Selected Acquisition Report (SAR)

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

Joint Light Tactical Vehicle (JLTV)

As of FY 2020 President's Budget

Defense Acquisition Management
Information Retrieval
(DAMIR)

This document contains information that may be exempt from mandatory disclosure under the FOIA.

Table of Contents

Sensitivity Originator

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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)
USD(A&S) - Under Secretary of Defense (Acquisition and Sustainment)

Program Information

Program Name

Joint Light Tactical Vehicle (JLTV)

DoD Component

Army

Joint Participants

United States Marine Corps

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References

SAR Baseline (Production Estimate)

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated April 27, 2016

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated April 27, 2016

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 consists of one base vehicle platform: the Utility (UTL); which has a payload capacity of 5,100-pounds. The four-seat CTV variant consists of two base vehicle platforms: the General Purpose (GP) and the Close Combat Weapons Carrier (CCWC); which has a payload capacity of 3,500-pounds. Each base vehicle platform will be configured as mission package configurations such as the GP, Heavy Guns Carrier (HGC), CCWC, and UTL.

Executive Summary

Program Highlights Since Last Report

The JLTV is a Joint Army and U.S. Marine Corps (USMC) program for which the Army is the lead Service.

The JLTV program capability requirements are stable and funding is adequate to meet cost, schedule, and performance objectives established in the current approved APB. Since the last SAR report, the program did not realize an increase in programmatic or operational risk.

The JLTV program is tracking four primary program risks that were accepted at the August 2015 Milestone C and are actively managed with resourced risk mitigations in place. The four risks involve failure to: demonstrate FRP performance entry criteria; achieve compliance with the Command, Control, Communication, Computers, Intelligence, Surveillance, and Reconnaissance systems; achieve a Type Classification and Materiel Release; and to obtain transportability certification. The impact to any of these risks may delay the FRP Decision and add cost to accomplish technical integration and testing. The program's mitigations during LRIP are focused on early technical reviews, test schedule priority, optimization of test assets, and prioritization in issue resolution process.

Current Developmental and Operational Tests demonstrated compliance to all KPPs and Key System Attributes. Transportability testing was completed in November 2018 with the exception of the B-kit Low-Velocity Airdrop (LVAD) testing which is expected to complete in June 2019 with base vehicle LVAD testing also completing in June 2019 under a Systems Technical Support contract action.

On November 20, 2018, the Army Acquisition Executive (AAE) signed an ADM to increase the LRIP quantity from 4,990 to 11,087 vehicles. On December 10, 2018, the Army System Acquisition Review Council (ASARC) requested Joint Program Office (JPO) JLTV to provide additional detail from Soldier assessments of potential improvements to an Army Requirements Oversight Council (AROC) no later than May 2019.The AAE approved fielding of LRIP production quantities with a Conditional Material Release at the ASARC.

Between February and April 2018, Army and USMC units participated in the JLTV Multi-Service Operational Test and Evaluation (MOT&E) event. This was held at Twentynine Palms, California, with a USMC Amphibious Assault mission conducted at Camp Pendleton, California. A total of 39 JLTVs ran approximately 36,500 miles during this event, which included unique mission cycles, helicopter sling load, amphibious landing, and road marches. Eighteen performance areas of note were identified based on feedback from Soldiers and Marines. Ten were resolved and fixes will be implemented on all fielded trucks. Four are in process and will be retrofitted as designs are finalized and funding is available. Two performance areas and two trades were reviewed at a November 30, 2018 AROC with the PEO and Cross Functional Teams to provide performance improvement recommendations to senior leaders no later than May 2019.

JPO JLTV, in support of the AROC and ASARC direction, will provide test vehicles to Army Futures Command and Army Test and Evaluation Command by April 2019 for evaluation of Situational Awareness optimal solution sets to include larger door windows with and without camera mix. Improvements for noise reduction (both internal and external), to include mufflers, alternator isolation and new design on gears for gear box, and transaxles are desired to be included with Soldier' Situational Awareness feedback assessment. Cost, schedule, performance, and prioritization of unit requirements will be captured for troop seats (including automotive style seat belts with integrated roll-over protection) and JLTV-trailers to be provided to senior leaders.

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

History of Significant Developments Since Program Initiation

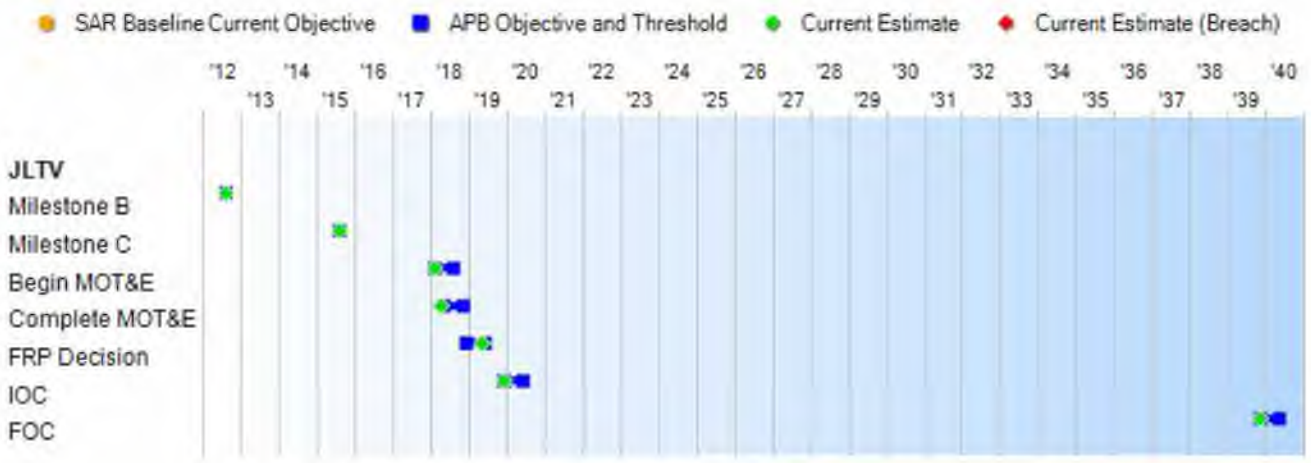
History of Significant Developments Since Program Initiation	
Date	**Significant Development Description**
January 2007	JLTV is one of the first programs to fully implement the OSD September 2007 Competitive Prototyping policy which calls for two or more competing teams producing prototypes through Milestone B with the goal of reducing risk and synchronizing requirements.
December 2007	JLTV achieved Milestone A 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 were closely aligned with the capabilities and performance demonstrated by the TD vendors.
January 2012	A full and open competition solicitation was issued using a best value tradeoff source selection process.
August 2012	The Milestone B decision authorized entry into EMD.
August 2012	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 included 14-months of performance, reliability and ballistic testing in order to validate that JLTV prototype vehicles achieve KPP and Key System Attribute thresholds and to support the source selection process for Production and Deployment. 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. In November 2014, the period of performance for all three contracts ended and all EMD testing successfully completed.
August 2015	On August 25, 2015, the Milestone C DAB was successfully held and the DAE signed the ADM authorizing entrance into the Production and Deployment phase. The contract was awarded on the same day to Oshkosh Defense LLC. On September 8, 2015 a Stop Work Order was issued to Oshkosh after Lockheed Martin filed a protest with the Government Accountability Office (GAO). On December 15, 2015 the GAO dismissed the protest due to Lockheed Martin's notice of intent to file a Post-Award Bid Protest with the U.S. Court of Federal Claims (COFC). The Stop Work Order was officially cancelled and Oshkosh resumed work. On December 17, 2015 Lockheed Martin officially filed a complaint with the COFC. On February 12, 2016 the COFC denied their request for a preliminary injunction and shortly after on February 17, 2016 Lockheed Martin officially withdrew their protest of the JLTV contract award decision.
April 2018	Between February and April 2018, Army and USMC units participated in the JLTV Multi-Service Operational Test and Evaluation event. This was held at Twenty-Nine Palms, California, with a USMC Amphibious Assault mission conducted at Camp Pendleton, California. A total of 39 JLTVs ran approximately 36,500 miles during this event, which included unique mission cycles, helicopter sling load, amphibious landings, and road marches.
November 2018	Approval of increase to LRIP quantity and awarded an additional 6,097 vehicles on November 27, 2018.
November 2018	Army Requirements Oversight Council provided guidance to obtain Soldier assessment on situational awareness and provide additional information on noise, troop seats, and trailers.
December 2018	Army System Acquisition Review Council approved fielding of LRIP production quantities under Conditional Material Release.

