Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army

Date: May 2017

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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	-	31.197	11.530	23.467	-	23.467	3.056	3.112	2.120	2.184	Continuing	Continuing
VU9: Joint Light Tactical Vehicle - ED	-	31.197	11.530	23.467	-	23.467	3.056	3.112	2.120	2.184	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 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 is the lead service. The JLTV goal is a FoV capable of performing multiple mission roles designed to provide protected, sustained, and networked mobility for personnel and payloads across the full Range of Military Operations (ROMO). JLTV objectives include increased performance, protection, and payload over the current legacy HMMWV fleet, minimizing ownership costs by maximizing commonality, fuel efficiency and reliability. The commonality of components, maintenance procedures, training, etc., among vehicles is expected to be inherent in FoV solutions across mission variants to minimize total ownership cost. Unique service requirements have been minimized.

Major FY18 budget activities include the continued monitoring of contractor performance, completion of provisioning and logistics publications for test, and the completion of the Low-Rate Initial Production (LRIP) test program required events such as: Full Up System Level (FUSL) test, Multi-Service Operational Test and Evaluation (MOT&E), Automatic Fire Extinguishing System (AFES) test, and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) test.

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	32.486	11.530	3.022	-	3.022
Current President's Budget	31.197	11.530	23.467	-	23.467
Total Adjustments	-1.289	0.000	20.445	-	20.445
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-1.289	-			
Adjustments to Budget Years	0.000	0.000	20.445	-	20.445

PE 0605812A: Joint Light Tactical Vehicle - ED

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Army		Date: May 2017
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0605812A / Joint Light Tactical Vehicle - ED	
Change Summary Explanation FY18 JLTV OPA funds re-colored to RDT&E to Support Operationa for the Full Rate Production (FRP) decision in FY19.	ll Testing and the Multi-Service Operational Test and Evalu	uation (MOT&E) event in preparation

PE 0605812A: Joint Light Tactical Vehicle - ED Army

Exhibit R-2A, RDT&E Project Ju	stification	: FY 2018 A	rmy							Date: May	2017	
Appropriation/Budget Activity 2040 / 5		_		i t (Number / Light Tactica	• `	Number/Name) nt Light Tactical Vehicle - ED						
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
VU9: Joint Light Tactical Vehicle - ED	-	31.197	11.530	23.467	-	23.467	3.056	3.112	2.120	2.184	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 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 is the lead service. The JLTV goal is a FoV capable of performing multiple mission roles designed to provide protected, sustained, and networked mobility for personnel and payloads across the full Range of Military Operations (ROMO). JLTV objectives include increased performance, protection, and payload over the current legacy HMMWV fleet, minimizing ownership costs by maximizing commonality, fuel efficiency and reliability. The commonality of components, maintenance procedures, training, etc., among vehicles is expected to be inherent in FoV solutions across mission variants to minimize total ownership cost. Unique service requirements have been minimized.

Major FY18 budget activities include the continued monitoring of contractor performance, completion of provisioning and logistics publications for test, and the completion of the Low-Rate Initial Production (LRIP) test program required events such as: Multi-Service Operational Test and Evaluation (MOT&E) and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) test.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Contract and support for development, fabrication, and test of live fire test assets.	17.200	4.271	4.109
Description: Funding is provided for the contract award for live fire test assets.			
FY 2016 Accomplishments: Contract awarded for Government System Integration Lab, Contractor Test Support, trailers, installation and packaged kits in support of Live Fire Testing Events and for Live Fire Test Assets that will be that will be destroyed during ballistic testing. Continued logistics support of GFE which will be destroyed during live fire test events.			
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 detroyed during live fire test events.			
FY 2018 Plans:			

PE 0605812A: Joint Light Tactical Vehicle - ED

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Army		Date: N	lay 2017	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605812A / Joint Light Tactical Vehicle - ED	Project (Number/I VU9 / Joint Light To	•	e - ED
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
Funding is provided for LRIP Contractor Test Support Contract Awar				
Title: Joint Light Tactical Vehicles (JLTV) program management sup	pport	3.159	2.046	1.43
Description: Funding is provided for the support of program manage	ement government operations.			
FY 2016 Accomplishments: Support for LRIP phase to include program management and monitor	oring of vendor performance for the live fire tests.			
FY 2017 Plans: Continue support for LRIP phase to include monitoring of vendor per management.	formance for the live fire asset effort and program			
FY 2018 Plans: Continue support for LRIP phase to include monitoring of vendor per	formance and program management.			
Title: Test and Evaluation Events and Analysis.		10.838	5.213	12.24
Description: Test and Evaluation Events				
FY 2016 Accomplishments: Finalized the LRIP test plan and started the LRIP test program to inc Extinguishing System (AFES), ballistic, corrosion, and roof crush.	clude Full Up System Level (FUSL), Automatic Fire			
FY 2017 Plans: Beginning of Logistics Demonstration testing and the continuation of (FUSL), Automatic Fire Extinguishing System (AFES), corrosion, and				
FY 2018 Plans: Continued monitoring of contractor performance, completion of provi of the Low-Rate Initial Production (LRIP) test program required even Service Operational Test and Evaluation (MOT&E), Automatic Fire E Communications, Computers, Intelligence, Surveillance, and Recontractions.	ts such as: Full Up System Level (FUSL) test, Multi- Extinguishing System (AFES) test, and Command, Contro			
Title: Science and Technology Updates.		-	-	5.67
Description: Funding is provided for the support of JLTV science an	nd technology updates.			
FY 2018 Plans:				

