# **UNCLASSIFIED**



# Selected Acquisition Report (SAR)

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



# Joint Light Tactical Vehicle (JLTV)

As of FY 2019 President's Budget

Defense Acquisition Management Information Retrieval (DAMIR)

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# **Sensitivity Originator**

No originator info Available at this time.

## 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**

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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 has a payload capacity of 5,100-pounds. The four-seat CTV variant provides a payload capacity of 3,500-pounds. Variants may further be 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 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. USMC quantities increased from 7,241 to 9,091 during this SAR reporting period. There are no increased risks to the JLTV program since the last SAR.

A procurement cost deviation resulted from the combined impact of procuring additional vehicles for the USMC and updating the Army model configuration and contractor furnished kit densities. There is no impact to the FRP decision date or fielding schedule.

The JLTV program is tracking four primary program risks that were accepted at Milestone C, in August 2015, 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, 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 and optimization of test assets and prioritization in issue resolution process.

As of January 31, 2018, 1,089 of 1,123 JLTVs were delivered and accepted along with 25 of 25 trailers. Acceptance by the Government is delayed due to a shortage of installation kits. Although vehicle acceptance is not meeting contractual schedule, vehicle production rate is being maintained. The production ramp up is healthy and not affected by the acceptance delay. Current testing demonstrated KPP and Key System Attribute compliance. All critical testing to support entrance into Multi-Service Operational Test and Evaluation (MOT&E) is complete. The program remains on schedule to meet the MOT&E and FRP major milestone events.

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 testingsuccessfully 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.

#### **Threshold Breaches**

Schedule		
Performanc	e	
Cost	RDT&E	
	Procurement	V
	MILCON	
	Acq O&M	
O&S Cost	177	
Unit Cost	PAUC	
	APUC	

### **Explanation of Breach**

The Procurement Cost breach is due to the combined impact of procuring additional U.S. Marine Corps vehicles and updating the Army model configuration and contractor furnished kit densities.

A Program Deviation Report is in process.

### **Nunn-McCurdy Breaches**

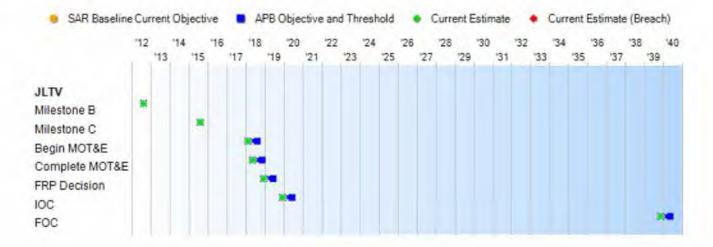
#### **Current UCR Baseline**

PAUC None APUC None

### Original UCR Baseline

PAUC None APUC None

### Schedule



Schedule Events								
Events	Events SAR Baseline Production Estimate		Current APB Production Objective/Threshold					
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	May 2018				
FRP Decision	Dec 2018	Dec 2018	Jun 2019	Dec 2018				
IOC	Dec 2019	Dec 2019	Jun 2020	Dec 2019				
FOC	Nov 2039	Nov 2039	May 2040	Nov 2039				

## **Change Explanations**

None

#### Notes

The above IOC is for the Army. The U.S. Marine Corps (USMC) IOC is aligned with the Army IOC.

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

### **Acronyms and Abbreviations**

MOT&E - Multi-Service Operational Test and Evaluation

# **Performance**

	Perfor	mance Characteristics		
SAR Baseline Production Estimate	Currer Produ Objective/	ection	Demonstrated Performance	Current Estimate
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.	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 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.	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 or integrated DoDAF content, and must satisfy the technical requirements for transition to Net-Centri 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, 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 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%.	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 demonstrating a capability to negotiate operationally relevant terrain profiles, which	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	(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	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 demonstrating a capability to negotiate operationally relevant terrain profiles, which

include basic organic vehicle instrumentation. controls and crew drills. controls and crew drills.

include basic organic vehicle instrumentation.

terrain profiles, which include basic organic vehicle instrumentation, controls and crew drills.

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 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 TBD 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.

