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Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: System Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604642A: LIGHT TACTICAL WHEELED VEHICLES							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	-	68.442	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
E40: LTV Prototype	-	68.442	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

^{##} The FY 2014 OCO Request will be submitted at a later date

A. Mission Description and Budget Item Justification

The High Mobility Multipurpose Wheeled Vehicle (HMMWV) is a lightweight, high performance, four-wheel drive, air transportable and air droppable, high mobility tactical wheeled vehicle. The HMMWV consists of a basic design with several variants including Cargo/Utility, Armament Carrier, Ambulance, Shelter Carrier and Armored Armament Carrier. RDT&E efforts support Phase 1 of the Modernized Expanded Capacity Vehicle (MECV) Program, which will assess current light tactical vehicle survivability technologies through vehicle testing and modeling and simulation efforts. RDT&E efforts also support automotive improvements as a risk mitigation strategy for Diminishing Manufacturing Sources and material shortages due to halting new HMMWV production, and reductions to HMMWV Recapitalization and spares.

B. Program Change Summary (\$ in Millions)	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014 Base</u>	<u>FY 2014 OCO</u>	<u>FY 2014 Total</u>
Previous President's Budget	69.981	0.000	0.000	-	0.000
Current President's Budget	68.442	0.000	0.000	-	0.000
Total Adjustments	-1.539	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.539	-			

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COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ^{##}	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
E40: LTV Prototype	-	68.442	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles												
# FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012												
## The FY 2014 OCO Request will be submitted at a later date												
A. Mission Description and Budget Item Justification												
The High Mobility Multipurpose Wheeled Vehicle (HMMWV) is a lightweight, high performance, four-wheel drive, air transportable and air droppable, high mobility tactical wheeled vehicle. The HMMWV consists of a basic design with several variants including Cargo/Utility, Armament Carrier, Ambulance, Shelter Carrier and Armored Armament Carrier. RDT&E efforts support Phase 1 of the Modernized Expanded Capacity Vehicle (MECV) Program, which will assess current light tactical vehicle survivability technologies through vehicle testing and modeling and simulation efforts. RDT&E efforts also support automotive improvements as a risk mitigation strategy for Diminishing Manufacturing Sources and material shortages due to halting new HMMWV production, and reductions to HMMWV Recapitalization and spares.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2012	FY 2013	FY 2014
Title: MECV-S (Survivability) Program										20.000	0.000	0.000
Articles:										0		
Description: MECV-S Planning and Development												
FY 2012 Accomplishments: Funding was provided for MECV-S												
Title: MECV-A (Automotive and Mobility Improvements)										20.000	0.000	0.000
Articles:										0		
Description: To provide an approved sustainment alternatives to the current High Mobility Multipurpose Wheeled Vehicle (HMMWV) Expanded Capacity Vehicle (ECV)												
FY 2012 Accomplishments: Government technical data package												
Title: The remaining is excess to the program										28.442	0.000	0.000
Articles:										0		
Description: The remaining is excess to the program												

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2012	FY 2013	FY 2014
<i>FY 2012 Accomplishments:</i> The remaining is excess to the program						
Accomplishments/Planned Programs Subtotals				68.442	0.000	0.000