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 Production Estimate	Current APB Production Objective/Threshold		Current Estimate	
Milestone B	Aug 2012	Aug 2012	Aug 2012	Aug 2012	
Milestone C	Aug 2015	Aug 2015	Aug 2015	Aug 2015	
Begin MOT&E	Feb 2018	Feb 2018	Aug 2018	Feb 2018	
Complete MOT&E	May 2018	May 2018	Nov 2018	Apr 2018	(Ch-1)
FRP Decision	Dec 2018	Dec 2018	Jun 2019	May 2019	(Ch-2)
IOC	Dec 2019	Dec 2019	Jun 2020	Dec 2019	
FOC	Nov 2039	Nov 2039	May 2040	Nov 2039	

Change Explanations

(Ch-1) The current estimate for Complete MOT&E changed from May 2018 to April 2018 to reflect the actual date of completion, which was one month earlier than previously estimated.
(Ch-2) The current estimate for FRP Decision changed from December 2018 to May 2019 due to direction from the ASARC that delayed the decision so the JPO can provide additional detail from soldier assessments of potential improvements.

Notes

The above IOC is for the Army. The U.S. Marine Corps (USMC) IOC is scheduled for July 2019.

The above FOC is for the Army. The USMC FOC is scheduled for September 2022.

Acronyms and Abbreviations

ASARC - Army System Acquisition Review Council
MOT&E - Multi-Service Operational Test and Evaluation

(U//~~FOUO~~) Performance

(U//~~FOUO~~) Performance Characteristics					
SAR Baseline Production Estimate	**Current APB Production Objective/Threshold**		**Demonstrated Performance**	**Current Estimate**	
(U//~~FOUO~~) 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 improvements, and 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 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 improvements, and 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 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 improvements, and 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.	(b)(3):10 USC § 130		(Ch-1)
(U//~~FOUO~~) Transportability KPP					
The JLTV FoV shall be transportable worldwide by air and sea modes to support strategic deployment and operational	The JLTV FoV shall be transportable worldwide by air and sea modes to support strategic deployment and operational	The JLTV FoV shall be transportable worldwide by air and sea modes to support strategic deployment and operational	(b)(3):10 USC § 130		(Ch-1)

maneuver in accordance with service concepts and programs. Rotary Wing: General Purpose – USMC: 2x CH-53K 40NM high-hot @ GVW, USA: 1xCH-47F 50NM 4k/95F @ GVW, USA: 1xMH-47 30NM IAT 4k/95F @ECC. Heavy Guns Carrier – USMC: 2x CH-53K 40NM high-hot @ GVW, USA: 1xCH-47F 50NM 4k/95F @ GVW, USA: 1xMH-47 30NM IAT 4k/95F @ECC. Close Combat Weapons Carrier – USMC: 2x CH-53K 40NM high-hot @ GVW, USA: 1xCH-47F 50NM 4k/95F @ GVW, USA: 1xMH-47 30NM IAT 4k/95F @ECC. Utility (2 Seat) – USMC: 2x CH-53K 40NM high-hot @ GVW, USA: 1xCH-47F 50NM 4k/95F @ GVW, USA: 1xMH-47 30NM IAT 4k/95F @ECC. Utility (Shelter) – Not a KPP for JLTV Utility vehicles when carrying a shelter. Note: Range, temperature, and pressure data: 1) CH-53K: Navy High Hot: 91.5 deg F/33 deg C, 40NM flight; sea-level take off & 3,000ft landing; 2) CH-47F high hot: 95 F / 35 deg C, 4,000 feet, 50NM; 3) CH-47F SL/SD: Sea Level / Standard Day (70 F), 50NM. Sealift. Transport by sea is an essential part of force deployment and a hallmark aspect of USMC Expeditionary	maneuver in accordance with service concepts and programs. Rotary Wing: General Purpose – USMC: 2x CH-53K 40NM high-hot @ GVW, USA: 1xCH-47F 50NM 4k/95F @ GVW, USA: 1xMH-47 30NM IAT 4k/95F @ECC. Heavy Guns Carrier – USMC: 2x CH-53K 40NM high-hot @ GVW, USA: 1xCH-47F 50NM 4k/95F @ GVW, USA: 1xMH-47 30NM IAT 4k/95F @ECC. Close Combat Weapons Carrier – USMC: 2x CH-53K 40NM high-hot @ GVW, USA: 1xCH-47F 50NM 4k/95F @ GVW, USA: 1xMH-47 30NM IAT 4k/95F @ECC. Utility (2 Seat) – USMC: 2x CH-53K 40NM high-hot @ GVW, USA: 1xCH-47F 50NM 4k/95F @ GVW, USA: 1xMH-47 30NM IAT 4k/95F @ECC. Utility (Shelter) – Not a KPP for JLTV Utility vehicles when carrying a shelter. Note: Range, temperature, and pressure data: 1) CH-53K: Navy High Hot: 91.5 deg F/33 deg C, 40NM flight; sea-level take off & 3,000ft landing; 2) CH-47F high hot: 95 F / 35 deg C, 4,000 feet, 50NM; 3) CH-47F SL/SD: Sea Level / Standard Day (70 F), 50NM. Sealift. Transport by sea is an essential part of force deployment and a hallmark aspect of USMC Expeditionary	maneuver in accordance with service concepts and programs. Rotary Wing: General Purpose – USMC: 2x CH-53K 40NM high-hot @ECC, USA: 1xCH-47F 50NM SL/SD @ ECC. Heavy Guns Carrier – USMC: 2x CH-53K 40NM high-hot @ECC, USA: 1xCH-47F 50NM SL/SD @ ECC. Close Combat Weapons Carrier – USMC: 2x CH-53K 40NM high-hot @ECC, USA: 1xCH-47F 50NM SL/SD @ ECC. Utility (2 Seat) – USMC: 2x CH-53K 40NM high-hot @ECC, USA: 1xCH-47F 50NM SL/SD @ ECC. Utility (Shelter) – Not a KPP for JLTV Utility vehicles when carrying a shelter. Note: Range, temperature, and pressure data: 1) CH-53K: Navy High Hot: 91.5 deg F/33 deg C, 40NM flight; sea-level take off & 3,000ft landing; 2) CH-47F high hot: 95 F / 35 deg C, 4,000 feet, 50NM; 3) CH-47F SL/SD: Sea Level / Standard Day (70 F), 50NM. Sealift. Transport by sea is an essential part of force deployment and a hallmark aspect of USMC Expeditionary capabilities. The USMC and Navy JLTV (CTV variants and the CSV Utility) shall be capable of being	(b)(3) 10 USC § 130		

