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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army										Date: February 2018		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604642A I LIGHT TACTICAL WHEELED VEHICLES							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	0.476	7.000	8.212	-	8.212	2.965	1.977	1.976	0.000	0.000	22.606
E40: LTV Prototype	-	0.476	7.000	8.212	-	8.212	2.965	1.977	1.976	0.000	0.000	22.606
Note This project includes GMV and Joint Light Tactical Vehicle - Reconnaissance Vehicle (JLTV-RV). Ground Mobility Vehicle (GMV) was a new start program in FY17. Joint Light Tactical Vehicle- Reconnaissance Vehicle (JLTV-RV) is a new start program in FY18.												
A. Mission Description and Budget Item Justification The Army Ground Mobility Vehicle (GMV) provides enhanced tactical mobility for an Infantry Brigade Combat Team (IBCT) 9-Soldier infantry squad with their associated equipment to move quickly around the battlefield. This capability is required across the range of military operations facing IBCT units conducting crises response, initial entry, and selected decisive action missions. GMV deploys worldwide by sea, air, and land modes to support strategic deployment and operational maneuver in accordance with Army and Joint doctrine. This capability provides flexibility for entry operations (permissive and non-permissive) to counter threat anti-access strategies by using multiple austere entry points to bring in combined arms configured units.  The Joint Light Tactical Vehicle - Reconnaissance Vehicle (JLTV-RV) was designated as the interim solution (2016 AROCM16-11.2) for the Light Reconnaissance Vehicle (LRV) to address a near term capability gap identified in the U.S. Army Combat Vehicle Modernization Strategy for the IBCT Cavalry Squadrons and Infantry Battalion Scout Platoons. This effort includes increased precision lethality through improved optics and a larger caliber weapon system to provide overmatch and counter threats as forces perform reconnaissance, surveillance and security operations.  FY19 GMV budget activities include Contractor Test Support, PQT testing to support FMR for A-GMV 1.1. testing, and program management support.  FY19 JLTV-LRV budget activities include Contractor Test Support, safety, performance, reliability, and ballistic testing of the JLTV-LRV, and program management support.												

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Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)		PE 0604642A / LIGHT TACTICAL WHEELED VEHICLES			
B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	0.494	7.000	8.300	-	8.300
Current President's Budget	0.476	7.000	8.212	-	8.212
Total Adjustments	-0.018	0.000	-0.088	-	-0.088
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.018	-			
• Adjustments to Budget Years	-	-	-0.088	-	-0.088
Change Summary Explanation					
FY19 decrease of \$88K is due to economic adjustment for inflation.					

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Army										Date: February 2018		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604642A / LIGHT TACTICAL WHEELED VEHICLES				Project (Number/Name) E40 / LTV Prototype			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
E40: LTV Prototype	-	0.476	7.000	8.212	-	8.212	2.965	1.977	1.976	0.000	0.000	22.606
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**Note**

This project includes GMV and Joint Light Tactical Vehicle - Reconnaissance Vehicle (JLTV-RV). Ground Mobility Vehicle (GMV) was a new start program in FY17. Joint Light Tactical Vehicle- Reconnaissance Vehicle (JLTV-RV) is a new start program in FY18.

**A. Mission Description and Budget Item Justification**

The Army Ground Mobility Vehicle (GMV) provides enhanced tactical mobility for an Infantry Brigade Combat Team (IBCT) 9-Soldier infantry squad with their associated equipment to move quickly around the battlefield. This capability is required across the range of military operations facing IBCT units conducting crises response, initial entry, and selected decisive action missions. GMV deploys worldwide by sea, air, and land modes to support strategic deployment and operational maneuver in accordance with Army and Joint doctrine. This capability provides flexibility for entry operations (permissive and non-permissive) to counter threat anti-access strategies by using multiple austere entry points to bring in combined arms configured units.