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 support strategic deployment and accordance with service concepts and General Purpose -

The JLTV FoV shall be transportable worldwide transportable by air and sea modes to by air and sea modes to worldwide by air and support strategic deployment and operational maneuver in operational maneuver in and operational accordance with service concepts and programs. Rotary Wing: programs. Rotary Wing: General Purpose -

The JLTV FoV shall be TBD sea modes to support strategic deployment maneuver in accordance with service concepts and programs. Rotary

The JLTV FoV shall be transportable worldwide by air and sea modes to support strategic deployment and operational 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 highhot @ 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 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

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 highhot @ GVW, USA: 1xCH-47F 50NM 4k/95F 47F 50NM SL/SD @ @ GVW, USA: 1xMH-47 ECC. Close Combat 30NM IAT 4k/95F @ECC. Close Combat Weapons Carrier -USMC: 2x CH-53K 40NM high-hot @ GVW, SL/SD @ ECC. Utility 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 essential part of force -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 loaded into all deck spaces of the prepositioning and

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-Weapons Carrier -USMC: 2x CH-53K 40NM high-hot @ECC, USA: 1xCH-47F 50NM (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 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 loaded into all deck spaces of the prepositioning and amphibious ships where current HMMWVs are loaded, including height

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 highhot @ 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,

restricted deck spaces

including height

amphibious ships

where current HMMWVs are loaded, including height restricted deck spaces of MPS and amphibious class ships.	where current HMMWVs are loaded, including height restricted deck spaces of MPS and amphibious class ships.	of MPS and amphibious class ships.		restricted deck spaces of the MPF MPS and amphibious class ships.
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.	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.

amphibious ships

### Requirements Reference

CPD dated November 21, 2014

## **Change Explanations**

None

#### Notes

Joint Program Office JLTV will report Demonstrated Performance after completion of LRIP testing and receipt of the test report.

### **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

JROC - Joint Requirements Oversight Council

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**

Appn		BA	PE		
Navy	1319	04	0603635M		
)	Proj	- 11	Name		
	3209		Marine Corps Grnd Cmbt/Supt Sys	(Sunk)	
	No	otes:	Funding line used through FY 2012		
Navy	1319	04	0605812M		
	Proj	ect	Name		
	3209 <b>N</b> o	otes:	Joint Light Tactical Vehicle Funding line FY 2013 - FY 2017	(Sunk)	
Navy	1319	05	0605813M		
	Project		Name		
3209	otes:	Joint Light Tactical Vehicle Funding line FY 2018 and beyond			
Army	2040	04	0603804A		
	Proj	ect	Name		
	L04		Joint Light Tactical Vehicle (JLTV) - Advanced Development (AD)	(Sunk)	
			Funding line used from FY 2008 - FY	2011	
Army	2040	05	0604804A		
	Proj	ect	Name		
	L50	ntes:	Joint Light Tactical Vehicle (JLTV) - System Development and Demonstration (SDD) Funding line used FY 2012	(Sunk)	
Army	2040	05	0605812A		
Allily	Proj	_	Name		
	VU9	COL	Joint Light Tactical Vehicle - Engineering and Manufacturing Development (EMD)		

# Procurement

App	n	BA	PE	
Navy	1109	05	0206211M	
	Line Item		Name	
	5095		Joint Light Tactical Ve	hicle
	No	tes:	Funding starts FY 201	5

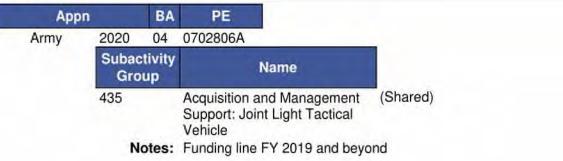
Army 2035 01 0216300A

Line Item Name

D15603 Joint Light Tactical Vehicle

Notes: Funding starts FY 2015





# **Cost and Funding**

### **Cost Summary**

		T	otal Acquis	ition Cost				
	B	/ 2015 \$M		BY 2015 \$M	TY \$M			
Appropriation	SAR Baseline Production Estimate	Current Produc Objective/T	tion	Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate	
RDT&E	941.4	941.4	1035.5	929.5	940.0	940.0	928.1	
Procurement	18758.1	18758.1	20633.9	21471.0	23604.0	23604.0	26809.3	
Flyaway				20323.9	-		25460.1	
Recurring		**		18954.9			23766.1	
Non Recurring		++		1369.0	44		1694.0	
Support				1147.1			1349.2	
Other Support				928.6			1090.9	
Initial Spares			144	218.5	ند		258.3	
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Acq O&M	0.0	0.0		221.4	0.0	0.0	291.5	
Total	19699.5	19699.5	N/A	22621.9	24544.0	24544.0	28028.9	