capabilities. The USMC and Navy JLTV (CTV variants and the CSV Utility) shall be capable of being loaded into all deck spaces of the prepositioning and amphibious ships where current HMMWVs are loaded, including height restricted deck spaces of MPS and amphibious class ships.	capabilities. The USMC and Navy JLTV (CTV variants and the CSV Utility) shall be capable of being loaded into all deck spaces of the prepositioning and amphibious ships where current HMMWVs are loaded, including height restricted deck spaces of MPS and amphibious class ships.	loaded into all deck spaces of the prepositioning and amphibious ships where current HMMWVs are loaded, including height restricted deck spaces of MPS and amphibious class ships.			
(U//~~FOUO~~) Survivability KPP					
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 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 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.	(b)(3) 10 USC § 130		(Ch-1)
~~(U//FOUO)~~ Payload KPP					
Combat Tactical Vehicles (CTVs including GP, HGC, and CCWC) shall have an on vehicle payload of 5,100lbs. CSV Utility: 11,000lbs. Utility 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 5,100lbs. CSV Utility: 11,000lbs. Utility 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 3,500lbs. CSV Utility: 5,100lbs. Utility 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.	(b)(3) 10 USC § 130		(Ch-1)
(U//~~FOUO~~) Sustainment KPP					
JLTV shall have an Ao of 98% and a Am of 85%.	JLTV shall have an Ao of 98% and a Am of 85%.	JLTV shall have an Ao of 95% and a Am of 80%.	(b)(3) 10 USC § 130		(Ch-1)

~~(U//FOUO)~~ Net-Ready KPP			
The JLTV FoV will achieve interoperability through the integration of Joint and Service C4I systems installed or mounted on the vehicle. JLTV NR KPP compliance with CJCSI 6212.01F is fulfilled via the systems described in the Platform Integration Information Table (see Table 5-4) and the Interoperability KSA.	The JLTV FoV will achieve interoperability through the integration of Joint and Service C4I systems installed or mounted on the vehicle. JLTV NR KPP compliance with CJCSI 6212.01F is fulfilled via the systems described in the Platform Integration Information Table (see Table 5-4) and the Interoperability KSA.	(T=O). The JLTV FoV will achieve interoperability through the integration of Joint and Service C4I systems installed or mounted on the vehicle. JLTV NR KPP compliance with CJCSI 6212.01F is fulfilled via the systems described in the Platform Integration Information Table (see Table 5-4) and the Interoperability KSA.	(b)(3) 10 USC § 130

				(b)(3) 10 USC § 130
~~(U//FOUO)~~ 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 demonstrating a capability to negotiate operationally relevant terrain profiles, which include basic organic vehicle instrumentation, controls and crew drills.	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 demonstrating a capability to negotiate operationally relevant terrain profiles, which include basic organic vehicle instrumentation, controls and crew drills.	(T=O). 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 demonstrating a capability to negotiate operationally relevant terrain profiles, which include basic organic vehicle instrumentation, controls and crew drills.	TBD	

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

Requirements Reference

CPD dated November 21, 2014

Change Explanations

(Ch-1) Current Estimate for Mobility, Transportability, Survivability, Payload and Sustainment KPPs changed from the previous SAR to reflect actual test results which are based on final LRIP test reports.

~~(U//FOUO)~~ Notes

Received partial certification for Interoperability requirements on September 10, 2018 from the Joint Interoperability Test Command. The certification represents Operational Test constraints and is aligned with the current JLTV fielding schedule and requirements.

Acronyms and Abbreviations

@ - at
Am - Materiel Availability
Ao - Operational Availability
ATO - Approval to Operate
C - Celsius
CCWC - Close Combat Weapons Carrier
CJCSI - Chairman Joint Chiefs of Staff Instruction
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 - NOT USED?
IP - Internet Protocol
IT - Information Technology
JTRS - Joint Tactical Radio System
k - Thousand
KSA - Key System Attribute
lbs - Pounds
LWMS - Light Weight Multipurpose Shelter
MPF - Maritime Pre-Positioning Force - NOT USED?
MPS - Maritime Pre-Positioning Squadron
nm - Nautical Miles - NM is used in the Performance Characteristics
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

Appn	BA	PE
Navy	04	0605812M

Project	Name	
3209	Joint Light Tactical Vehicle	(Sunk)

Notes: Funding line FY 2013 - FY 2017

Appn	BA	PE
Navy	05	0605813M

Project	Name
3209	Joint Light Tactical Vehicle

Notes: Funding line FY 2018 and beyond

Appn	BA	PE
Army	04	0603804A

Project	Name	
L04	Joint Light Tactical Vehicle (JLTV) - Advanced Development (AD)	(Sunk)

Notes: Funding line used from FY 2008 - FY 2011

Appn	BA	PE
Army	05	0604804A

Project	Name	
L50	Joint Light Tactical Vehicle (JLTV) - System Development and Demonstration (SDD)	(Sunk)

Notes: Funding line used FY 2012

Appn	BA	PE
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	2035	01	0216300A

Line Item	Name
D15603	Joint Light Tactical Vehicle

Notes: Funding starts FY 2015

Acq O&M

Appn		BA	PE
Army	2020	04	0702806A

Subactivity Group	Name	
435	Acquisition and Management Support: Joint Light Tactical Vehicle	(Shared)

Notes: Funding line FY 2019 and beyond

Cost and Funding

Cost Summary

Total Acquisition Cost							
Appropriation	BY 2015 $M			BY 2015 $M	TY $M		
	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate
RDT&E	941.4	941.4	1035.5	892.4	940.0	940.0	883.4
Procurement	18758.1	18758.1	20633.9	19739.2	23604.0	23604.0	24622.9
Flyaway	--	--	--	18659.3	--	--	23290.7
Recurring	--	--	--	17455.3	--	--	21815.6
Non Recurring	--	--	--	1204.0	--	--	1475.1
Support	--	--	--	1079.9	--	--	1332.2
Other Support	--	--	--	992.1	--	--	1226.7
Initial Spares	--	--	--	87.8	--	--	105.5
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	159.6	0.0	0.0	204.7
Total	19699.5	19699.5	N/A	20791.2	24544.0	24544.0	25711.0