The Joint Light Tactical Vehicle - Reconnaissance Vehicle (JLTV-RV) was designated as the interim solution (2016 AROCM16-11.2) for the Light Reconnaissance Vehicle (LRV) to address a near term capability gap identified in the U.S. Army Combat Vehicle Modernization Strategy for the IBCT Cavalry Squadrons and Infantry Battalion Scout Platoons. This effort includes increased precision lethality through improved optics and a larger caliber weapon system to provide overmatch and counter threats as forces perform reconnaissance, surveillance and security operations.

FY19 GMV budget activities include Contractor Test Support, PQT testing to support FMR for A-GMV 1.1. testing, and program management support.

FY19 JLTV-LRV budget activities include monitoring of Contractor Test Support, safety, performance, reliability, and ballistic testing of the JLTV-LRV, and program management support.

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

	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<b>Title:</b> GMV Contract Test Support	0.153	-	0.264
<b>Description:</b> Funding is provided for the contract award for Ground Mobility Vehicle (GMV) Contractor Test Support.			
<b>FY 2019 Plans:</b> Will continue support of GMV Contractor Test Support.			
<b>FY 2018 to FY 2019 Increase/Decrease Statement:</b>			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2019 Army		<b>Date:</b> February 2018	
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604642A / <i>LIGHT TACTICAL WHEELED VEHICLES</i>	<b>Project (Number/Name)</b> E40 / <i>LTV Prototype</i>	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2017</b>	<b>FY 2018</b>
Increase in funding to support of Full Materiel Release (FMR) and operational testing.			<b>FY 2019</b>
<b>Title:</b> GMV Test and Evaluation  <b>Description:</b> Funding is provided for Ground Mobility Vehicle (GMV) testing events.  <b>FY 2018 Plans:</b> Continuation of Urgent Materiel Release (UMR) and First Unit Equipped (FUE) Performance Qualification Testing (PQT) for A-GMV 1.1. Beginning Full Materiel Release (FMR) PQT for A-GMV 1.1. Testing covers Inspections, Physical Characteristics, Ride Quality, Human Factors Engineering, Slopes and Grades, Braking, Steering and Handling, Transportability, limited and extended endurance testing. Start of Low Velocity Air Drop (LVAD) testing for A-GMV 1.1 .  <b>FY 2019 Plans:</b> PQT will support FMR for A-GMV 1.1. Testing covers Inspections, Physical Characteristics, Ride Quality, Human Factors Engineering, Slopes and Grades, Braking, Steering and Handling, Transportability, and extended endurance testing.  LVAD testing for A-GMV 1.1.  Operational testing for A-GMV 1.1.  <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Continuation of PQT and LVAD testing for A-GMV.1.1		0.323	1.450
<b>Title:</b> GMV Program Management Support  <b>Description:</b> Funding is provided for the support of Ground Mobility Vehicle (GMV) program management government operations.  <b>FY 2018 Plans:</b> Beginning of GMV test program management support efforts.  <b>FY 2019 Plans:</b> Funding will be for the continuation of labor and travel test support for GMV.		-	0.160
<b>Title:</b> GMV Seating Kit  <b>Description:</b> Development of Ground Mobility Vehicle (GMV) Seating kit to obtain 9-man seating kit.  <b>FY 2018 Plans:</b>		-	0.390
			-

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604642A / LIGHT TACTICAL WHEELED VEHICLES	Project (Number/Name) E40 / LTV Prototype		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019
Development of the GMV seating kit <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Completion of seating kit in FY18.				
<b>Title:</b> JLTV-RV Mission Equipment Packages (MEP) <b>Description:</b> Effort to design/develop the integration kit for the improved optics and weapon system of JLTV. <b>FY 2018 Plans:</b> Contract award of work directive on current JLTV contract. <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Completion in FY18.		-	0.328	-
<b>Title:</b> JLTV-RV Test Assets <b>Description:</b> Purchase JLTV-RV Mission Equipment Packages (MEP) test assets. <b>FY 2018 Plans:</b> Test assets for performance testing, Log Demonstration, and Limited User Test. <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Procure MEP Test Assets in FY18 to start testing in FY19.		-	4.139	-
<b>Title:</b> JLTV-RV Program Management Support <b>Description:</b> Funding is provided for the support of JLTV-RV program management government operations. <b>FY 2018 Plans:</b> Beginning of support for JLTV-RV test program management efforts. <b>FY 2019 Plans:</b> Will continue support for JLTV-RV test program management efforts. <b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Decrease due to economic adjustment.		-	0.533	0.445
<b>Title:</b> JLTV-RV Contractor Test Support <b>Description:</b> Funding is provided for the JLTV-LRV Contractor Test Support contract award.		-	-	0.409