APB Breach

#### **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.

In accordance with Section 842 of the National Defense Authorization Act for FY 2017, which amended title 10 U.S.C. § 2334, the Director of Cost Assessment and Program Evaluation, and the Secretary of the military department concerned or the head of the Defense Agency concerned, must issue guidance requiring a discussion of risk, the potential impacts of risk on program costs, and approaches to mitigate risk in cost estimates for MDAPs and major subprograms. The information required by the guidance is to be reported in each SAR. This guidance is not yet available; therefore, the information on cost risk is not contained in this SAR.

The total Procurement cost breach is due to the combined impact of procuring additional U.S. Marine Corps vehicles and updating the Army model configuration and contractor furnished kit densities.

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.

Total Quantity							
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate				
RDT&E	118	118	116				
Procurement	54599	54599	58190				
Total	54717	54717	58306				

#### **Quantity Notes**

The estimate is updated to reflect the latest test plan. EMD test results determined that fewer Live Fire Tests are required, therefore the RDT&E quantity was reduced.

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

The 2016 SAR Current Estimate for RDT&E quantities was 114. The USMC purchased two additional RDT&E vehicles which changes the Current Estimate to 116.

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

FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023

Proc:TY\$M \$ 1.800 \$ 51.750 \$ 30.145 \$ 51.234 \$ 51.772 \$ 54.604 \$ 52.990

Qty 4 138 50 115 116 124 144

OCO:TY\$M \$ 0.750 \$ 24.750 Qty 2 66

The table above represents an Air Force formal budget request to procure JLTVs starting in FY 2017.

### Forecasted Navy Requirements

#### FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023

Proc:TY\$M \$ 1.260 \$ 3.427 \$ 5.681 \$ 4.457 \$ 5.455 \$ 4.803 Qty 3 8 13 10 12 10

The table above represents a Navy formal budget request to procure JLTVs starting in FY 2018.

# **Cost and Funding**

# **Funding Summary**

			Арр	ropriation S	ummary				
	F	Y 2019 Pre	sident's B	udget / De	cember 20	17 SAR (T	/\$ M)		
Appropriation	Prior	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
RDT&E	790.2	44.2	5.0	4.8	1.7	2.8	4.8	74.6	928.1
Procurement	1172.2	1038.0	1926.4	1855.0	1718.1	1786.5	1632.8	15680.3	26809.3
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	11.9	12.2	12.4	12.7	12.9	229.4	291.5
PB 2019 Total	1962.4	1082.2	1943.3	1872.0	1732.2	1802.0	1650.5	15984.3	28028.9
PB 2018 Total	1964.7	1082.2	1749.7	1843.9	1607.1	1703.4	1235.1	14090.0	25276.1
Delta	-2.3	0.0	193.6	28.1	125.1	98.6	415.4	1894.3	2752.8

### **Funding Notes**

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 2024 through FY 2038.

Due to system limitations, USMC funding in FY 2021 through FY 2023 does not appear in this report. The RDT&E funding is:

RDT&E **FY 2021 FY 2022 FY 2023** TY\$M \$ 0.026 \$ 0.024 \$ 0.022

			Qu	antity Su	mmary					
	FY 20	19 Presid	dent's Bu	dget / De	ecember	2017 SA	R (TY\$ M	)		
Quantity	Undistributed	Prior	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Development	116	0	0	0	0	0	0	0	0	116
Production	0	2915	2615	5032	5029	3685	4119	3682	31113	58190
PB 2019 Total	116	2915	2615	5032	5029	3685	4119	3682	31113	58306
PB 2018 Total	114	3047	2637	4737	5190	3838	4084	2912	29895	56454
Delta	2	-132	-22	295	-161	-153	35	770	1218	1852

# **Cost and Funding**

# **Annual Funding By Appropriation**

	00	040   RDT&E   Re	Annual Fu	inding	valuation Arm	mié	
	20	J40   RDT&E   Re	search, Developr	TY \$M	valuation, Arr	ny	
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	**	-					105
2009							20
2010							26
2011				144	44		33
2012							84.
2013				2-			59.
2014		**					81.
2015							28.
2016						24	21.
2017		-	122				11.
2018							23.
2019							2.
2020				144			2.
2021				144			1.
2022							2
2023		22)		144	144		4
2024	44			1.00	1.48	**	4.
2025						14	4.
2026		**	340	(**			7.
2027	1,44	-	144				8.
2028			122				5.
2029			186		1,000		5.
2030	1-2						5.
2031							8.
2032		÷÷.		-	-		9.
2033		**					5.
2034	129	÷.					5.
2035	**			**	77	-	5.
2036		0.00		0.44			0.
Subtotal	66	-	14.	144	14		584.