Current APB Cost Estimate Reference

JLTV Joint Cost Position dated August 25, 2015

Cost Notes

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

The POE, Component Cost Estimate, and an ICE were completed for the program and reconciled into a Joint Cost Position during the 2018 SAR reporting period. Risks in the estimate include:

- If material costs increase, then manufacturing costs will increase.
- Variability in Add-on-Kit densities. If current model densities are lower than required, then the program could experience cost growth that will impact the program unit cost.
- O&S Costs are based on Multi-Service Operational Test & Evaluation (MOT&E) which if fielded vehicles are not indicative of MOT&E vehicles, then program O&S costs could either increase or decrease.

Total Quantity			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E	118	118	132
Procurement	54599	54599	58190
Total	54717	54717	58322

Quantity Notes

U.S. Marine Corps (USMC) procurement quantity increased from 5,500 to 9,091.

The 2017 SAR Current Estimate for RDT&E quantities was 116. The USMC purchased 18 additional RDT&E vehicles and the Army plans to purchase two less vehicles than originally planned in the out years which changes the Current Estimate to 132.

The Air Force and the Navy are procuring JLTVs independent of the JLTV acquisition program established in the Memorandum of Agreement between the Army and the Marine Corps. The following funding and correlated quantity are not included in the JLTV APB or the cost and funding charts displayed above.

Forecasted Air Force Requirements

	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Proc:TY$M	$ 53.080	$ 46.577	$73.026	$ 61.915	$ 64.158	$ 61.619	$ 164.275
Qty	125	50	140	201	211	168	37

The table above represents Air Force FY 2020 PB request to procure JLTVs.

Forecasted Navy Requirements

	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Proc:TY$M	$ 1.260	$ 3.427	$ 9.613	$ 3.566	$ 4.546	$ 4.323	$ 2.939
Qty	3	8	22	8	10	9	6

The table above represents Navy FY2020 PB request to procure JLTVs.

Cost and Funding

Funding Summary

Appropriation Summary FY 2020 President's Budget / December 2018 SAR (TY$ M)									
Appropriation	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
RDT&E	826.4	0.0	4.8	1.7	1.8	1.8	2.0	44.9	883.4
Procurement	2206.7	1878.7	1554.1	1581.3	1538.6	1520.4	1528.6	12814.5	24622.9
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	11.0	10.7	11.0	11.2	11.4	11.4	138.0	204.7
PB 2020 Total	3033.1	1889.7	1569.6	1594.0	1551.6	1533.6	1542.0	12997.4	25711.0
PB 2019 Total	3044.6	1943.3	1872.0	1732.2	1802.0	1650.5	1630.8	14353.5	28028.9
Delta	-11.5	-53.6	-302.4	-138.2	-250.4	-116.9	-88.8	-1356.1	-2317.9

Funding Notes

The Program Office was approved by the Milestone Decision Authority to increase the LRIP quantity limit and permit taking advantage of contractually beneficial ordering periods to the Government and maintain an orderly increase in the production rate for the system sufficient to support a positive Full-Rate Production decision upon the successful resolution of remaining MOT&E performance areas. This award resulted in ~$53M Joint (Army and USMC) cost avoidance based on the terms of the contract.

FY 2018 Army RDTE funds of $16.9M accounts for a $5.677M rescission due to under execution of FY 2018 funds that were set aside for MOT&E support. Loss of funding reduces the ability to complete engineering and integration optimization, and reduces the ability to increase capability to include emerging technologies.

FY 2018 Army Procurement funds of $810.0M accounts for a $24.390M rescission due to achieving the LRIP quantity limitation on contract. These reductions will limit procurement of vehicles but mitigations will enable Full Rate Production, First Unit Equipped, and Initial Operational Capability to occur on schedule.

Beginning in FY 2019, the Army realigned direct civilian personnel pay costs from RDT&E and Procurement investment accounts to O&M to provide additional transparency and auditability.

The To Complete dollars include program funding from FY 2025 through FY 2039

Quantity Summary										
FY 2020 President's Budget / December 2018 SAR (TY$ M)										
Quantity	Undistributed	Prior	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	To Complete	Total
Development	132	0	0	0	0	0	0	0	0	132
Production	0	5850	5035	3928	3666	3727	3632	3632	28720	58190
PB 2020 Total	132	5850	5035	3928	3666	3727	3632	3632	28720	58322
PB 2019 Total	116	5530	5032	5029	3685	4119	3682	3645	27468	58306
Delta	16	320	3	-1101	-19	-392	-50	-13	1252	16

Cost and Funding

Annual Funding By Appropriation

Annual Funding 2040 | RDT&E | Research, Development, Test, and Evaluation, Army							
		TY $M					
Fiscal Year	Quantity	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	--	--	--	--	--	--	28.3
2016	--	--	--	--	--	--	21.6
2017	--	--	--	--	--	--	11.1
2018	--	--	--	--	--	--	16.9
2019	--	--	--	--	--	--	--
2020	--	--	--	--	--	--	2.7
2021	--	--	--	--	--	--	1.7
2022	--	--	--	--	--	--	1.8
2023	--	--	--	--	--	--	1.8
2024	--	--	--	--	--	--	2.0
2025	--	--	--	--	--	--	1.9
2026	--	--	--	--	--	--	2.3
2027	--	--	--	--	--	--	1.9
2028	--	--	--	--	--	--	3.0
2029	--	--	--	--	--	--	2.0
2030	--	--	--	--	--	--	3.8
2031	--	--	--	--	--	--	5.3
2032	--	--	--	--	--	--	4.3
2033	--	--	--	--	--	--	8.3
2034	--	--	--	--	--	--	0.4
Subtotal	64	--	--	--	--	--	531.6

Annual Funding 2040 | RDT&E | Research, Development, Test, and Evaluation, Army							
Fiscal Year	Quantity	BY 2015 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	114.9
2009	--	--	--	--	--	--	22.1
2010	--	--	--	--	--	--	27.9
2011	--	--	--	--	--	--	34.8
2012	--	--	--	--	--	--	86.7
2013	--	--	--	--	--	--	59.7
2014	--	--	--	--	--	--	80.5
2015	--	--	--	--	--	--	27.5
2016	--	--	--	--	--	--	20.8
2017	--	--	--	--	--	--	10.5
2018	--	--	--	--	--	--	15.7
2019	--	--	--	--	--	--	--
2020	--	--	--	--	--	--	2.4
2021	--	--	--	--	--	--	1.5
2022	--	--	--	--	--	--	1.5
2023	--	--	--	--	--	--	1.5
2024	--	--	--	--	--	--	1.7
2025	--	--	--	--	--	--	1.5
2026	--	--	--	--	--	--	1.8
2027	--	--	--	--	--	--	1.5
2028	--	--	--	--	--	--	2.3
2029	--	--	--	--	--	--	1.5
2030	--	--	--	--	--	--	2.8
2031	--	--	--	--	--	--	3.8
2032	--	--	--	--	--	--	3.0
2033	--	--	--	--	--	--	5.7
2034	--	--	--	--	--	--	0.3
Subtotal	64	--	--	--	--	--	533.9

