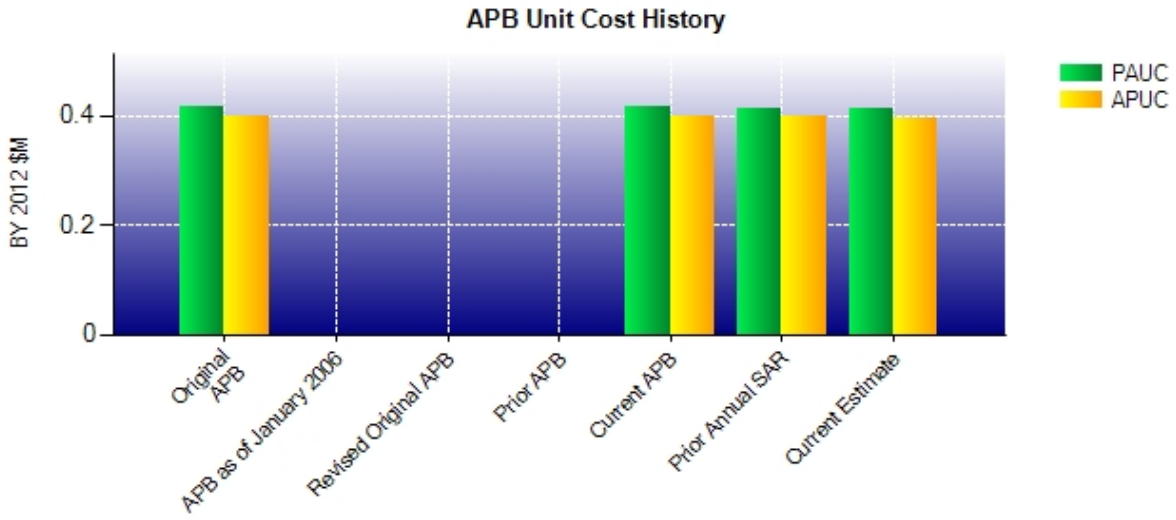
Unit Cost

Unit Cost Report

Item	BY 2012 $M Current UCR Baseline (Oct 2012 APB)	BY 2012 $M Current Estimate (Dec 2014 SAR)	% Change
Program Acquisition Unit Cost			
Cost	22780.2	22571.4	
Quantity	54730	54720	
Item	0.416	0.412	-0.96
Average Procurement Unit Cost			
Cost	21782.0	21635.5	
Quantity	54599	54599	
Unit Cost	0.399	0.396	-0.75

Item	BY 2012 $M Original UCR Baseline (Oct 2012 APB)	BY 2012 $M Current Estimate (Dec 2014 SAR)	% Change
Program Acquisition Unit Cost			
Cost	22780.2	22571.4	
Quantity	54730	54720	
Unit Cost	0.416	0.412	-0.96
Average Procurement Unit Cost			
Cost	21782.0	21635.5	
Quantity	54599	54599	
Unit Cost	0.399	0.396	-0.75

Unit Cost History



Item	Date	BY 2012 $M		TY $M	
		PAUC	APUC	PAUC	APUC
Original APB	Oct 2012	0.416	0.399	0.556	0.538
APB as of January 2006	N/A	N/A	N/A	N/A	N/A
Revised Original APB	N/A	N/A	N/A	N/A	N/A
Prior APB	N/A	N/A	N/A	N/A	N/A
Current APB	Oct 2012	0.416	0.399	0.556	0.538
Prior Annual SAR	Dec 2013	0.414	0.398	0.567	0.550
Current Estimate	Dec 2014	0.412	0.396	0.559	0.542

SAR Unit Cost History

Current SAR Baseline to Current Estimate (TY $M)									
Initial PAUC Development Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.556	0.006	-0.001	-0.002	0.000	-0.001	0.000	0.001	0.003	0.559

Current SAR Baseline to Current Estimate (TY $M)									
Initial APUC Development Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.538	0.006	0.000	-0.002	0.000	0.000	0.000	0.001	0.005	0.542

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	Aug 2012	N/A	Aug 2012
Milestone C	N/A	May 2015	N/A	Jul 2015
IOC	N/A	May 2018	N/A	Aug 2018
Total Cost (TY $M)	N/A	30408.7	N/A	30574.0
Total Quantity	N/A	54730	N/A	54720
PAUC	N/A	0.556	N/A	0.559