	20	040   RDT&E   Re	Annual Fu search, Develope		valuation Arr	nv	
	2	940   NDTAL   NE	search, Developi	BY 2015 \$1		ily	
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008		**				++	114.
2009				**			22.
2010				1			27.
2011							34.
2012		**1					86.
2013			-				59.
2014							80.
2015			<del></del>	4			27.
2016		24)	-	3-4	44		20.
2017			122		144		10.
2018	42	441		,00	20		22.
2019		44	44		1.2	44	2.
2020				-24		99	2.
2021						124	1.
2022		-		(			2.
2023						22	4.
2024							3.
2025						24	3.
2026							6.
2027		-					6.
2028							3.
2029							3.
2030	120				(-10)		3.
2031			199	199			6.
2032				G <del>eo</del>			6.
2033			-		-		3.
2034	-		(44)	14-			3.
2035							3.
2036			-	-		-	0.
Subtotal	66						576.

		TY \$M								
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program			
2008	177	++			in the second	re.	38.7			
2009		-		**	**		40.7			
2010	**		199		- 55		47.8			
2011	**				( <del>40</del> )		18.3			
2012					-		45.1			
2013						**	35.5			
2014							52.9			
2015		: <del></del> :		4-			7.2			
2016		220	144	7-4			24.8			
2017			122			**	7.7			
2018	144	**		744			20.7			
2019		**	(44)			44	2.3			
2020	99					55	2.1			
Subtotal	50		**			FF.	343.8			

				BY 2015 \$	Ņ.		
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2008	177	++			in.	**	42.4
2009				**			44.0
2010			199		95		50.9
2011	**				(44)		19.0
2012							46.2
2013				**		**	36.0
2014							52.8
2015		1.00					7.1
2016		220	122	7-4			24.1
2017			12			**	7.3
2018	142	**		122	- 22		19.4
2019	-	**				44	2.1
2020	45		7-			- 55	1.9
Subtotal	50						353.2

	Annual Funding 2035   Procurement   Other Procurement, Army						
	1	2000   11		TY \$M			
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2015	397	127.9	4	24.6	152.5	12.1	164.
2016	581	188.6		55.4	244.0	5.9	249.
2017	1591	465.5		63.2	528.7	58.8	587.
2018	2088	668.0		62.3	730.3	74.1	804.
2019	3390	1082.1		68.6	1150.7	168.7	1319.
2020	3035	957.3		48.3	1005.6	141.6	1147.
2021	2501	997.8		65.1	1062.9	179.8	1242.
2022	3121	1231.6		73.8	1305.4	41.4	1346.8
2023	2751	1111.5		64.9	1176.4	34.8	1211.2
2024	2719	1095.6		63.1	1158.7	31.1	1189.8
2025	2526	1042.2		61.4	1103.6	33.9	1137.
2026	2350	1018.4		83.9	1102.3	28.2	1130.5
2027	2230	967.3		89.3	1056.6	27.4	1084.0
2028	2220	982.7		80.0	1062.7	28.4	1091.
2029	2219	1002.3		82.2	1084.5	26.3	1110.8
2030	2226	1025.6		79.2	1104.8	27.0	1131.8
2031	2178	1036.4		91.5	1127.9	27.1	1155.0
2032	2215	1062.3		87.7	1150.0	28.0	1178.0
2033	2259	1104.7		67.3	1172.0	29.1	1201.
2034	2278	1136.7		59.2	1195.9	29.9	1225.
2035	2268	1175.9		43.0	1218.9	30.4	1249.
2036	1956	995.7		34.1	1029.8	27.0	1056.8
2037		-		15.9	15.9	0.1	16.0
2038				12.8	12.8		12.8
Subtotal	49099	20476.1	(44)	1476.8	21952.9	1091.1	23044.0