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	--	--	--	--	--	--	18.3
2012	--	--	--	--	--	--	45.1
2013	--	--	--	--	--	--	35.5
2014	--	--	--	--	--	--	52.9
2015	--	--	--	--	--	--	7.2
2016	--	--	--	--	--	--	24.8
2017	--	--	--	--	--	--	7.5
2018	--	--	--	--	--	--	19.5
2019	--	--	--	--	--	--	--
2020	--	--	--	--	--	--	2.1
2021	--	--	--	--	--	--	--
2022	--	--	--	--	--	--	--
2023	--	--	--	--	--	--	--
2024	--	--	--	--	--	--	--
2025	--	--	--	--	--	--	1.9
2026	--	--	--	--	--	--	2.3
2027	--	--	--	--	--	--	2.0
2028	--	--	--	--	--	--	3.1
2029	--	--	--	--	--	--	2.1
2030	--	--	--	--	--	--	0.3
Subtotal	68	--	--	--	--	--	351.8

Annual Funding 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy							
Fiscal Year	Quantity	BY 2015 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	--	--	--	--	--	--	42.4
2009	--	--	--	--	--	--	44.0
2010	--	--	--	--	--	--	50.9
2011	--	--	--	--	--	--	19.0
2012	--	--	--	--	--	--	46.1
2013	--	--	--	--	--	--	35.9
2014	--	--	--	--	--	--	52.8
2015	--	--	--	--	--	--	7.1
2016	--	--	--	--	--	--	24.0
2017	--	--	--	--	--	--	7.1
2018	--	--	--	--	--	--	18.2
2019	--	--	--	--	--	--	--
2020	--	--	--	--	--	--	1.9
2021	--	--	--	--	--	--	--
2022	--	--	--	--	--	--	--
2023	--	--	--	--	--	--	--
2024	--	--	--	--	--	--	--
2025	--	--	--	--	--	--	1.5
2026	--	--	--	--	--	--	1.8
2027	--	--	--	--	--	--	1.6
2028	--	--	--	--	--	--	2.4
2029	--	--	--	--	--	--	1.6
2030	--	--	--	--	--	--	0.2
Subtotal	68	--	--	--	--	--	358.5

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	397	127.9	--	24.6	152.5	12.1	164.6
2016	592	181.9	--	54.1	236.0	5.0	241.0
2017	1812	518.1	--	67.6	585.7	1.8	587.5
2018	2176	683.0	--	63.5	746.5	63.5	810.0
2019	3393	1125.8	--	56.8	1182.6	96.8	1279.4
2020	2530	875.9	--	53.0	928.9	67.1	996.0
2021	2601	936.5	--	66.9	1003.4	93.6	1097.0
2022	2733	979.0	--	58.3	1037.3	59.6	1096.9
2023	2692	980.5	--	62.4	1042.9	53.9	1096.8
2024	2675	978.9	--	63.8	1042.7	53.9	1096.6
2025	2704	1006.3	--	56.5	1062.8	55.5	1118.3
2026	2710	1029.5	--	54.6	1084.1	56.7	1140.8
2027	2729	1057.3	--	55.7	1113.0	50.9	1163.9
2028	2737	1079.7	--	55.2	1134.9	52.0	1186.9
2029	2740	1101.6	--	56.0	1157.6	53.1	1210.7
2030	2738	1121.5	--	59.2	1180.7	54.2	1234.9
2031	2755	1143.6	--	60.1	1203.7	55.7	1259.4
2032	2830	1172.7	--	53.7	1226.4	58.2	1284.6
2033	2839	1196.5	--	54.5	1251.0	59.5	1310.5
2034	2716	1128.6	--	36.5	1165.1	55.6	1220.7
2035	--	--	--	37.2	37.2	--	37.2
2036	--	--	--	36.9	36.9	--	36.9
Subtotal	49099	18424.8	--	1187.1	19611.9	1058.7	20670.6

Annual Funding 2035 | Procurement | Other Procurement, Army							
Fiscal Year	Quantity	BY 2015 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2015	397	124.1	--	24.0	148.1	11.7	159.8
2016	592	174.2	--	51.8	226.0	4.8	230.8
2017	1812	486.1	--	63.4	549.5	1.7	551.2
2018	2176	628.4	--	58.4	686.8	58.4	745.2
2019	3393	1015.5	--	51.2	1066.7	87.3	1154.0
2020	2530	774.6	--	46.9	821.5	59.3	880.8
2021	2601	811.9	--	58.0	869.9	81.2	951.1
2022	2733	832.1	--	49.5	881.6	50.7	932.3
2023	2692	817.0	--	52.1	869.1	44.9	914.0
2024	2675	799.7	--	52.1	851.8	44.1	895.9
2025	2704	806.0	--	45.2	851.2	44.5	895.7
2026	2710	808.4	--	42.9	851.3	44.5	895.8
2027	2729	813.9	--	42.9	856.8	39.2	896.0
2028	2737	814.9	--	41.6	856.5	39.3	895.8
2029	2740	815.1	--	41.5	856.6	39.3	895.9
2030	2738	813.6	--	42.9	856.5	39.3	895.8
2031	2755	813.3	--	42.8	856.1	39.6	895.7
2032	2830	817.7	--	37.4	855.1	40.6	895.7
2033	2839	817.9	--	37.3	855.2	40.7	895.9
2034	2716	756.4	--	24.5	780.9	37.2	818.1
2035	--	--	--	24.4	24.4	--	24.4
2036	--	--	--	23.8	23.8	--	23.8
Subtotal	49099	14540.8	--	954.6	15495.4	848.3	16343.7

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	6	2.2	--	4.2	6.4	1.0	7.4
2016	128	42.8	--	15.8	58.6	--	58.6
2017	212	71.0	--	33.2	104.2	--	104.2
2018	527	176.9	--	32.8	209.7	23.7	233.4
2019	1642	532.0	--	27.7	559.7	39.6	599.3
2020	1398	489.8	--	23.5	513.3	44.8	558.1
2021	1065	408.9	--	32.3	441.2	43.1	484.3
2022	994	398.8	--	16.3	415.1	26.6	441.7
2023	940	380.9	--	20.7	401.6	22.0	423.6
2024	957	393.2	--	23.2	416.4	15.6	432.0
2025	1012	409.8	--	15.0	424.8	16.1	440.9
2026	210	84.5	--	14.8	99.3	12.7	112.0
2027	--	--	--	8.8	8.8	2.6	11.4
2028	--	--	--	6.4	6.4	2.1	8.5
2029	--	--	--	6.6	6.6	2.1	8.7
2030	--	--	--	6.7	6.7	2.1	8.8
2031	--	--	--	--	--	2.0	2.0
2032	--	--	--	--	--	2.0	2.0
2033	--	--	--	--	--	2.1	2.1
2034	--	--	--	--	--	2.1	2.1
2035	--	--	--	--	--	2.2	2.2
2036	--	--	--	--	--	2.2	2.2
2037	--	--	--	--	--	2.2	2.2
2038	--	--	--	--	--	2.3	2.3
2039	--	--	--	--	--	2.3	2.3
Subtotal	9091	3390.8	--	288.0	3678.8	273.5	3952.3

