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Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605812A / <i>Joint Light Tactical Vehicle - ED</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	-	43.302	32.486	11.530	-	11.530	3.022	2.905	2.971	1.967	Continuing	Continuing
VU9: <i>Joint Light Tactical Vehicle - ED</i>	-	43.302	32.486	11.530	-	11.530	3.022	2.905	2.971	1.967	Continuing	Continuing

Note

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 2017 budget activities include the continued monitoring of contractor performance, completion of provisioning, and the continuation of Live Fire Test for the Low-Rate Initial Production (LRIP) program to include: Full Up System Level (FUSL), Automatic Fire Extinguishing System (AFES), Corrosion, Ballistics, and Logistics Demonstration testing.

The FY 2017 funding request was reduced by \$13.689 million to account for the availability of prior year execution balances.

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B. Program Change Summary (\$ in Millions)	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total
Previous President's Budget	45.694	32.486	25.566	-	25.566
Current President's Budget	43.302	32.486	11.530	-	11.530
Total Adjustments	-2.392	0.000	-14.036	-	-14.036
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.654	-			
• SBIR/STTR Transfer	-1.738	-			
• Adjustments to Budget Years	-	-	-14.036	-	-14.036

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Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605812A / Joint Light Tactical Vehicle - ED				Project (Number/Name) VU9 / Joint Light Tactical Vehicle - ED			
COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
VU9: Joint Light Tactical Vehicle - ED	-	43.302	32.486	11.530	-	11.530	3.022	2.905	2.971	1.967	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

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 2017 budget activities include the continued monitoring of contractor performance, completion of provisioning, and the continuation of Live Fire Test for the Low-Rate Initial Production (LRIP) program to include: Full Up System Level (FUSL), Automatic Fire Extinguishing System (AFES), Corrosion, Ballistics, and Logistics Demonstration testing.

The FY 2017 funding request was reduced by \$13.689 million to account for the availability of prior year execution balances.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2015	FY 2016	FY 2017
Title: Contract and support for development, fabrication, and test of live fire test assets.	17.825	9.377	4.271
Description: Funding is provided for the contract award for live fire test assets.			
FY 2015 Accomplishments: Funding provides for contract award of live fire test assets that will be destroyed during ballistic testing. Developed logistics documentation, Government Furnished Equipment (GFE), management, and provided oversight of programmatic and contractual issues related to logistics.			
FY 2016 Plans:			

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605812A / Joint Light Tactical Vehicle - ED	Project (Number/Name) VU9 / Joint Light Tactical Vehicle - ED		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2015	FY 2016	FY 2017
<p>Funding provides for contract award to continue testing of Live Fire Test Assets that will be destroyed during ballistic testing and support for live fire testing. Continue logistics support of GFE which will be destroyed during live fire test events.</p> <p>FY 2017 Plans: Funding provides for contract award to continue testing of Live Fire Test Assets that will be destroyed during ballistic testing and support for live fire testing. Continue logistics support of GFE which will be destroyed during live fire test events.</p>				
<p>Title: Joint Light Tactical Vehicles (JLTV) program management support</p> <p>Description: Funding is provided for the support of program management government operations.</p> <p>FY 2015 Accomplishments: Continue support for the completion of the EMD phase to include program management, level of effort reports, test evaluation analyses, integrated logistics support, government furnished equipment management, building maintenance, building utilities, vehicle leases, close out of the EMD contracts, preparation of analysis and documentation in support of Milestone C, and LRIP source selection.</p> <p>FY 2016 Plans: Support for LRIP phase to include program management and monitoring of vendor performance for the live fire tests.</p> <p>FY 2017 Plans: Continue support for LRIP phase to include monitoring of vendor performance for the live fire asset effort and program management.</p>		8.165	2.497	2.046
<p>Title: Test and Evaluation Events and Analysis.</p> <p>Description: Test and Evaluation Events</p> <p>FY 2015 Accomplishments: Completion of LUT testing and finalize the EMD test reports in support of Milestone C, LRIP source selection, and ballistic hulls in preparation of LRIP test.</p> <p>FY 2016 Plans: Finalize the LRIP test plan and start the LRIP test program to include Full Up System Level (FUSL), Automatic Fire Extinguishing System (AFES), ballistic, corrosion, and roof crush.</p> <p>FY 2017 Plans:</p>		17.312	20.612	5.213