		2035 I Pi	Annual Fu	inding er Procurement, A	Army		
		2000   11	CC TOTAL TOTAL	BY 2015 \$M			
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2015	397	124.4		23.9	148.3	11.8	160
2016	581	181.2		53.2	234.4	5.7	240.
2017	1591	439.7	7.5	59.8	499.5	55.5	555.
2018	2088	620.1	-	57.8	677.9	68.8	746.
2019	3390	985.5		62.5	1048.0	153.7	1201.
2020	3035	854.9		43.1	898.0	126.5	1024.
2021	2501	873.6		57.0	930.6	157.4	1088.
2022	3121	1057.1		63.4	1120.5	35.5	1156.
2023	2751	935.3		54.6	989.9	29.3	1019.
2024	2719	903.9		52.0	955.9	25.7	981.
2025	2526	843.0		49.7	892.7	27.4	920.
2026	2350	807.6		66.5	874.1	22.4	896.
2027	2230	752.0		69.4	821.4	21.3	842.
2028	2220	749.0		61.0	810.0	21.6	831.
2029	2219	749.0		61.4	810.4	19.6	830.
2030	2226	751.3	44	58.0	809.3	19.8	829.
2031	2178	744.4		65.8	810.2	19.4	829.
2032	2215	748.0	44	61.8	809.8	19.7	829.
2033	2259	762.6		46.5	809.1	20.1	829.
2034	2278	769.3		40.0	809.3	20.3	829.
2035	2268	780.2	-	28.5	808.7	20.2	828.
2036	1956	647.7		22.2	669.9	17.6	687.
2037		-		10.1	10.1	0.1	10.
2038		(++)	199	8.0	8.0		8.
Subtotal	49099	16079.8	44	1176.2	17256.0	919.4	18175.

	Annual Funding 1109   Procurement   Procurement, Marine Corps								
		TY \$M							
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program		
2015	6	2.3		4.1	6.4	1.0	7.4		
2016	128	42.6		16.0	58.6		58.6		
2017	212	68.8	177	34.7	103.5	0.7	104.2		
2018	527	180.3		18.8	199.1	34.5	233.6		
2019	1642	539.9		25.4	565.3	41.7	607.0		
2020	1994	639.5		17.1	656.6	51.2	707.8		
2021	1184	388.2		19.8	408.0	67.4	475.4		
2022	998	402.5		20.8	423.3	16.4	439.7		
2023	931	390.5		17.2	407.7	13.9	421.6		
2024	926	392.8		16.9	409.7	13.5	423.2		
2025	543	242.6		16.1	258.7	12.7	271.4		
2026		**		5.1	5.1	5.1	10.2		
2027		-		5.2	5.2		5.2		
Subtotal	9091	3290.0		217.2	3507.2	258.1	3765.3		

	Annual Funding 1109   Procurement   Procurement, Marine Corps						
				BY 2015 \$	Л		
Fiscal Year	Quantity	End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2015	6	2.2		4.0	6.2	1.0	7.5
2016	128	41.0		15.4	56.4		56.4
2017	212	65.1	177	32.7	97.8	0.7	98.
2018	527	167.5		17.5	185.0	32.0	217.0
2019	1642	492.1		23.2	515.3	38.0	553.3
2020	1994	571.6		15.3	586.9	45.7	632.
2021	1184	340.2		17.3	357.5	59.1	416.0
2022	998	345.8		17.8	363.6	14.1	377.
2023	931	328.9		14.5	343.4	11.7	355.
2024	926	324.3		14.0	338.3	11.1	349.4
2025	543	196.4		13.0	209.4	10.3	219.7
2026		**		4.1	4.1	4.0	8.
2027		-		4.0	4.0		4.0
Subtotal	9091	2875.1		192.8	3067.9	227.7	3295.6

Annual Funding 2020   Acq O&M   Operation and Maintenance, Army				
	TY \$M			
Fiscal Year	Total Program			
2019	11.9			
2020	12.2			
2021	12.4			
2022	12.7			
2023	12.9			
2024	13.2			
2025	13.5			
2026	13.8			
2027	14.1			
2028	14.4			
2029	14.7			
2030	15.0			
2031	15.3			
2032	15.6			
2033	15.9			
2034	16.3			
2035	16.6			
2036	17.0			
2037	16.8			
2038	17.2			
Subtotal	291.5			