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• DV0230: <i>HMMWV</i>	4.313	271.000								0.000	275.313
<i>RECAPITALIZATION PROGRAM</i>											
<i>DV0230 OPA</i>											
Remarks											
D. Acquisition Strategy											
<p>MECV-S: The acquisition strategy for Phase 1 of the Modernized Expanded Capacity Vehicle (MECV) Program is to assess current light tactical vehicle survivability technologies through vehicle testing and modeling and simulation efforts. The strategy involves a best value acquisition that will evaluate proposals and test rolling chassis' per Mine Resistant Ambush Protected (MRAP) Capabilities Production Document (CPD) 1.0 blast thresholds and objectives, and current theater threats. The effort will be conducted under a full and open competition Request for Proposal (RFP), resulting in up to six Firm Fixed Price (FFP) contracts. Vendors shall also provide models to be used for modeling and simulation excursions at higher threats and different soil conditions. The output of the contracts will be advancement on Army knowledge of technologies and techniques available, and their respective unit cost impacts which are critical to a successful protection system that may be applied to future Army Program of Records.</p> <p>MECV-A: The acquisition strategy for the automotive improvements is to provide an approved sustainment alternative to the current High Mobility Multipurpose Wheeled Vehicle (HMMWV) Expanded Capacity Vehicle (ECV) engine as risk mitigation strategy for Diminishing Manufacturing Sources and material shortages due to halting new HMMWV production, and reductions to HMMWV Recapitalization and spares. The acquisition strategy is a phased approach utilizing trade studies, prototyping, and automotive performance testing. The end state is a Government Performance Specification package to support future procurement as desired. The effort is a non-developmental approach to incrementally update and improve the HMMWV.</p>											
E. Performance Metrics											
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army												DATE: April 2013			
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Product Development (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
MECV-S Prototype Vehicle Contract	C/FFP	TBD:TBD	0.000	13.000	May 2013	-		-		-		-	0.000	13.000	0.000
MECV-A HMMWV Sustainment Modification Initiative	MIPR	USMC:Quantico, VA	0.000	10.743	Oct 2012	-		-		-		-	0.000	10.743	0.000
Subtotal			0.000	23.743		0.000		0.000		0.000		0.000	0.000	23.743	0.000
Support (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
MECV-S Program Support and SSEB	MIPR	PM LTV:TACOM Warren, MI	0.101	0.200	Sep 2012	-		-		-		-	0.000	0.301	0.000
MECV-S Program Engineering Support	MIPR	TARDEC and PM LTV:TACOM Warren, MI	1.176	2.514	Sep 2012	-		-		-		-	0.000	3.690	0.000
Program Support for MECV-A HMMWV Mobility and Sustainment Initiative	MIPR	PD, LTV, TACOM:Warren, MI	0.000	1.296	Oct 2012	-		-		-		-	0.000	1.296	0.000
HMMWV STS Transmission Work Directive	SS/FFPLOE	AM General:Livonia, MI	0.000	2.276	Mar 2013	-		-		-		-	0.000	2.276	0.000
Requested funding to be reprogrammed for other Army requirements	TBD	TBD:TBD	0.000	28.442		-		-		-		-	0.000	28.442	0.000
Subtotal			1.277	34.728		0.000		0.000		0.000		0.000	0.000	36.005	0.000
Remarks Not applicable															

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Test and Evaluation (\$ in Millions)				FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Modeling & Simulation	MIPR	TARDEC and TBS:Warren, MI	0.000	1.667	Jan 2013	-		-		-		-	0.000	1.667	0.000
MECV Test Planning and Test Support	MIPR	ATC:Aberdeen Proving Grounds, MD	0.641	0.814	Oct 2012	-		-		-		-	0.000	1.455	0.000
MECV-S Testing	MIPR	ATC:Aberdeen Proving Grounds, MD	0.000	3.000	Nov 2012	-		-		-		-	0.000	3.000	0.000
HMMWV Sustainment Initiative Testing (400 hour NATO testing)	MIPR	TARDEC, TACOM:Warren, MI	0.000	1.000	Mar 2013	-		-		-		-	0.000	1.000	0.000
Suspension Improvement Kit Testing	MIPR	TARDEC:Warren, MI	0.000	3.490	Jan 2013	-		-		-		-	0.000	3.490	0.000
Subtotal			0.641	9.971		0.000		0.000		0.000		0.000	0.000	10.612	0.000

	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	1.918	68.442	0.000	0.000	0.000	0.000	0.000	70.360	0.000

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army			DATE: April 2013		
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	FY 2012				FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018			
	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
MECV RFP / Source Selection Evaluation Board (SSEB)																												
MECV Contract Award																												
Prototype Build																												
MECV Blast Testing																												
HMMWV Sustainment/Mobility Improvements Initiative Contract Award																												
Concept Prototype Build																												
HMMWV Sustainment/Mobility Improvements Testing																												
HMMWV Sustainment/Mobility Improvements NATO Testing																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army			DATE: April 2013
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
MECV RFP / Source Selection Evaluation Board (SSEB)	2	2013	3	2013
MECV Contract Award	3	2013	3	2013
Prototype Build	3	2013	3	2013
MECV Blast Testing	4	2013	4	2013
HMMWV Sustainment/Mobility Improvements Initiative Contract Award	1	2013	1	2013
Concept Prototype Build	1	2013	4	2013
HMMWV Sustainment/Mobility Improvements Testing	1	2013	4	2013
HMMWV Sustainment/Mobility Improvements NATO Testing	4	2013	4	2013