Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army

Date: February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 5: System

PE 0605812A I Joint Light Tactical Vehicle - ED

Development & Demonstration (SDD)

COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	-	81.388	45.694	32.486	-	32.486	25.566	3.213	3.085	3.143	Continuing	Continuing
VU9: Joint Light Tactical Vehicle - ED	-	81.388	45.694	32.486	-	32.486	25.566	3.213	3.085	3.143	Continuing	Continuing

#### Note

Army

At the request of the House Armed Services Committee - Air and Land Forces, a separate and distinct funding line (0605812A-VU9) was established for JLTV, transition of Project L50 funding to this newly established Program Element (PE) occurred in FY 2013.

### A. Mission Description and Budget Item Justification

Funding supports the development and testing of the Joint Light Tactical Vehicle (JLTV) Family of Vehicles (FoV). JLTV is a joint program between the U.S. Army and the U.S. Marine Corps, of which the U.S. Army has the lead. The JLTV goal is a FoV capable of performing multiple mission roles and designed to provide protected, sustained, networked mobility for personnel and payloads across the full range of military operations. JLTV objectives include increased protection and performance over the current fleet; minimizing ownership costs by maximizing commonality, fuel efficiency, reliability, and maintaining effective competition throughout the life cycle. Commonality of components, maintenance procedures, training, etc., between vehicles is expected to be inherent in FoV solutions across mission variants to minimize total ownership cost. Unique service requirements have been minimized.

Major FY 2016 budget activities include the continued monitoring of contractor performance, continued fabrication of Live Fire Test Assets, and the initialization of the Low-Rate Initial Production (LRIP) test program, to include: ballistic, performance, and Reliability, Availability, & Maintainability (RAM) testing.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	84.185	45.718	32.724	-	32.724
Current President's Budget	81.388	45.694	32.486	-	32.486
Total Adjustments	-2.797	-0.024	-0.238	-	-0.238
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-2.797	-			
<ul> <li>Adjustments to Budget Years</li> </ul>	-	-0.024	-0.238	-	-0.238

PE 0605812A: Joint Light Tactical Vehicle - ED

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Exhibit R-2A, RDT&E Project Ju	stification	: PB 2016 A	Army							Date: Febr	uary 2015	
Appropriation/Budget Activity 2040 / 5		_	am Elemen 12A / Joint L	•	• `	Number/Name) nt Light Tactical Vehicle - ED						
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
VU9: Joint Light Tactical Vehicle - ED	-	81.388	45.694	32.486	-	32.486	25.566	3.213	3.085	3.143	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

#### Note

Army

FY 2012 funding for the Joint Light Tactical Vehicles (JLTV) program is under Program Element (PE) 0604804A, Project L50.

FY 2013 and out year funding is under Project Element (PE) 0605812A, Project VU9.

## A. Mission Description and Budget Item Justification

Funding supports the development and testing of the Joint Light Tactical Vehicle (JLTV) Family of Vehicles (FoV). JLTV is a joint program between the U.S. Army and the U.S. Marine Corps, of which the U.S. Army has the lead. The JLTV goal is a FoV capable of performing multiple mission roles and designed to provide protected, sustained, networked mobility for personnel and payloads across the full range of military operations. JLTV objectives include increased protection and performance over the current fleet; minimizing ownership costs by maximizing commonality, fuel efficiency, reliability, and maintaining effective competition throughout the life cycle. Commonality of components, maintenance procedures, training, etc., between vehicles is expected to be inherent in FoV solutions across mission variants to minimize total ownership cost. Unique service requirements have been minimized.