	Funding on and Maintenance, Army
100	BY 2015 \$M
Fiscal Year	Total Program
2019	11.0
2020	11.0
2021	11.0
2022	11.1
2023	11.0
2024	11.0
2025	11.1
2026	11.1
2027	11.1
2028	11.1
2029	11.1
2030	11.1
2031	11.1
2032	11.1
2033	11.1
2034	11.2
2035	11.2
2036	11.2
2037	10.9
2038	10.9
Subtotal	221.4

# **Low Rate Initial Production**

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	8/20/2012	8/25/2015
Approved Quantity	3100	4990
Reference	Milestone B ADM	Milestone C ADM
Start Year	2015	2015
End Year	2017	2018

# **Foreign Military Sales**

Country	Date of Sale	Quantity	Total Cost \$M	Description
Denmark		0	0.4	Number: DEBVLI Agreement Type: Letter of Offer and Acceptance Provides for System Technical Support Services
United Kingdom		0	1.3	Number: UKBWSZ Agreement Type: Letter of Offer and Acceptance Provides for System Technical Support Services
United Kingdom	5/30/2018	2	0.7	Number: UKBWTH Agreement Type: Letter of Offer and Acceptance Provides for one General Purpose Variant JLTV, one Utility Variant JLTV, associated kits and Basic Issue Items.

Notes

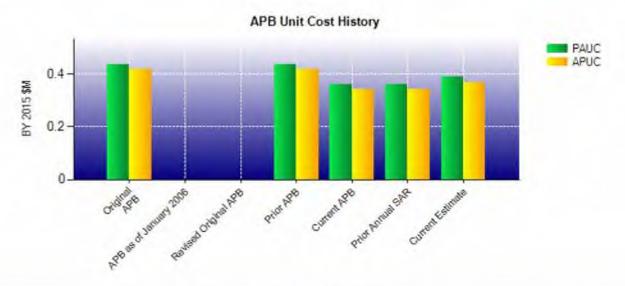
# **Nuclear Costs**

None

# **Unit Cost**

	BY 2015 \$M	BY 2015 \$M	% Change
Item	Current UCR Baseline (Apr 2016 APB)	Current Estimate (Dec 2017 SAR)	
Program Acquisition Unit Co	ost		
Cost	19699.5	22621.9	
Quantity	54717	58306	
Unit Cost	0.360	0.388	+7.78
Average Procurement Unit	Cost		
Cost	18758.1	21471.0	
Quantity	54599	58190	
Unit Cost	0.344	0.369	+7.27
Original	UCR Baseline and Current Estimate	(Base-Year Dollars)	
	BY 2015 \$M	BY 2015 \$M	% Change
Item	Original UCR Baseline (Oct 2012 APB)	Current Estimate (Dec 2017 SAR)	

	BY 2015 \$M	BY 2015 \$M	% Change
Item	Original UCR Baseline (Oct 2012 APB)	Current Estimate (Dec 2017 SAR)	
Program Acquisition Unit Cost			
Cost	23868.6	22621.9	
Quantity	54730	58306	
Unit Cost	0.436	0.388	-11.01
Average Procurement Unit Cost			
Cost	22822.7	21471.0	
Quantity	54599	58190	
Unit Cost	0.418	0.369	-11.72



APB Unit Cost History								
0.00	5.00	BY 201	5 \$M	TY \$	M			
Item	Date	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 2016	0.360	0.344	0.448	0.432			
Current Estimate	Dec 2017	0.388	0.369	0.481	0.461			

## **SAR Unit Cost History**

		Initial	SAR Basel	ine to Curr	ent SAR B	aseline (TY	(\$M)		
Initial PAUC Development Estimate				Char	iges				PAUC Production
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Estimate
0.556	0.004	0.107	-0.027	0.000	-0.188	0.000	-0.003	-0.107	0.44

PAUC				Chang	ges				PAUC	
Production Estimate	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Estimate	

Initial APUC				Char	nges				APUC
Development Estimate	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Production Estimate

APUC Production Estimate				Chang	ges				APUC
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Estimate
	-0.005	-0.004	0.040	0.000	-0.005	0.000	0.003	0.029	Estimate

	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	28028.9					
Total Quantity	N/A	54730	54717	58306					
PAUC	N/A	0.556	0.449	0.481					