Annual Funding 1109 | Procurement | Procurement, Marine Corps							
Fiscal Year	Quantity	BY 2015 $M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2015	6	2.1	--	4.1	6.2	1.0	7.2
2016	128	41.0	--	15.2	56.2	--	56.2
2017	212	66.7	--	31.2	97.9	--	97.9
2018	527	162.9	--	30.1	193.0	21.9	214.9
2019	1642	480.2	--	25.0	505.2	35.8	541.0
2020	1398	433.5	--	20.8	454.3	39.6	493.9
2021	1065	354.8	--	28.0	382.8	37.4	420.2
2022	994	339.2	--	13.9	353.1	22.6	375.7
2023	940	317.7	--	17.3	335.0	18.3	353.3
2024	957	321.5	--	18.9	340.4	12.8	353.2
2025	1012	328.5	--	12.0	340.5	12.9	353.4
2026	210	66.4	--	11.6	78.0	10.0	88.0
2027	--	--	--	6.8	6.8	2.0	8.8
2028	--	--	--	4.8	4.8	1.6	6.4
2029	--	--	--	4.8	4.8	1.6	6.4
2030	--	--	--	4.9	4.9	1.5	6.4
2031	--	--	--	--	--	1.4	1.4
2032	--	--	--	--	--	1.4	1.4
2033	--	--	--	--	--	1.4	1.4
2034	--	--	--	--	--	1.4	1.4
2035	--	--	--	--	--	1.4	1.4
2036	--	--	--	--	--	1.4	1.4
2037	--	--	--	--	--	1.4	1.4
2038	--	--	--	--	--	1.4	1.4
2039	--	--	--	--	--	1.4	1.4
Subtotal	9091	2914.5	--	249.4	3163.9	231.6	3395.5

Annual Funding 2020 | Acq O&M | Operation and Maintenance, Army	
Fiscal Year	TY $M Total Program
2019	11.0
2020	10.7
2021	11.0
2022	11.2
2023	11.4
2024	11.4
2025	11.7
2026	11.7
2027	11.9
2028	12.2
2029	12.4
2030	12.7
2031	12.9
2032	11.0
2033	11.2
2034	10.3
2035	10.5
2036	9.5
Subtotal	204.7

Annual Funding 2020 | Acq O&M | Operation and Maintenance, Army	
Fiscal Year	BY 2015 $M Total Program
2019	10.1
2020	9.6
2021	9.7
2022	9.7
2023	9.7
2024	9.5
2025	9.5
2026	9.3
2027	9.3
2028	9.4
2029	9.3
2030	9.4
2031	9.3
2032	7.8
2033	7.8
2034	7.0
2035	7.0
2036	6.2
Subtotal	159.6

Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	8/20/2012	11/20/2018
Approved Quantity	3100	11087
Reference	Milestone B ADM	ADM for LRIP Quantity Increase
Start Year	2015	2015
End Year	2017	2019

The Current Total LRIP Quantity is more than 10% of the total production quantity of 58,190. The LRIP increase from the previously approved LRIP Quantity of 4,990 vehicles to 11,087 vehicles will permit an orderly increase in the production rate for the system which is sufficient to lead to FRP upon the successful resolution of remaining Multi-Service Operational Test & Evaluation performance areas.

(U//~~FOUO~~) Foreign Military Sales

(U//~~FOUO~~)

Country	Date of Sale	Quantity	Total Cost $M	Description
(b)(3):10 USC § 130				

Notes
(b)(3):10 USC § 130

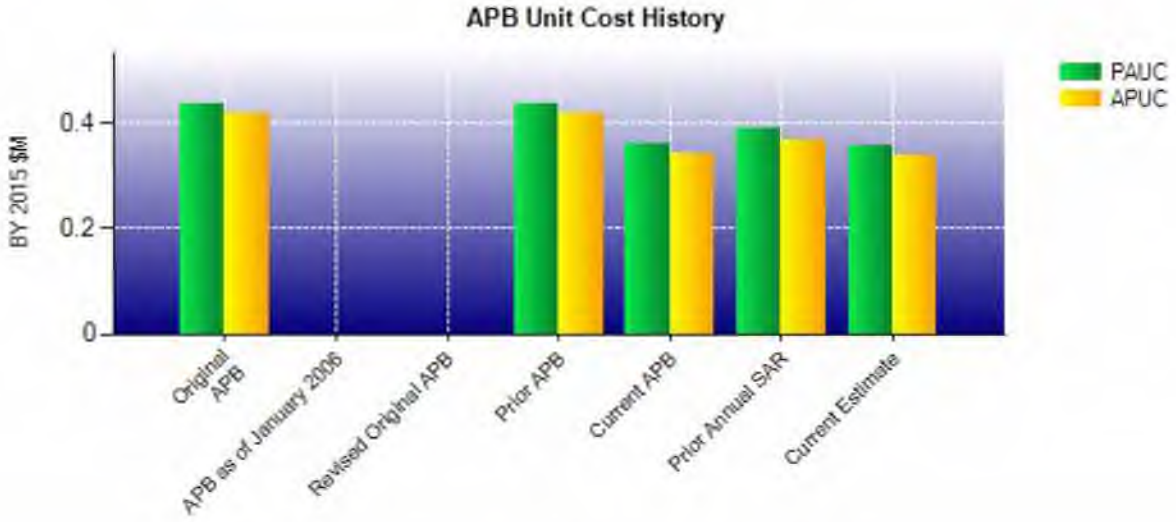
Nuclear Costs

None

Unit Cost

Current UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 2015 $M Current UCR Baseline (Apr 2016 APB)	BY 2015 $M Current Estimate (Dec 2018 SAR)	% Change
Program Acquisition Unit Cost			
Cost	19699.5	20791.2	
Quantity	54717	58322	
Unit Cost	0.360	0.356	-1.11
Average Procurement Unit Cost			
Cost	18758.1	19739.2	
Quantity	54599	58190	
Unit Cost	0.344	0.339	-1.45

Original UCR Baseline and Current Estimate (Base-Year Dollars)			
Item	BY 2015 $M Original UCR Baseline (Oct 2012 APB)	BY 2015 $M Current Estimate (Dec 2018 SAR)	% Change
Program Acquisition Unit Cost			
Cost	23868.6	20791.2	
Quantity	54730	58322	
Unit Cost	0.436	0.356	-18.35
Average Procurement Unit Cost			
Cost	22822.7	19739.2	
Quantity	54599	58190	
Unit Cost	0.418	0.339	-18.90