Major FY 2016 budget activities include the continued monitoring of contractor performance, continued fabrication of Live Fire Test Assets, and the initiation of the Low-Rate Initial Production (LRIP) test program, to include: ballistic, performance, and Reliability, Availability, & Maintainability (RAM) testing.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
Title: Contract and support for development, fabrication, and test of live fire test assets.	-	27.280	10.355
Description: Funding is provided for the contract award for live fire test assets.			
FY 2015 Plans: Funding provides for contract award of live fire test assets that will be destroyed during ballistic testing. Developed logistics documentation, GFE, management, and provided oversight of programmatic and contractual issues related to logistics.			
FY 2016 Plans: Funding provides testing of Live Fire Test Assets that will be destroyed during ballistic testing and support for live fire testing. Continue logistics support, development of logistics documentation and oversight of programmatic and contractual issues related to logistics.			
Title: Joint Light Tactical Vehicles (JLTV) program management support	9.442	11.722	1.032

PE 0605812A: Joint Light Tactical Vehicle - ED UNCLASSIFIED

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: F	ebruary 2015	i		
Appropriation/Budget Activity 2040 / 5		Project (Number/Name) e - VU9 / Joint Light Tactical Vehicle - EL				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016		
Description: Funding is provided for the support of program management government	ernment operations.					
FY 2014 Accomplishments: Funding was provided for continued Engineering and Manufacturing Development and fabrication. Key events included the continued monitoring of twell as preparation of analysis and documentation in support of Milestone C.						
FY 2015 Plans: Continue support for the completion of the EMD phase to include program man analyses, integrated logistics support, government furnished equipment manag vehicle leases, close out of the EMD contracts, preparation of analysis and doc source selection.	ement, building maintenance, building utilities,					
FY 2016 Plans: Support for LRIP phase to include program management and monitoring of ven	ndor performance for the live fire asset effort.					
Title: Test and Evaluation Events and Analysis.		31.208	6.692	21.09		
Description: Test and Evaluation Events						
FY 2014 Accomplishments: Completed EMD prototype testing to include (but not limited to) Automated Fire performance and RAM testing and initiated LUT testing upon the completion of						
FY 2015 Plans: Completion of LUT testing and finalize the EMD test reports in support of Milest preparation of LRIP test.	tone C, LRIP source selection, and ballistic hulls in					
<b>FY 2016 Plans:</b> Finalize the LRIP test plan and continue the LRIP test program to include (but r performance, RAM testing, logistics demonstration and operational testing.	not limited to) AFES, ballistic, corrosion,					
Title: Engineering and Manufacturing Development (EMD) prototype contract a	and support for development and fabrication.	40.738	-	-		
<b>Description:</b> Funding is provided for EMD prototype contract award for develop	pment and fabrication.					
FY 2014 Accomplishments:						

PE 0605812A: Joint Light Tactical Vehicle - ED Army

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Date: February 2015

837.043 1.092.066 1.113.019 Continuing Continuing

1.965 Continuing Continuing

Appropriation/Budget Activity 2040 / 5	•				•	nent (Numb int Light Tac	er/Name) tical Vehicle		t (Number/N Joint Light Ta	Name) actical Vehicle	e - ED
B. Accomplishments/Planned	Programs (\$ in N	<u>Millions)</u>							FY 2014	FY 2015	FY 2016
Funding was provided for contin			nt Tactical Ve	ehicles deve	lopment and	fabrication.	Test events				
included performance, reliability	, live fire, and roo	f crush.									
				Accor	nplishment	s/Planned F	rograms Su	ubtotals	81.388	45.694	32.486
C. Other Program Funding Su	mmary (\$ in Milli	ons)									
			FY 2016	FY 2016	FY 2016					Cost To	-
Line Item	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 201	9 FY 202	0 Complete	Total Cost

308.336

36.656

598.546

23.614

2.109

2.892

308.336

36.656

164.615

9.445

50.251

# 0605812M: Marine Corps Ground Combat/Support Systems, RDTE Project 3209 0605812M

PM JLTV PRODUCTION D15603:

Joint Light Tactical Vehicles (JLTV), D15603, Army OPA 1
• PM JLTV PROJECT 3209

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army

• PM JLTV PRODUCTION 5095: - 7.500 79.429 - 79.429 155.280 540.770 615.741 678.749 Continuing Continuing Marine Corps Ground Combat/

Support Systems, Production 5095

#### Remarks

# D. Acquisition Strategy

Joint Light Tactical Vehicle (JLTV) is a Joint Service Program with the U.S. Army and Marine Corps as the two main components. The U.S. Army is the JLTV service lead. In addition, the Navy anticipates procuring JLTV vehicles upon successful Full Rate Production (FRP) decision.