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<b><i>FY 2019 Plans:</i></b> Will initiate of JLTV-RV Contractor Test Support.			
<b><i>FY 2018 to FY 2019 Increase/Decrease Statement:</i></b> Initiation of JLTV-RV Contract Test Support.			
<b><i>Title:</i></b> JLTV-RV Test and Evaluation  <b><i>Description:</i></b> Funding is provided to perform safety, performance, reliability, and ballistic testing of the JLTV-LRV.	-	-	4.229
<b><i>FY 2019 Plans:</i></b> Will provide safety, performance, reliability, and ballistic testing of the JLTV-RV.			
<b><i>FY 2018 to FY 2019 Increase/Decrease Statement:</i></b> Safety, performance, reliability, and ballistic testing of the JLTV-RV.			
<b>Accomplishments/Planned Programs Subtotals</b>	0.476	7.000	8.212

  

<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<b>Line Item</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
• D15505: <i>Ground Mobility Vehicle D15505 OPA</i>	4.907	40.935	46.988	-	46.988	49.818	48.861	48.861	19.212	Continuing	Continuing
<b>Remarks</b>											
<b>D. Acquisition Strategy</b> Ground Mobility Vehicle (GMV) Phase I: Per the Directed Requirement, procure the GMV capability for 5 Airborne IBCTS through the SOCOM GMV1.1 contract. GMV Phase II: Pursue development of the GMV to fulfill the requirements for the remainder of the IBCTs using a commercial item. A firm fixed priced contract will be awarded through full and open competition. Funding for Phase II will be competed in the FY19-23 POM with an expectation that contract award would be in FY20.  Pursue development of the LRV to fulfill near term capability gap identified in the U.S. Army Combat Vehicle Modernization Strategy for the Infantry Brigade Combat Team (IBCT) Cavalry Squadrons and Infantry Battalion Scout Platoons. The Light Reconnaissance Vehicle (LRV) MEP will be incorporated into the current JLTV Technical Data Battalion Scout Platoons. The LRV MEP will be incorporated into the current JLTV Technical Data Package (TDP) and will be a kit option on the next JLTV contract. The program is planning for the next production contract to be awarded through full and open competition.											
<b>E. Performance Metrics</b>											
N/A											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army												Date: February 2018			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604642A / LIGHT TACTICAL WHEELED VEHICLES				Project (Number/Name) E40 / LTV Prototype					
Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
GMV Seating Kit Development	MIPR	TBD : TBD	-	-		0.390		-		-		-	0.000	0.390	-
JLTV-RV Mission Equipment Packages Integration	Option/ CPFF	Oshkosh : Oshkosh, Wisconsin	-	-		0.328		-		-		-	0.000	0.328	-
JLTV-RV Test Assets	C/TBD	TBD : TBD	-	-		4.139		-		-		-	0.000	4.139	-
GMV Contractor Test Support	Option/ CPFF	GD-OTS : St Petersburg, FL	-	0.153	Dec 2017	-		0.264	Jan 2019	-		0.264	0.000	0.417	-
JLTV-RV Contractor Test Support	Option/ FFP	Oshkosh : Oshkosh, WI	-	-		-		0.409	Jan 2019	-		0.409	0.000	0.409	-
Subtotal			-	0.153		4.857		0.673		-		0.673	0.000	5.683	N/A
Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
GMV PM Support	MIPR	PL GMV : TACOM Warren, MI	-	-		0.160		0.160	Oct 2018	-		0.160	0.000	0.320	-
JLTV-RV PM Support	MIPR	PM JLTV : TACOM Warren, MI	-	-		0.533		0.445	Oct 2018	-		0.445	0.000	0.978	-
Subtotal			-	-		0.693		0.605		-		0.605	0.000	1.298	N/A
Remarks Not applicable															
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
GMV Operational Testing, LVAD, Rollover and Durability Testing	MIPR	Various : Various	-	0.323	Jan 2018	1.450		2.705	Dec 2018	-		2.705	0.000	4.478	-