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Army			Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
2040 / 5	PE 0605812A I Joint Light Tactical Vehicle -	VU9 I Joint	Light Tactical Vehicle - ED
	ED		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Science and Technology funds will be used to explore Acoustic and Thermal signature mitigation technology along with research into potential fuel economy savings.			
Accomplishments/Planned Programs Subtotals	31.197	11.530	23.467

C. Other Program Funding Summary (\$ in Millions)

			FY 2018	FY 2018	FY 2018					Cost To	
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost
• PM JLTV PRODUCTION D15603:	249.911	587.514	804.440	-	804.440	1,078.794	1,099.507	1,135.483	1,168.494	Continuing	Continuing
Joint Light Tactical Vehicles											
(JLTV), D15603, Army OPA 1											
• PM JLTV PROJECT 3209	24.790	23.197	20.710	-	20.710	2.280	2.135	_	-	Continuing	Continuing
0605812M: Marine Corps Ground											
Combat/Support Systems,											
RDTE Project 3209 0605812M											
• PM JLTV PRODUCTION 5095:	58.578	113.230	217.739	-	217.739	665.477	739.211	469.511	532.720	Continuing	Continuing
Marine Corps Ground Combat/											

Remarks

Army

D. Acquisition Strategy

Support Systems, Production 5095

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 purchase of the Technical Data Package (TDP) with appropriate data rights to allow for possible future competition for production vehicles and spares.

During the LRIP phase, JPO JLTV will continue 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 to U.S. Army and USMC units once the FRP decision is achieved and allow the program to transition into Full Rate production.

PE 0605812A: Joint Light Tactical Vehicle - ED

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Army		Date: May 2017
Appropriation/Budget Activity 2040 / 5		ect (Number/Name) I Joint Light Tactical Vehicle - ED
The JLTV program will continually monitor emerging technologies and capabilit organizations as well as through industry market research and partnerships. A will look for opportunities to implement increased capabilities throughout the sy	at this time follow-on increments for technology inse	
E. Performance Metrics N/A		

PE 0605812A: Joint Light Tactical Vehicle - ED Army

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Army

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)
PE 0605812A / Joint Light Tactical Vehicle - VU9 / Joint Light Tactical Vehicle - ED

ED

Management Service	es (\$ in M	illions)		FY 2016		FY 2	2017	FY 2018 Base		FY 2018 OCO		FY 2018 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)Contract Service Support	SS/CPFF	Booz-Allen Hamilton, : McLean, VA	10.191	-		-		-		-		-	0.000	10.191	0.000
JLTV Contract Service Support for Cost Analysis for JLTV CARD	SS/CPFF	Camber Corporation, : Huntsville, AL	0.591	-		-		-		-		-	0.000	0.591	0.000
JLTV Service Support	MIPR	US Army Combined Arms Support Commands - CASCOM, : Ft. Lee, VA	0.200	-		-		-		-		-	0.000	0.200	0.000
	•	Subtotal	10.982	_		-		-		_		-	0.000	10.982	0.000

Remarks

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

Product Developmen	Product Development (\$ in Millions)				FY 2016		FY 2017		2018 ise	FY 2018 OCO		FY 2018 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 Live Fire Test Assets and Support	C/FFP	Oshkosh Corporation : Oshkosh, WI	5.708	13.383	Dec 2016	4.121		2.609	Dec 2018	-		2.609	Continuing	Continuing	Continuing
Science and Technology Updates	C/TBD	To Be Determined : To Be Determined	0.000	-		-		5.677	Jul 2018	-		5.677	0.000	5.677	0.000
		Subtotal	5.708	13.383		4.121		8.286		-		8.286	-	-	-

Remarks

Army

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 0605812A, Project VU9, and the U.S. Marine Corps under PE 0605812M, 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. Funding for Live Fire Test Assets decreases as Live Fire Testing is completed and the program moves toward a Full Rate Program (FRP) decision.