The program will use an evolutionary approach to deliver capabilities in increments based on program priorities. All technologies entering the Engineering and Manufacturing Development (EMD) phase were Technology Readiness Level 6 or higher to achieve Capabilities Development Document (CDD) requirements. Increment I will produce two Mission Role Variant (MRV) configurations (Combat Tactical Vehicle (CTV) and Combat Support Vehicle (CSV)) with mission packages (General Purpose, Heavy Guns Carrier, Close Combat Weapons Carrier, and Utility/Shelter Carrier). Increment 2 is undefined.

The program revised the acquisition strategy in the first quarter of FY 2012, addressing better buying power initiatives and reduced the program schedule by fifteen (15) months to enable a 33-month Non-Development Item approach for EMD, with Milestone B approved on 9 August 2012. The program anticipates Milestone C decision in July 2015.

Through a full and open competition, the program awarded three fixed price contracts for EMD phase on 22 August 2012 to AM General, Lockheed Martin, and Oshkosh Corporations.

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
2040 / 5	PE 0605812A I Joint Light Tactical Vehicle -	VU9 I Join	t Light Tactical Vehicle - ED
	ED		

EMD vendors fabricated a total of 66 vehicles (22 test assets per vendor) representing mission packages for both MRVs, which the Government will fully test during FMD.

Vehicles were delivered in the fourth quarter of FY 2013 to begin the fourteen (14) month government performance and reliability testing, which will focus on demonstrating Key Performance Parameters/Key System Attributes (KPP/KSA) and safety requirements. Test strategy represents a mix of vendor risk reduction testing and formal government testing.

The JLTV Joint Program Office (JPO) intends to award a Low Rate Initial Production (LRIP)/Full Rate Production (FRP) contract under a limited competition between the three JLTV EMD contractors. An approved Justification and Approval (J&A) signed by the Army Acquisition Executive on 8 May 2014, supported the release of the draft Request for Proposal (RFP) on 26 June 2014 and limited the competition for the LRIP/FRP contract to the three EMD vendors. The JLTV JPO made adjustments to the draft RFP as directed by the Defense Acquisition Executive and the OSD peer review. The final RFP was released on 12 December 2014 and the solicitation is scheduled to close on 10 February 2015. The Milestone C Defense Acquisition Board is scheduled for July 2015 and LRIP/FRP contract award in the 4th quarter of FY 2015. It will be a single award, fixed price contract consisting of a three year LRIP period with options for five additional years of FRP deliveries. The JLTV JPO requested separately priced firm fixed price (FFP) option(s) for purchase of the Technical Data Package (TDP) with appropriate data rights to allow for possible future competition for production vehicles as well as spares.

### **E. Performance Metrics**

N/A

Army

PE 0605812A: Joint Light Tactical Vehicle - ED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army

Date: February 2015

Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

2040 I 5

PE 0605812A I Joint Light Tactical Vehicle - VU9 I Joint Light Tactical Vehicle - ED

ED

Management Service	es (\$ in M	illions)		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Joint Light Tactical Vehicles (JLTV)Contract Service Support	SS/CPFF	Booz-Allen Hamilton, : McLean, VA	2.725	7.466	Jan 2014	2.360	Jan 2015	-		-		-	Continuing	Continuing	Continuing
JLTV Contract Service Support and Performance- based logistics (PBL) / Business Case Analysis (BCA)	SS/CPFF	Camber Corporation, : Huntsville, AL	0.421	0.140	May 2014	0.300	Feb 2015	-		-		-	Continuing	Continuing	Continuing
JLTV Service Support	MIPR	US Army Combined Arms Support Commands - CASCOM, : Ft. Lee, VA	0.200	-		-		-		-		-	-	0.200	-
	1	Subtotal	3.346	7.606		2.660		-		-		-	-	-	-

#### Remarks

Funding for Management Services decreases between FY 2015 and FY 2016 due to the end of the development phase as well as programmatic support shifting from R&D to procurement.