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2015	FY 2016	FY 2017
Beginning of Logistics Demonstration testing and the continuation of the LRIP test program to include Full Up System Level (FUSL), Automatic Fire Extinguishing System (AFES), corrosion, and ballistic testing.			
Accomplishments/Planned Programs Subtotals	43.302	32.486	11.530

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
• PM JLTV PRODUCTION D15603: <i>Joint Light Tactical Vehicles (JLTV), D15603, Army OPA 1</i>	164.615	249.911	587.514	-	587.514	827.890	1,082.456	1,103.261	1,139.366	Continuing	Continuing
• PM JLTV PROJECT 3209 <i>0605812M: Marine Corps Ground Combat/Support Systems, RDTE Project 3209 0605812M</i>	8.970	32.149	23.197	-	23.197	7.873	2.854	2.135	-	Continuing	Continuing
• PM JLTV PRODUCTION 5095: <i>Marine Corps Ground Combat/Support Systems, Production 5095</i>	7.425	59.954	113.230	-	113.230	421.660	668.830	681.183	98.994	Continuing	Continuing

Remarks

D. Acquisition Strategy

Joint Light Tactical Vehicle (JLTV) is a Joint Service Program with the U.S. Army and U.S. Marine Corps as the two main components. The U.S. Army is the JLTV service lead.

The JLTV Program entered the Production and Deployment Phase with the Acquisition Decision Memorandum authorization on 25 August 2015. With Milestone C approval the LRIP fixed price contract was awarded to Oshkosh Defense LLC on 25 August 2015. This contract consists of a three year LRIP period with options for five additional years of FRP deliveries. JPO JLTV requested separately priced firm fixed price (FFP) option(s) for the purchase of the Technical Data Package (TDP) with appropriate data rights to allow for possible future competition for production vehicles as well as spares. On 8 September 2015, a Stop Work Order was issued to Oshkosh after a protest was filed to the Government Accountability Office (GAO). On 15 December 2015, the Government Accountability Office (GAO) dismissed the protest due to Lockheed Martin's notice that they intended to file a Post-Award Bid Protest with the U.S. Court of Federal Claims (COFC). The Stop Work Order was officially canceled and Oshkosh has resumed work. On 17 December 2015, Lockheed Martin officially filed a complaint with the COFC and an injunction decision is pending. JPO JLTV is currently evaluating potential injunction impacts.

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The program now begins the LRIP phase where it will strive to produce production vehicles for extensive Test and Evaluation activities to support a FRP Decision. A ramp up of JLTV quantities will continue thru FY19 to support fielding's to Army and USMC units once the FRP decision is achieved and allow the program to smoothly transition into FRP.

The JLTV program will continually monitor emerging technologies and capabilities through its partnerships with Army and Marine Corps science and technology organizations as well as through industry market research and partnerships. At this time Follow-on Increments for technology insertion is undefined, the JLTV program will look for opportunities to implement increased capabilities throughout the system's Life Cycle.

E. Performance Metrics

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605812A / Joint Light Tactical Vehicle - ED	Project (Number/Name) VU9 / Joint Light Tactical Vehicle - ED
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Management Services (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Joint Light Tactical Vehicles (JLTV) Contract Service Support	SS/CPFF	Booz-Allen Hamilton, : McLean, VA	10.191	-		-		-		-		-	0	10.191	0
JLTV Contract Service Support for Cost Analysis for JLTV CARD	SS/CPFF	Camber Corporation, : Huntsville, AL	0.561	0.030	Nov 2015	-		-		-		-	0	0.591	0
JLTV Service Support	MIPR	US Army Combined Arms Support Commands - CASCOM, : Ft. Lee, VA	0.200	-		-		-		-		-	0	0.200	0
Subtotal			10.952	0.030		-		-		-		-	0.000	10.982	0.000

Remarks
Funding for Management Services has shifted from RDT&E to procurement.

Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Joint Light Tactical Vehicles (JLTV) Engineering and Manufacturing Development (EMD) Contract	C/FFP	Oshkosh Corporation, : Oshkosh, WI	34.920	-		-		-		-		-	0	34.920	56.864
JLTV Engineering and Manufacturing Development Contract	C/FFP	Lockheed Martin Corporation, : Grand Prairie, TX	18.878	-		-		-		-		-	0	18.878	65.497
JLTV Engineering and Manufacturing Development Contract	C/FFP	AM General, : South Bend, IN	53.565	-		-		-		-		-	0	53.565	64.545

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Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
JLTV Live Fire Test Assets and Support	C/FFP	Oshkosh Corporation : Oshkosh, WI	0.000	5.708	Aug 2015	5.432	Feb 2016	4.121	Dec 2016	-		4.121	Continuing	Continuing	Continuing
Subtotal			107.363	5.708		5.432		4.121		-		4.121	-	-	-

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. U.S. Army under PE 0604804A Project L50 and U.S. Marine Corps under PE 0603635M Project 3209. The LRIP/FRP contract awarded in FY15 has a cost sharing agreement between the services to cover shared RDT&E funded test activities.

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 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Joint Light Tactical Vehicles (JLTV) Program Management Support	Various	TACOM Life Cycle Management Command (LCMC), : Harrison Township, MI	16.308	8.165	Sep 2015	2.497	Sep 2016	2.046	Sep 2017	-		2.046	Continuing	Continuing	Continuing
GFE Management / GFE / Analysis	MIPR	Various : TBD	13.799	2.881	Mar 2015	3.800	Aug 2016	-		-		-	Continuing	Continuing	Continuing
JLTV EMD/LRIP phase.	MIPR	Tank-Automotive Reseach, Development, and Engineering Center - TARDEC : Warren, MI	9.670	4.575	Jan 2015	-		-		-		-	Continuing	Continuing	Continuing
JLTV Prototype EMD/LRIP - Cost and Systems, Legal, Budget, Safety, Security, Contracting, Logistics	MIPR	TACOM Life Cycle Management Command (LCMC), : Warren, MI	5.759	4.631	Dec 2014	0.145	Dec 2015	0.150	Dec 2016	-		0.150	Continuing	Continuing	Continuing

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Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Subtotal			45.536	20.252		6.442		2.196		-		2.196	-	-	-

Remarks
Funding for Support Costs decreases due to the end of the development phase as well as programmatic support shifting from RDT&E to procurement.

Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Complete Engineering and Manufacturing Development (EMD) Test - Limited User Test (LUT)	MIPR	Army Evaluation Center (AEC) : Aberdeen Proving Ground, MD	40.942	0.400	Aug 2015	-		-		-		-	0	41.342	0
Live Fire T&E - ballistics, FUSL, AFES, roof crush, Log demo, and corrosion.	Various	TBD : Various	0.000	16.912	Feb 2015	20.612	Oct 2015	5.213	Oct 2016	-		5.213	23.708	66.445	0
Subtotal			40.942	17.312		20.612		5.213		-		5.213	23.708	107.787	0.000

	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	204.793	43.302	32.486	11.530	-	11.530	-	-	-

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army **Date:** February 2016

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605812A / Joint Light Tactical Vehicle - ED	Project (Number/Name) VU9 / Joint Light Tactical Vehicle - ED
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Engineering and Manufacturing Development (EMD) Contract	[Bar]																											
EMD Test / Limited User Test / Validation / Reports	[Bar]																											
Milestone C Preparation	[Bar]																											
Source Selection Evaluation Board	[Bar]																											
(1) Milestone C Approval																												
(2) Test Vehicles and Low-Rate Initial Production (LRIP) Contract Award																												
Test Vehicles and LRIP Contract													[Bar]															
(3) Full-Rate Production (FRP) Decision																					[Bar]							
(4) Army Initial Operating Capability (IOC)																					[Bar]							

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Exhibit R-4A, RDT&E Schedule Details: PB 2017 Army		Date: February 2016
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605812A / <i>Joint Light Tactical Vehicle - ED</i>	Project (Number/Name) VU9 / <i>Joint Light Tactical Vehicle - ED</i>

Schedule Details

Events	Start		End	
	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	1	2019
Full-Rate Production (FRP) Decision	1	2019	1	2019
Army Initial Operating Capability (IOC)	1	2020	1	2020

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