PE 0605812A: Joint Light Tactical Vehicle - ED

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Army

Date: May 2017

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

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ED

Support (\$ in Millions	s)			FY 2	2016	FY 2	017	FY 2 Ba			2018 CO	FY 2018 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) Program Management Support	Various	TACOM Life Cycle Management Command (LCMC), : Harrison Township, MI	24.473	3.159	Sep 2016	2.046		1.432	Sep 2018	-		1.432	Continuing	Continuing	Continuing
GFE Management / GFE / Analysis	MIPR	Various : TBD	16.680	1.824	Aug 2016	-		1.500	Jul 2018	-		1.500	Continuing	Continuing	Continuing
JLTV EMD/LRIP phase.	MIPR	Tank-Automotive Reseach, Development, and Engineering Center - TARDEC : Warren, MI	14.245	-		-		-		-		-	Continuing	Continuing	Continuing
JLTV Prototype EMD/LRIP - Budget	MIPR	TACOM Life Cycle Management Command (LCMC), : Warren, MI	10.390	1.993	Apr 2016	0.150		-		-		-	Continuing	Continuing	Continuing
		Subtotal	65.788	6.976		2.196		2.932		-		2.932	-	-	-

Remarks

Army

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 Milli	ons)		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO					
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)	MIPR	Army Evaluation Center (AEC) : Aberdeen Proving Ground, MD	41.342	-		-		-		-		-	0.000	41.342	0.000
MOT&E and Live Fire T&E - ballistics, FUSL, AFES, Log demo and corrosion.	Various	TBD : Various	16.912	10.838	Aug 2016	5.213		12.249	Oct 2017	-		12.249	23.708	68.920	0.000
		Subtotal	58.254	10.838		5.213		12.249		-		12.249	23.708	110.262	0.000

PE 0605812A: Joint Light Tactical Vehicle - ED

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Army		Date: May 2017
	` ` ` `	umber/Name) t Light Tactical Vehicle - ED

Test and Evaluation	(\$ in Milli	ons)		FY	2016	FY 2	2017		2018 ase		2018 CO	FY 2018 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

Remarks

Funding for Government Test Support increases from FY17 to FY18 to support the Operational Test and Evaluation Event scheduled for the second quarter of FY18.

	Prior Years	FY 2016	FY 2	2017	FY 2 Ba	2018 se	FY 2	2018 CO	FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	140.732	31.197	11.530		23.467		-		23.467	-	-	-

Remarks

PE 0605812A: Joint Light Tactical Vehicle - ED Army

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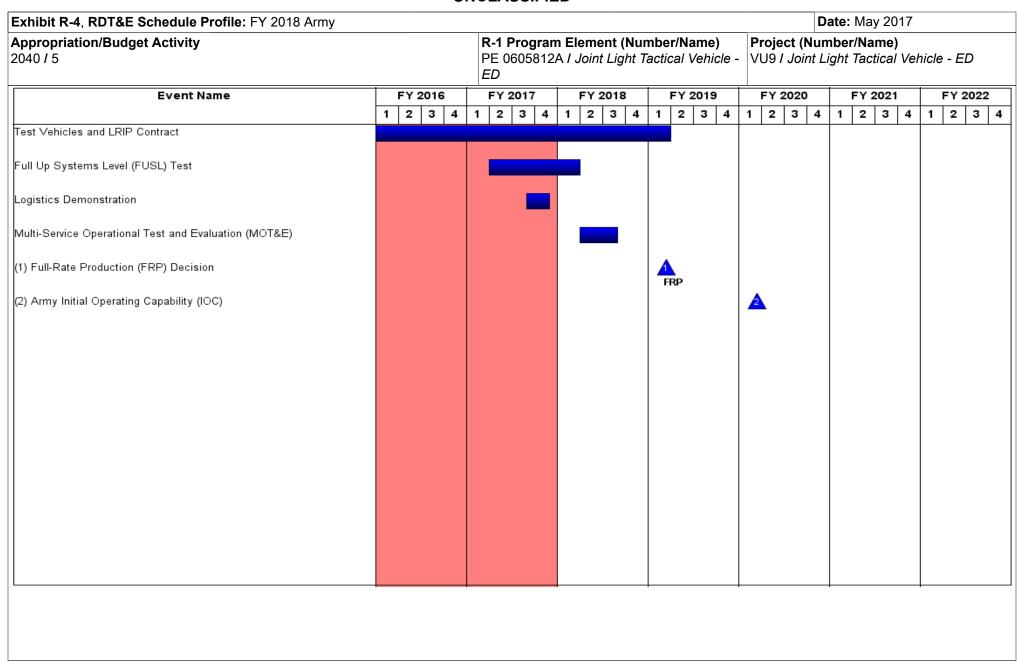


Exhibit R-4A, RDT&E Schedule Details: FY 2018 Army			Date: May 2017
	3	- , (umber/Name) t Light Tactical Vehicle - ED

Schedule Details

	St	End		
Events	Quarter	Year	Quarter	Year
Test Vehicles and LRIP Contract	1	2016	1	2019
Full Up Systems Level (FUSL) Test	2	2017	1	2018
Logistics Demonstration	3	2017	4	2017
Multi-Service Operational Test and Evaluation (MOT&E)	2	2018	3	2018
Full-Rate Production (FRP) Decision	1	2019	1	2019
Army Initial Operating Capability (IOC)	1	2020	1	2020