Cost Variance

Summary TY $M					
Item	**RDT&E**	**Procurement**	**MILCON**	**Acq O&M**	**Total**
SAR Baseline (Development Estimate)	1009.8	29359.4	--	39.5	30408.7
Previous Changes					
Economic	+7.1	+743.3	--	+0.4	+750.8
Quantity	--	--	--	--	--
Schedule	-12.7	-12.6	--	--	-25.3
Engineering	--	--	--	--	--
Estimating	-19.7	-38.0	--	-39.9	-97.6
Other	--	--	--	--	--
Support	--	-10.7	--	--	-10.7
Subtotal	-25.3	+682.0	--	-39.5	+617.2
Current Changes					
Economic	-5.2	-398.6	--	--	-403.8
Quantity	-7.3	--	--	--	-7.3
Schedule	--	-107.5	--	--	-107.5
Engineering	--	--	--	--	--
Estimating	+14.4	+11.9	--	--	+26.3
Other	--	--	--	--	--
Support	--	+40.4	--	--	+40.4
Subtotal	+1.9	-453.8	--	--	-451.9
Total Changes	-23.4	+228.2	--	-39.5	+165.3
CE - Cost Variance	986.4	29587.6	--	--	30574.0
CE - Cost & Funding	986.4	29587.6	--	--	30574.0

Summary BY 2012 $M					
Item	RDT&E	Procurement	MILCON	Acq O&M	Total
SAR Baseline (Development Estimate)	962.3	21782.0	--	35.9	22780.2
Previous Changes					
Economic	--	--	--	--	--
Quantity	--	--	--	--	--
Schedule	-13.1	-23.9	--	--	-37.0
Engineering	--	--	--	--	--
Estimating	-18.7	-34.3	--	-35.9	-88.9
Other	--	--	--	--	--
Support	--	-8.7	--	--	-8.7
Subtotal	-31.8	-66.9	--	-35.9	-134.6
Current Changes					
Economic	--	--	--	--	--
Quantity	-6.9	--	--	--	-6.9
Schedule	--	-120.9	--	--	-120.9
Engineering	--	--	--	--	--
Estimating	+12.3	+8.6	--	--	+20.9
Other	--	--	--	--	--
Support	--	+32.7	--	--	+32.7
Subtotal	+5.4	-79.6	--	--	-74.2
Total Changes	-26.4	-146.5	--	-35.9	-208.8
CE - Cost Variance	935.9	21635.5	--	--	22571.4
CE - Cost & Funding	935.9	21635.5	--	--	22571.4

Previous Estimate: December 2013

RDT&E	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-5.2
Reduction of RDTE funded test vehicles and armor kits (Army). (Quantity)	-3.2	-3.4
Reduction of RDTE funded test vehicles and armor kits (Navy). (Quantity)	-3.7	-3.9
Adjustment for current and prior escalation. (Estimating)	+1.4	+1.4
Updated Test estimate based on updated test plans and test asset requirements to align with Request For Proposal (RFP) (Army). (Estimating)	+10.6	+13.5
Updated Test estimate based on updated test plans and test asset requirements to align with RFP (Navy). (Estimating)	+2.4	+2.3
Net funding change due to PB 2016 adjustments and actual cost for EMD testing (Army). (Estimating)	-3.5	-4.2
Net funding change due to PB 2016 adjustments and actual cost for EMD testing (Navy). (Estimating)	+1.4	+1.4
RDT&E Subtotal	+5.4	+1.9

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-398.6
Change in phasing of the total vehicle procurement schedule due to budget adjustments and updated inflation guidance (Army). (Schedule)	0.0	+62.0
Change in phasing of the total vehicle procurement schedule due to budget adjustments and updated inflation guidance (Navy). (Schedule)	0.0	-7.9
Additional schedule variance due to updated configuration mix, Protection Level (PL) 1 to PL 2 kit requirements update, and procurement schedules for vehicle kits (Army). (Schedule)	-113.6	-155.6
Additional schedule variance due to updated configuration mix, PL 1 to PL 2 kit requirements update, and procurement schedules for vehicle kits (Navy). (Schedule)	-7.3	-6.0
Adjustment for current and prior escalation. (Estimating)	+1.0	+1.1
Reductions in Government Systems Engineering and Program Management (SEPM) due to down select and program efficiencies (Army). (Estimating)	-6.2	-5.5
Changes in Government SEPM due to down select and program efficiencies (Navy). (Estimating)	-1.2	-1.8
Updated test estimate based on updated test plans for LRIP / FRP first contract period (Army). (Estimating)	+12.0	+14.5
Updated test estimate based on updated test plans for LRIP / FRP first contract period (Navy). (Estimating)	+3.0	+3.6
Adjustment for current and prior escalation. (Support)	+0.1	+0.1
Update in Other Support (for example, Interim Contractor Support (ICS), New Equipment Training, and Tech Manual Development) due to production schedule adjustment including increase in the number of vehicles operating during ICS (Army). (Support)	+32.7	+39.9
Increase in Initial Spares (Army). (Support)	+0.3	+0.4
Increase in Other Support (Navy). (Support)	+0.1	+0.6
Decrease in Initial Spares (Navy). (Support)	-0.5	-0.6
Procurement Subtotal	-79.6	-453.8