Product Developme	roduct Development (\$ in Millions)			FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Joint Light Tactical Vehicles (JLTV) Engineering and Manufacturing Development (EMD) Contract	C/FFP	Oshkosh Corporation, : Oshkosh, WI	3.914	5.308	Nov 2013	-		-		-		-	-	9.222	55.698
JLTV Engineering and Manufacturing Development Contract	C/FFP	Lockheed Martin Corporation, : Grand Prairie, TX	0.106	4.225	Nov 2013	-		-		-		-	-	4.331	65.106

PE 0605812A: Joint Light Tactical Vehicle - ED Army

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
2040 / 5	PE 0605812A I Joint Light Tactical Vehicle -	VU9 I Joint Light Tactical Vehicle - ED
	ED	

Product Developmen	t (\$ in Mi	illions)		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
JLTV Engineering and Manufacturing Development Contract	C/FFP	AM General, : South Bend, IN	27.560	2.490	Nov 2013	-		-		-		-	-	30.050	63.808
JLTV Live Fire Test Assets and support	C/FFP	TBD : TBD	0.000	-		11.200	Jul 2015	7.119	Dec 2015	-		7.119	Continuing	Continuing	Continuing
		Subtotal	31.580	12.023		11.200		7.119		-		7.119	-	-	-

#### Remarks

Joint Light Tactical Vehicles (JLTV) is a Joint Services Program with the U.S. Army and U.S. Marine Corps as the two main components. Total value of Engineering and Manufacturing Development (EMD) contracts is shared between the U.S. Army and the U.S. Marine Corps. Contract awards were funded in FY 2012, U.S. Army under PE 0604804A Project L50 and U.S. Marine Corps under PE 0603635M Project 3209.

Total estimated target value of the Live Fire Test contract is shared between the U.S. Army and the U.S. Marine Corps. The U.S. Marine Corps funds are under PE 0605812M Project 3209.

Support (\$ in Millions	. , ,			FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Joint Light Tactical Vehicles (JLTV) Program Management Support	Various	TACOM Life Cycle Management Command (LCMC), : Harrison Township, MI	6.866	9.442	Sep 2014	11.722	Sep 2015	1.032	Sep 2016	-		1.032	Continuing	Continuing	Continuing
GFE Management / GFE / Analysis	MIPR	Various : TBD	1.016	12.783	Feb 2015	3.150	Mar 2015	-		-		-	Continuing	Continuing	Continuing
JLTV EMD/LRIP phase.	MIPR	Tank-Automotive Reseach, Development, and Engineering Center - TARDEC : Warren, MI	4.517	5.153	Jan 2014	5.145	Jan 2015	1.260	Jan 2016	-		1.260	Continuing	Continuing	Continuing
JLTV Prototype EMD/LRIP - Cost and Systems, Legal,	MIPR	TACOM Life Cycle Management	2.586	3.173	Jan 2014	5.125	Jan 2015	1.976	Jan 2016	-		1.976	Continuing	Continuing	Continuing

PE 0605812A: Joint Light Tactical Vehicle - ED Army

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

Project (Number/Name)

PE 0605812A I Joint Light Tactical Vehicle -

VU9 I Joint Light Tactical Vehicle - ED

ED

Support (\$ in Millions	s)			FY 2	2014	FY 2	015	FY 2 Ba		FY 2		FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Budget, Safety, Security, Contracting, Logistics		Command (LCMC), : Warren, MI													
		Subtotal	14.985	30.551		25.142		4.268		-		4.268	-	-	-

### Remarks

2040 / 5

Funding for Support Costs decreases between FY 2015 and FY 2016 due to the end of the development phase as well as programmatic support shifting from R&D to procurement.