# **Cost Variance**

		Summary TY \$N	1		
Item	RDT&E	Procurement	MILCON	Acq O&M	Total
SAR Baseline (Production Estimate)	940.0	23604.0	24	<del>- 1</del>	24544.0
Previous Changes					
Economic	+0.5	-78.5	-		-78.0
Quantity		+606.3	**	- 6-6	+606.3
Schedule	+29.8	+131.7	440		+161.5
Engineering				- 48	-
Estimating	-40.3	-14.3			-54.6
Other				44	-
Support		+96.9		44	+96.9
Subtotal	-10.0	+742.1	22	22	+732.1
Current Changes					
Economic	-1.8	-208.1			-209.9
Quantity	+0.7	+671.9			+672.6
Schedule		+2202.9			+2202.9
Engineering					-
Estimating	-0.8	-267.6		+291.5	+23.1
Other			44		4
Support		+64.1			+64.1
Subtotal	-1.9	+2463.2		+291.5	+2752.8
Total Changes	-11.9	+3205.3		+291.5	+3484.9
CE - Cost Variance	928.1	26809.3	99	291.5	28028.9
CE - Cost & Funding	928.1	26809.3		291.5	28028.9

Summary BY 2015 \$M								
Item	RDT&E	Procurement	MILCON	Acq O&M	Total			
SAR Baseline (Production Estimate)	941.4	18758.1	-		19699.			
Previous Changes								
Economic			(44)		-			
Quantity		+519.3	144	++	+519.3			
Schedule	+28.0	+65.0			+93.0			
Engineering	1	4		**	4			
Estimating	-38.7	-20.8	1.		-59.5			
Other			**		-			
Support		+83.1			+83.1			
Subtotal	-10.7	+646.6		**	+635.9			
Current Changes								
Economic								
Quantity	+0.7	+553.8			+554.5			
Schedule		+1668.0			+1668.0			
Engineering	-2		1220		-			
Estimating	-1.9	-208.9		+221.4	+10.6			
Other	11		24		-			
Support		+53.4			+53.4			
Subtotal	-1.2	+2066.3		+221.4	+2286.5			
Total Changes	-11.9	+2712.9	(+)	+221.4	+2922.4			
CE - Cost Variance	929.5	21471.0	-	221.4	22621.9			
CE - Cost & Funding	929.5	21471.0		221.4	22621.9			

Previous Estimate: December 2016

RDT&E	\$M		
Current Change Explanations	Base Year	Then Year	
Revised escalation indices. (Economic)	N/A	-1.8	
Adjustment for current and prior escalation. (Estimating)	+0.8	+0.8	
Quantity change due to two additional vehicles and associated kits bought for testing (USMC). (Quantity)	+0.7	+0.7	
Revised estimate due to realignment of test event funding (Army). (Estimating)	+0.5	+1.6	
Revised estimate due to realignment of test event funding (USMC). (Estimating)	-2.6	-2.6	
Revised estimate to reflect the Army's realignment of direct civilian pay costs from RDT&E and Procurement investment accounts to O&M to provide additional transparency and auditability (Army). (Estimating)	-0.6	-0.6	
RDT&E Subtotal	-1.2	-1.9	

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-208.1
Adjustment for current and prior escalation. (Estimating)	+11.5	+12.2
Total quantity variance resulting from an increase of 1,850 vehicles from 7,241 to 9,091 (USMC). (Subtotal)	+556.8	+675.6
Quantity variance resulting from an increase of 1,850 vehicles from 7,241 to 9,091 (USMC). (Quantity)	(+553.8)	(+671.9)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(+3.4)	(+4.1)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-0.4)	(-0.4)
Stretch-out of procurement buy profile from FY 2015 to FY 2036 (Army). (Schedule)	0.0	+31.4
Additional Schedule Variance due to updates in vehicle configuration and kit mix (Army). (Schedule)	+1494.5	+1957.1
Stretch-out of procurement buy profile from FY 2019 to FY 2023 (USMC). (Schedule)	0.0	+9.8
Additional Schedule Variance due to updates in vehicles and kits based on vehicle configuration mix (USMC). (Schedule) (QR)	+170.1	+200.5
Revised estimate for test costs due to modifying the cost share ratio with USMC for the follow-on contract (Army). (Estimating)	-9.0	-11.4
Revised estimate for test costs due to modifying the cost share ratio with USMC for the follow-on contract (USMC). (Estimating)	-3.3	-3.6
Revised estimate to Contractor Program Support and System Technical Support due to modified cost share ratio with USMC for follow-on contract (Army). (Estimating)	-17.8	-10.8
Revised estimate to Contractor Program Support and System Technical Support due to modified cost share ratio with USMC for follow-on contract (USMC). (Estimating)	+28.6	+37.3
Revised estimate to reflect the Army's realignment of direct civilian pay costs from RDT&E and Procurement investment accounts to O&M to provide additional transparency and auditability (Army). (Estimating)	-218.5	-290.9
Adjustment for current and prior escalation. (Support)	+1.2	+1.3
Increase in Other Support due to updates in fielding estimates (Army). (Support)	+12.2	+13.2
Increase in Other Support due to updates in fielding estimates (USMC). (Support)	+24.3	+29.8
Increase in Initial Spares due to updated estimating methodology (Army). (Support)	+12.9	+16.2
Increase in Initial Spares due to updated estimating methodology (USMC). (Support)	+2.8	+3.6