Contracts

Contract Identification

Appropriation: RDT&E
Contract Name: JLTV EMD Phase PD B
Contractor: AM General LLC
Contractor Location: 105 N Niles Ave
South Bend, IN 46617-2705
Contract Number: W56HZV-12-C-0258
Contract Type: Firm Fixed Price (FFP)
Award Date: August 22, 2012
Definitization Date: August 22, 2012

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
63.9	N/A	22	64.5	N/A	22	64.5	64.5

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the partial de-scoping of contractor Reliability, Availability, and Maintainability; Shakedown testing; and the addition of Development Test and Operational Test operator / crew training.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FFP) contract.

Notes

Quantity of 22 represents research and development prototypes, not fully developed systems and not intended to be fielded.

This contract is more than 90% complete; therefore, this is the final report for this contract.

Contract Identification

Appropriation: RDT&E

Contract Name: JLTV EMD Phase PD C

Contractor: Lockheed Martin Corporation

Contractor Location: 1701 W Marshall Dr.
Grand Prairie, TX 75051-2704

Contract Number: W56HZV-12-C-0262

Contract Type: Firm Fixed Price (FFP)

Award Date: August 22, 2012

Definitization Date: August 22, 2012

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
65.0	N/A	22	65.5	N/A	22	65.5	65.5

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the partial de-scoping of contractor Reliability, Availability, and Maintainability; Shakedown testing; and the addition of Development Test and Operational Test operator / crew training.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FFP) contract.

Notes

Quantity of 22 represents research and development prototypes, not fully developed systems and not intended to be fielded.

This contract is more than 90% complete; therefore, this is the final report for this contract.

Contract Identification

Appropriation: RDT&E

Contract Name: JLTV EMD Phase PD A

Contractor: Oshkosh Defense LLC

Contractor Location: 2307 Oregon St
Oshkosh, WI 54902-7062

Contract Number: W56HZV-12-C-0264

Contract Type: Firm Fixed Price (FFP)

Award Date: August 22, 2012

Definitization Date: August 22, 2012

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
55.9	N/A	22	56.9	N/A	22	56.9	56.9

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to the partial de-scoping of contractor Reliability, Availability, and Maintainability; Shakedown testing; and the addition of Development Test and Operational Test operator / crew training.

Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FFP) contract.

Notes

Quantity of 22 represents research and development prototypes, not fully developed systems and not intended to be fielded.

This contract is more than 90% complete; therefore, this is the final report for this contract.

Deliveries and Expenditures

Deliveries				
Delivered to Date	**Planned to Date**	**Actual to Date**	**Total Quantity**	**Percent Delivered**
Development	90	90	121	74.38%
Production	0	0	54599	0.00%
Total Program Quantity Delivered	90	90	54720	0.16%

Expended and Appropriated (TY $M)			
Total Acquisition Cost	30574.0	Years Appropriated	8
Expended to Date	628.9	Percent Years Appropriated	22.86%
Percent Expended	2.06%	Appropriated to Date	914.0
Total Funding Years	35	Percent Appropriated	2.99%

The above data is current as of January 31, 2015.

Operating and Support Cost

Cost Estimate Details

Date of Estimate:	December 31, 2014
Source of Estimate:	POE
Quantity to Sustain:	54599
Unit of Measure:	Vehicle
Service Life per Unit:	20.00 Years
Fiscal Years in Service:	FY 2018 - FY 2061

Total JLTV vehicle quantity of 54,720 includes 121 RDT&E funded vehicles and 54,599 Procurement funded vehicles. RDT&E vehicles represent prototypes from the Technology Development and EMD phases and vehicles for Live Fire and Destructive Testing during the Production phase. Prototypes, Live Fire and Destructive Test assets will not be fielded.