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis:</b> PB 2019 Army												<b>Date:</b> February 2018			
<b>Appropriation/Budget Activity</b> 2040 / 5						<b>R-1 Program Element (Number/Name)</b> PE 0604642A / <i>LIGHT TACTICAL WHEELED VEHICLES</i>						<b>Project (Number/Name)</b> E40 / <i>LTV Prototype</i>			

  

<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2017</b>		<b>FY 2018</b>		<b>FY 2019 Base</b>		<b>FY 2019 OCO</b>		<b>FY 2019 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
JLTV-RV, Safety, Performance, Reliability, and Ballistic testing	MIPR	Various : Various	-	-		-		4.229	Jan 2019	-		4.229	0.000	4.229	-
<b>Subtotal</b>			-	0.323		1.450		6.934		-		6.934	0.000	8.707	N/A

  

	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>	-	0.476	7.000	8.212	-	8.212	0.000	15.688	N/A

  

**Remarks**



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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army																Date: February 2018												
Appropriation/Budget Activity 2040 / 5								R-1 Program Element (Number/Name) PE 0604642A / LIGHT TACTICAL WHEELED VEHICLES								Project (Number/Name) E40 / LTV Prototype												
Event Name	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
GMV Directed Requirement Approval		1 DR Approval																										
GMV MDD Phase I			3 MDD I																									
GMV MS C							MS C																					
GMV Hardware Contract							6 Contract Award																					
GMV UMR Approval							7 UMR																					
GMV Production Qualification Testing																												
GMV Log Development																												
GMV Full Rate Production																	9 FRP											
JLTV-RV Acquisition Concept Brief to AAE			2 Acq Concept Brief																									
JLTV-RV Directed Requirement Update				4 DR Update																								
JLTV-RV Contract Award for Test Assets							5 Contract Award																					
JLTV-RV Development																												
JLTV-RV XM914 Decision Point																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army																Date: February 2018												
Appropriation/Budget Activity 2040 / 5									R-1 Program Element (Number/Name) PE 0604642A / LIGHT TACTICAL WHEELED VEHICLES								Project (Number/Name) E40 / LTV Prototype											
Event Name	FY 2017				FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023			
	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
JLTV-RV Testing									Testing																			

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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2019 Army			<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604642A / <i>LIGHT TACTICAL WHEELED VEHICLES</i>	<b>Project (Number/Name)</b> E40 / <i>LTV Prototype</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
GMV Directed Requirement Approval	2	2017	2	2017
GMV MDD Phase I	4	2017	4	2017
GMV MS C	2	2018	2	2018
GMV Hardware Contract	2	2018	2	2018
GMV UMR Approval	3	2018	3	2018
GMV Production Qualification Testing	3	2018	1	2019
GMV Log Development	3	2018	3	2019
GMV Full Rate Production	1	2020	1	2020
JLTV-RV Acquisition Concept Brief to AAE	3	2017	3	2017
JLTV-RV Directed Requirement Update	4	2017	4	2017
JLTV-RV Contract Award for Test Assets	2	2018	2	2018
JLTV-RV Development	2	2018	2	2020
JLTV-RV XM914 Decision Point	4	2018	4	2018
JLTV-RV Testing	3	2019	4	2020