Procurement Subtotal +2066.3 +2463.2

(QR) Quantity Related

Acq O&M	\$M		
Current Change Explanations	Base Year	Then Year	
Revised estimate to reflect the Army's realignment of direct civilian pay costs from RDT&E and Procurement investment accounts to O&M to provide additional transparency and auditability (Army). (Estimating)	+221.4	+291.5	
Acq O&M Subtotal	+221.4	+291.5	

## 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 P	rice		
Initial Co	ntract Price (	(\$M) Current Contract Price (\$M) Estimated Price At Comp				e At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
114.7	N/A	201	1184.2	N/A	3441	1184.2	1184.2

## **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 include buying 3240 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 four 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**

Cost and schedule variances are not reported for this contract since 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 a 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 present such characteristics.

## Notes

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

<b>Current Contract</b>	Qty
Army	2873
USMC	562
Air Force	4
UK	2
Grand Total	3441

# **Deliveries and Expenditures**

Deliveries					
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered	
Development	112	110	116	94.83%	
Production	1101	1069	58190	1.84%	
Total Program Quantity Delivered	1213	1179	58306	2.02%	

Expended and Appropriated (TY \$M)				
Total Acquisition Cost	28028.9	Years Appropriated	11	
Expended to Date	1121.6	Percent Years Appropriated	35,48%	
Percent Expended		Appropriated to Date	3044.6	
Total Funding Years	31	Percent Appropriated	10.86%	

The above data is current as of February 12, 2018.

December 2017 SAR

JLTV

# Operating and Support Cost

#### **Cost Estimate Details**

Date of Estimate: December 31, 2017

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 2057

Total JLTV vehicle quantity of 58,306 includes 116 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 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 will occur beginning in FY 2019 for Army and USMC fielding and will not exceed three years; sustainment will then transition 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	5.000	8.000		
Unit Operations	3.000	2.000		
Maintenance	10.000	4.000		
Sustaining Support	2.000	6.000		
Continuing System Improvements	2.000	1.000		
Indirect Support	2.000	3.000		
Other	0.000	0.000		
Total	24.000	24.000		

The JLTV O&S costs reflect peacetime operations.

		Total O&S	Cost \$M		
Item	JLTV			The second second	
item	Current Production A Objective/Threshold		Current Estimate	HMMWV (Antecedent)	
Base Year	27224.1	29946.5	26777.7	57839.0	
Then Year	40346.6	N/A	40547.7	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: \$26,777.7M (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 2016 SAR	27639.5			
Programmatic/Planning Factors		e due to updated configuration mix and quantity of that will be operating.		
Cost Estimating Methodology	0.0			
Cost Data Update	0.0			
Labor Rate	0.0			

Energy Rate Technical Input	0.0	hotwoon	
recimical input	<ul> <li>-4493.0 Decrease due to updated reliability for mean miles between hardware mission failure and fuel consumption data.</li> </ul>		
Other	0.0		
Total Changes	-861.8		
Current Estimate	26777.7		

## **Disposal Estimate Details**

Date of Estimate: December 31, 2017

Source of Estimate: POE

Disposal/Demilitarization Total Cost (BY 2015 \$M): Total costs for disposal of all Vehicle are 205.3

Total Demilitarization Cost includes costs for disposal and transportation associated with disposal of JLTVs. Increase of \$0.2M to disposal costs are due to an increase in number of vehicles procured and operated.