APB Unit Cost History					
Item	Date	BY 2015 $M		TY $M	
		PAUC	APUC	PAUC	APUC
Original APB	Oct 2012	0.436	0.418	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	Oct 2012	0.436	0.418	0.556	0.538
Current APB	Apr 2016	0.360	0.344	0.449	0.432
Prior Annual SAR	Dec 2017	0.388	0.369	0.481	0.461
Current Estimate	Dec 2018	0.356	0.339	0.441	0.423

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY $M)									
Initial PAUC Development Estimate	Changes								PAUC Production Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.556	0.004	0.107	-0.027	0.000	-0.188	0.000	-0.003	-0.107	0.449

Current SAR Baseline to Current Estimate (TY $M)									
PAUC Production Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.449	0.000	-0.006	0.038	0.000	-0.042	0.000	0.002	-0.008	0.441

Initial SAR Baseline to Current SAR Baseline (TY $M)									
Initial APUC Development Estimate	Changes								APUC Production Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.538	0.004	0.000	-0.027	0.000	-0.080	0.000	-0.003	-0.106	0.432

Current SAR Baseline to Current Estimate (TY $M)									
APUC Production Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
0.432	-0.001	-0.003	0.037	0.000	-0.044	0.000	0.002	-0.009	0.423

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	Aug 2012	Aug 2012
Milestone C	N/A	May 2015	Aug 2015	Aug 2015
IOC	N/A	May 2018	Dec 2019	Dec 2019
Total Cost (TY $M)	N/A	30408.7	24544.0	25711.0
Total Quantity	N/A	54730	54717	58322
PAUC	N/A	0.556	0.449	0.441

Cost Variance

Summary TY $M					
Item	RDT&E	Procurement	MILCON	Acq O&M	Total
SAR Baseline (Production Estimate)	940.0	23604.0	--	--	24544.0
Previous Changes					
Economic	-1.3	-286.6	--	--	-287.9
Quantity	+0.7	+1278.2	--	--	+1278.9
Schedule	+29.8	+2334.6	--	--	+2364.4
Engineering	--	--	--	--	--
Estimating	-41.1	-281.9	--	+291.5	-31.5
Other	--	--	--	--	--
Support	--	+161.0	--	--	+161.0
Subtotal	-11.9	+3205.3	--	+291.5	+3484.9
Current Changes					
Economic	+1.4	+257.5	--	+1.8	+260.7
Quantity	+6.4	--	--	--	+6.4
Schedule	--	-159.8	--	--	-159.8
Engineering	--	--	--	--	--
Estimating	-52.5	-2255.4	--	-88.6	-2396.5
Other	--	--	--	--	--
Support	--	-28.7	--	--	-28.7
Subtotal	-44.7	-2186.4	--	-86.8	-2317.9
Total Changes	-56.6	+1018.9	--	+204.7	+1167.0
CE - Cost Variance	883.4	24622.9	--	204.7	25711.0
CE - Cost & Funding	883.4	24622.9	--	204.7	25711.0

Summary BY 2015 $M					
Item	RDT&E	Procurement	MILCON	Acq O&M	Total
SAR Baseline (Production Estimate)	941.4	18758.1	--	--	19699.5
Previous Changes					
Economic	--	--	--	--	--
Quantity	+0.7	+1073.1	--	--	+1073.8
Schedule	+28.0	+1733.0	--	--	+1761.0
Engineering	--	--	--	--	--
Estimating	-40.6	-229.7	--	+221.4	-48.9
Other	--	--	--	--	--
Support	--	+136.5	--	--	+136.5
Subtotal	-11.9	+2712.9	--	+221.4	+2922.4
Current Changes					
Economic	--	--	--	--	--
Quantity	+6.0	--	--	--	+6.0
Schedule	--	--	--	--	--
Engineering	--	--	--	--	--
Estimating	-43.1	-1664.6	--	-61.8	-1769.5
Other	--	--	--	--	--
Support	--	-67.2	--	--	-67.2
Subtotal	-37.1	-1731.8	--	-61.8	-1830.7
Total Changes	-49.0	+981.1	--	+159.6	+1091.7
CE - Cost Variance	892.4	19739.2	--	159.6	20791.2
CE - Cost & Funding	892.4	19739.2	--	159.6	20791.2

Previous Estimate: December 2017

RDT&E	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+1.4
Adjustment for current and prior escalation. (Estimating)	-0.8	-0.8
Quantity variance due to reduction of two vehicles and associated kits for testing (Army). (Quantity)	-0.7	-0.8
Quantity variance due to increase of 18 vehicles and associated kits for testing and Government Systems Integration Lab (Navy). (Quantity)	+6.7	+7.2
Revised estimate to reflect updated Test Plan (Army). (Estimating)	-11.6	-13.2
Revised estimate to reflect updated Test Plan (Navy). (Estimating)	-6.6	-6.9
Revised estimate in Evaluation & Assessment of current & future engineering efforts based on historical data (Army). (Estimating)	-29.7	-39.3
Revised estimate in Evaluation & Assessment of current & future engineering efforts based on modified cost share ratio with the U.S. Marine Corps (USMC) for follow-on contract (Navy). (Estimating)	+8.0	+10.3
Revised estimate in Evaluation & Assessment of current & future engineering efforts based on historical data (Navy). (Estimating)	-2.4	-2.6
RDT&E Subtotal	-37.1	-44.7

Procurement	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+257.5
Adjustment for current and prior escalation. (Estimating)	-28.0	-30.3
Acceleration of procurement buy profile from ending in FY 2036 to ending in FY 2034 (Army). (Schedule)	0.0	-188.1
Stretch-out of procurement buy profile from ending in FY 2025 to ending in FY 2026 (Navy). (Schedule)	0.0	+28.3
Revised estimate for vehicle and kit costs based on unit cost data from current contract (Army). (Estimating)	-1529.1	-2053.3
Revised estimate due to increases in kit densities (Navy). (Estimating)	+45.2	+46.9
Revised estimate for test due to updated Test plan (Army). (Estimating)	-81.2	-106.9
Revised estimate for test due to updated Test plan (Navy). (Estimating)	+37.0	+44.3
Revised estimate for contractor support and system technical support due to modified cost share ratio with USMC for follow-on contract (Army). (Estimating)	-129.4	-182.4
Revised estimate for contractor support and system technical support due to modified cost share ratio with USMC for follow-on contract (Navy). (Estimating)	+20.9	+26.3
Adjustment for current and prior escalation. (Support)	-3.1	-3.7
Increase in Other Support due to updates for transportation, new equipment training, total package fielding and support equipment (Army). (Support)	+40.3	+90.6
Increase in Other Support due to updates for transportation, new equipment training, total package fielding and support equipment (Navy). (Support)	+25.4	+38.2
Decrease in Initial Spares due to updated estimating methodology (Army). (Support)	-108.8	-129.7
Decrease in Initial Spares due to updated estimating methodology (Navy). (Support)	-21.0	-24.1
Procurement Subtotal	-1731.8	-2186.4