Test and Evaluation	(\$ in Milli	ons)		FY 2	2014	FY 2	2015	FY 2 Ba	2016 ise	FY 2	2016 CO	FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Complete Engineering and Manufacturing Development (EMD) Test - Limited User Test (LUT)	Various	TBD : Various	9.294	31.208	Jun 2014	3.219	Feb 2015	-		-		-	-	43.721	-
Live Fire Test & Eval - ballistic hull test, Full Up Syst Level, Automatic Fire Extinguishing Syst	Various	TBD : Various	0.000	-		3.473	Feb 2015	21.099	Jan 2016	-		21.099	23.708	48.280	-
		Subtotal	9.294	31.208		6.692		21.099		-		21.099	23.708	92.001	-

	Prior Years	FY 2014	FY 2	2015	FY 2 Ba	2016 Ise		2016 CO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	59.205	81.388	45.694		32.486		-		32.486	-	-	-

Remarks

PE 0605812A: Joint Light Tactical Vehicle - ED

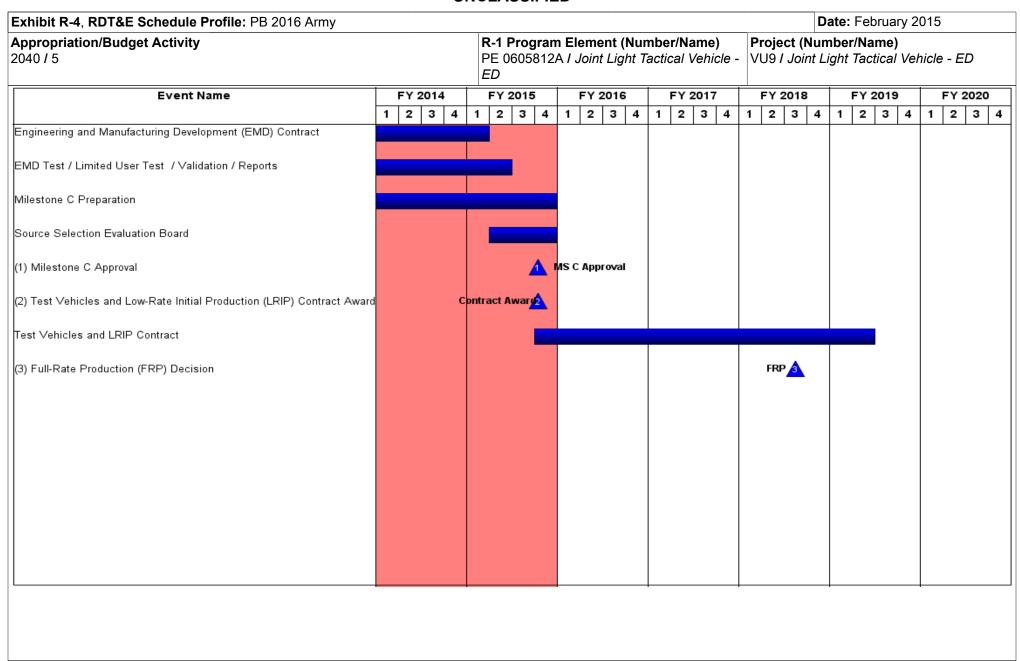


Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army	Date: February 2015		
11	` ` ` '	, ,	umber/Name) t Light Tactical Vehicle - ED

# Schedule Details

	St	End		
Events	Quarter	Year	Quarter	Year
Engineering and Manufacturing Development (EMD) Contract	4	2012	1	2015
EMD Test / Limited User Test / Validation / Reports	1	2013	2	2015
Milestone C Preparation	1	2014	4	2015
Source Selection Evaluation Board	2	2015	4	2015
Milestone C Approval	4	2015	4	2015
Test Vehicles and Low-Rate Initial Production (LRIP) Contract Award	4	2015	4	2015
Test Vehicles and LRIP Contract	4	2015	2	2019
Full-Rate Production (FRP) Decision	3	2018	3	2018