Sustainment quantity is the Procurement quantity of 54,599

Procurement Quantity: 49,099: Army / 5,500: USMC

Sustainment Strategy

Reflects peacetime Operational Tempo (OPTEMPO) as identified by sub-configuration by the Army G-3/5/7 Training and in JLTV Operation Mode Summary & Mission Profile for the United States Marine Corps (USMC). Reduced OPTEMPO used for Army Training and Army Prepositioned Stock units and inactive USMC units.

Interim Contractor Support (ICS) occurs the first three years of Army fielding (FY 2018 - FY 2020) and then transitions to organic maintenance support in FY 2021. ICS will occur for the USMC starting with the second year of LRIP (FY 2016) until IOC (FY 2018). USMC Supply Support is required from IOC (FY 2018) until fielding is complete (FY2022).

Army maintenance concept will be two levels of maintenance: Field and Sustainment maintenance. USMC maintenance concept will be three levels of maintenance: Operator/Crew, Field, and Sustainment.

The JLTV will incur a condition-based Overhaul, starting at ten years. Of the operational vehicles that are older than ten years, 2.4-percent per year will undergo the condition-based overhaul.

Antecedent Information

Rough Order Magnitude estimate developed using JLTV cost model adjusted with system technical & cost data for High-Mobility Multipurpose Wheeled Vehicle (HMMWV) (M1151, M1152 & M1165).

HMMWV data normalized for JLTV quantity, operating schedule, OPTEMPO & other Ground Rules and Assumptions.

Antecedent Sources: JLTV Analysis of Alternatives and Army Product Manager Light Tactical Vehicles.

Annual O&S Costs BY2012 $K		
Cost Element	**JLTV Average Annual Cost Per Vehicle**	**HMMWV (Antecedent) Average Annual $ Per Vehicle**
Unit-Level Manpower	8.990	8.700
Unit Operations	5.931	5.800
Maintenance	10.608	7.100
Sustaining Support	1.655	1.200
Continuing System Improvements	1.647	0.800
Indirect Support	0.948	0.000
Other	0.000	0.000
Total	29.779	23.600

Reflects peacetime operations.

Excludes Government Furnished Equipment, Consumable, and Reparable costs because it was decided at the Joint Cost Review Board on May 15, 2012 to exclude GFE procurement & sustainment from program costs in the Joint Cost Position and APB.

Item	Total O&S Cost $M			
	JLTV			HMMWV (Antecedent)
	Current Development APB Objective/Threshold		Current Estimate	
Base Year	31728.7	34901.6	32516.6	25800.9
Then Year	50630.5	N/A	53743.3	N/A

Equation to Translate Annual Cost to Total Cost

Unitized O&S Cost = Total O&S Costs / Total Operational Vehicle Years where Total Operational Vehicle Years = Total Operating Vehicles * Economic Useful Life

Total O&S Costs: $32516.6M (BY$ 2012)

Total Operational Vehicle Years: 1,091,980

Total Operating Vehicles: 54,599

Economic Useful Life: 20 Years

O&S Cost Variance		
Category	**BY 2012 $M**	**Change Explanations**
Prior SAR Total O&S Estimates - Dec 2013 SAR	31747.7	
Programmatic/Planning Factors	1495.6	Updated peacetime training requirements (including increased OPTEMPO) and minor cost impacts as a result of current production and fielding schedules.

Cost Estimating Methodology	0.0	
Cost Data Update	-2405.5	Updated Cost Estimating Relationship (CERs) based on current Operating and Support Management Information System data for consumables, reparables, spare parts costs. Reflects updated vehicle manufacturing costs as input to O&S CERs (for consumables and reparables cost and civilian maintenance).
Labor Rate	1799.8	Updated Army Military-Civilian Cost System Military Pay rates based new Army and OSD Guidance.
Energy Rate	-121.0	Updated cost of fuel.
Technical Input	0.0	
Other	0.0	
Total Changes	768.9	
Current Estimate	32516.6	

Disposal Estimate Details

Date of Estimate:	December 31, 2014
Source of Estimate:	POE
Disposal/Demilitarization Total Cost (BY 2012 $M):	Total costs for disposal of all Vehicle are 157.6

Total Demilitarization Cost includes costs for disposal and transportation associated with disposal of JLTVs.