Acq O&M	$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+1.8
Adjustment for current and prior escalation. (Estimating)	-0.1	-0.1
Revised estimate of direct civilian pay costs (Army). (Estimating)	-61.7	-88.5
Acq O&M Subtotal	-61.8	-86.8

Contracts

Contract Identification

Appropriation: Procurement
Contract Name: LRIP & FRP contract
Contractor: Oshkosh Defense LLC
Contractor Location: 2307 Oregon St
Oshkosh, WI 54902
Contract Number: W56HZV-15-C-0095
Contract Type: Firm Fixed Price (FFP), Cost Plus Fixed Fee (CPFF)
Award Date: August 25, 2015
Definitization Date: December 15, 2015

Contract Price							
Initial Contract Price ($M)			Current Contract Price ($M)			Estimated Price At Completion ($M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
114.7	N/A	201	3483.4	N/A	11121	3483.4	3483.4

Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to exercising Option Periods 1 through 3 which includes buying 10,920 additional vehicles plus associated kits, trailers, test support, System Engineering and Program Management, System Technical Support, and the JLTV Technical Data Package.

The Current Contract Price Target also includes Air Force Procurement funds for the purchase of 130 vehicles, Navy Procurement funds for the purchase of three vehicles, FMS funds for a United Kingdom (UK) System Technical Support work directive and FMS funds for the purchase of two UK vehicles along with associated kits in accordance with FMS case UK-B-WTH.

Cost and Schedule Variance Explanations

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

General Contract Variance Explanation

An EVM waiver was granted by the Army Acquisition Executive on July 1, 2015 due to the Cost Plus Fixed Fee Contract Line Items containing Level of Effort (LOE) type work. There is a possibility that an System Technical Support work directive could exceed the $20M threshold, represent work of a discrete, non-LOE nature, and reflect a period of performance long enough to warrant application of EVM. Should such a case arise, JLTV will invoke EVM requirements on any individual or combination of related work directives that reflect such characteristic.

Notes

This contract is comprised of a basic performance period plus eight option periods.

Current Contract	Qty
Army	8440
USMC	2546
Air Force	130
Navy	3
UK	2
Grand Total	**11121**

Total quantity includes RDT&E and Procurement funded vehicles. Army quantity includes 60 Army Reserve vehicles.

Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	118	118	132	89.39%
Production	3337	3330	58190	5.72%
Total Program Quantity Delivered	3455	3448	58322	5.91%

Expended and Appropriated (TY $M)

Total Acquisition Cost	25711.0	Years Appropriated	12
Expended to Date	1906.8	Percent Years Appropriated	37.50%
Percent Expended	7.42%	Appropriated to Date	4922.8
Total Funding Years	32	Percent Appropriated	19.15%

The above data is current as of March 11, 2019.

Notes

The Development Quantity above includes 90 RDT&E-funded, prototype vehicles purchased during the Technology Development and EMD.

Operating and Support Cost

Cost Estimate Details

Date of Estimate:	December 31, 2018
Source of Estimate:	POE
Quantity to Sustain:	58190
Unit of Measure:	Vehicle
Service Life per Unit:	20.00 Years
Fiscal Years in Service:	FY 2019 - FY 2058

The total JLTV vehicle quantity of 58,322 includes 132 RDT&E-funded vehicles and 58,190 Procurement-funded vehicles. RDT&E vehicles represent prototypes from Technology Development and EMD and vehicles for Live Fire and Destructive Testing during Production. Prototypes, Live Fire Test, and Destructive Test assets will not be fielded.

Procurement Quantity: 49,099 (Army) / 9,091 (U.S. Marine Corps (USMC))

Sustainment Strategy

The Sustainment Strategy reflects peacetime Operational Tempo (OPTEMPO) as identified by sub-configuration by the Army and in JLTV Operation Mode Summary & Mission Profile for the USMC. Reduced OPTEMPO is used for Army training, Army Prepositioned Stocks and inactive USMC units.

Interim Contractor Support begins in FY 2019 for Army and USMC fielding and will not exceed three years; sustainment then transitions to organic maintenance support. USMC Supply Support is required from IOC (FY 2020) until fielding is complete (FY 2023).

The Army maintenance concept is two levels of maintenance: Field and Sustainment. The USMC maintenance concept is 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 condition-based overhaul.

Antecedent Information

The Antecedent System is the High Mobility Multipurpose Wheeled Vehicle (HMMWV). Total and annual per vehicle O&S costs for HMMWV were provided by Army Product Manager Light Tactical Vehicles (PM LTV). This estimate is based on an operating schedule from FY 2015 to FY 2045 and includes actual HMMWV costs as available.

The HMMWV costs provided by PM LTV are for Army only.

Annual O&S Costs BY2015 $K		
Cost Element	**JLTV Average Annual Cost Per Vehicle**	**HMMWV (Antecedent) Average Annual $ Per Vehicle**
Unit-Level Manpower	6.332	8.000
Unit Operations	2.145	1.700
Maintenance	8.869	4.500
Sustaining Support	1.670	5.500
Continuing System Improvements	1.375	0.600
Indirect Support	0.990	3.000
Other	0.000	0.000
Total	21.381	23.300

The JLTV O&S costs reflect peacetime operations.

Item	Total O&S Cost $M			
	JLTV			HMMWV (Antecedent)
	Current Production APB Objective/Threshold		Current Estimate	
Base Year	27224.1	29946.5	24883.0	57839.0
Then Year	40346.6	N/A	37167.9	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 x Economic Useful Life

Total O&S Costs: $24,883.0M (BY$ 2015)

Total Operational Vehicle Years: 1,163,800

Total Operating Vehicles: 58,190

Economic Useful Life: 20 Years

O&S Cost Variance		
Category	**BY 2015 $M**	**Change Explanations**
Prior SAR Total O&S Estimates - Dec 2017 SAR	26777.7	
Programmatic/Planning Factors	0.0	
Cost Estimating Methodology	-1200.9	Updated methodology for field maintenance civilian labor, system specific base operations, consumables & reparables.
Cost Data Update	-723.8	Reflects updated vehicle manufacturing costs as input to

		modifications & overhaul. Updated cost data for transportation & training costs.
Labor Rate	714.4	Updated AMCOS Military Pay rates.
Energy Rate	-684.4	Updated cost of fuel.
Technical Input	0.0	
Other	0.0	
Total Changes	-1894.7	
Current Estimate	24883.0	

Disposal Estimate Details

Date of Estimate:	December 31, 2018
Source of Estimate:	POE
Disposal/Demilitarization Total Cost (BY 2015 $M):	185.2

Total Demilitarization Cost includes costs for disposal and transportation associated with disposal of JLTVs. The reduction in disposal costs is due to cost estimating updates.