Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

**R-1 ITEM NOMENCLATURE** 

2040: Research, Development, Test & Evaluation, Army

PE 0203735A: Combat Vehicle Improvement Programs

BA 7: Operational Systems Development

	•											
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	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	-	35.046	253.959	177.532	-	177.532	219.937	169.927	130.581	34.115	Continuing	Continuing
330: Abrams Tank Improve Prog	-	9.347	97.278	101.319	-	101.319	135.228	110.917	90.042	34.115	Continuing	Continuing
371: Bradley Improve Prog	-	11.858	82.586	76.213	-	76.213	84.709	59.010	40.539	0.000	Continuing	Continuing
DS5: Armored Multi Purpose Vehicle	-	13.841	74.095	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

<sup>&</sup>lt;sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

#### Note

The Armored Multi Purpose Vehicle Program is submitted under a new Program Element for the FY 2014 President's Budget. The previous program element was 0203735A, Project DS5, Combat Vehicle Improvement Program. The new project element is 0605028A, Project EB5, Armored Multi Purpose Vehicle (AMPV).

### A. Mission Description and Budget Item Justification

The Army has approved engineering change proposals for the Abrams and Bradley programs to restore lost platform capability and host inbound technologies.

This Program Element (PE) corrects vehicle deficiencies identified in Army operations; continues technical system upgrades to include the integration of applicable technologies on ground systems; addresses needed evolutionary enhancements to tracked combat vehicles; and develops technology improvements which have application to or insertion opportunities across multiple Ground Combat Systems vehicles. This PE provides combat effectiveness and Operating and Support (O&S) cost reduction enhancements for the Abrams tanks and Bradley Fighting Vehicles through a series of product improvements.

The strategy for Abrams and Bradley will focus on incrementally delivering capability to the warfighter to meet both near-term limitations as well as mitigating gaps and maintaining combat overmatch in the future. This effort was approved by the Army Acquisition Executive in 3Q FY 2011.

The Abrams M1A2 SEP V2 and M2/M3A3 Bradley Fighting Vehicles are at or exceeds Space, Weight, and Power-Cooling (SWaP-C) limitations. In order to host and restore lost platform capability, the Abrams Tank and Bradley Fighting Vehicle programs will execute a series of Engineering Change Proposals (ECPs) to support the current embedded systems and to facilitate integration of technologies currently in development under other existing Programs of Record. The ECPs are not intended to exceed the operational capability outlined in current system requirements documents, but rather to ensure that the existing system performance is not further degraded and that Army mission equipment packages can be integrated on the Abrams and Bradley Platforms.

The Armored Multi-Purpose Vehicle (AMPV) is a material solution to support the Armored Brigade Combat Team (ABCT) across the Spectrum of Conflict by replacing five mission roles currently performed by the M113 Family of Vehicles (FOV) and integrating the current M113 FOV Mission Equipment Package (MEP) to a modified existing vehicle platform.

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<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Army

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0203735A: Combat Vehicle Improvement Programs

BA 7: Operational Systems Development

The Armored Multi Purpose Vehicle Program is submitted under Program Element 0605028A, Project EB5 for the FY 2014 President's Budget.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	36.150	253.959	293.007	-	293.007
Current President's Budget	35.046	253.959	177.532	-	177.532
Total Adjustments	-1.104	0.000	-115.475	-	-115.475
<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	-	-			
<ul> <li>Other Adjustments 1</li> </ul>	-1.104	-	0.823	-	0.823
Other Adjustments 2	-	-	-116.298	-	-116.298

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2014 <i>P</i>	Army							<b>DATE:</b> Apr	il 2013			
APPROPRIATION/BUDGET ACT 2040: Research, Development, To		ation Army				NOMENCL 35A: Comba			PROJECT		orove Prog			
BA 7: Operational Systems Devel		ation, Anny			1	ent Program			330: Abrams Tank Improve Prog					
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost		
330: Abrams Tank Improve Prog	-	9.347	97.278	101.319	-	101.319	135.228	110.917	90.042	34.115	Continuing	Continuing		
Quantity of RDT&E Articles														

<sup>&</sup>lt;sup>#</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

### A. Mission Description and Budget Item Justification

The Army has approved engineering change proposals for the Abrams program to restore lost platform capability and host inbound technologies. The strategy for Abrams will focus on incrementally delivering capability to the warfighter to meet both near-term limitations as well as mitigating gaps and maintaining combat overmatch in the future. This effort was approved by the Army Acquisition Executive in 3Q FY 2011.

The Abrams M1A2 SEP V2 vehicle is at or exceeds Space, Weight, and Power-Cooling (SWaP-C) limitations. In order to host and restore lost platform capability, the Abrams Tank will execute a series of Engineering Change Proposals (ECPs) to support the current embedded systems and to facilitate integration of technologies currently in development under other existing Programs of Record. The ECPs are not intended to exceed the operational capability outlined in current system requirements documents, but rather to ensure that the existing system performance is not further degraded and that Army mission equipment packages can be integrated on the Abrams Platform.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Abrams Engineering Change Proposal (ECP) 1	0.818	79.355	83.900
Articles:	0	0	
<b>Description:</b> The M1A2 SEPv2 improvements implemented through the Abrams ECP 1 Program will restore lost power generation and distribution while incorporating inbound technologies currently under development under other existing Programs.			
FY 2012 Accomplishments:  Design and integration of ECP 1 technologies			
FY 2013 Plans: The largest portion of sub-system integration will be executed in FY 2013 with the confirmation of the preliminary design at the Preliminary Design Review. This will quickly be followed by the Critical Design Review in 2Q FY 2014, finalizing the system baseline.			
FY 2014 Plans: The Critical Design Review will occur in 2QFY2014. This will finalize the system baseline and initiate technology integration of Joint Tactical Radio System Handheld Manpack Small (JTRS-HMS) and Joint Battle Command-Platform (JBC-P) to enable			

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<sup>\*\*\*</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE: A	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development		PROJECT 330: Abrams Tank Improve Prog			
B. Accomplishments/Planned Programs (\$ in Millions, Article C	Quantities in Each)	Γ	FY 2012	FY 2013	FY 2014
network compatibility, Power Generation/Distribution (battery monit auxiliary power unit, ammunition data link, armor protection upgrad V3, and Line replacement modules as well as the start of nine (9) p	e, Counter RCIED Electronics Warfare System (CREW) Do	uke			
Title: Program Management Office (PMO) Support	Arti	icles:	7.555 0	15.934 0	15.46
<b>Description:</b> Program Management Office Support includes System travel and other support costs required to effectively manage the program of					
FY 2012 Accomplishments: System Engineering and Program Management Office Support to e	ffectively manage the program.				
FY 2013 Plans: Systems Engineering and Program Management Office Support to	effectively manage the program.				
<b>FY 2014 Plans:</b> Systems Engineering and Program Management Office Support to	effectively manage the program.				
Title: Test & Evaluation	Arti	icles:	0.974 0	1.989 0	1.952
Description: Test and Evaluation					
FY 2012 Accomplishments: Test & Evaluation efforts to support system level test events and plants.	anning and development of test documentation				
FY 2013 Plans: Test & Evaluation efforts to support system level test events and plants.	anning and development of test documentation				
FY 2014 Plans: Test & Evaluation efforts to support system level test events and plants.	anning and development of test documentation				
	Accomplishments/Planned Programs Subt	otals	9.347	97.278	101.319

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PE 0203735A: Combat Vehicle Improvement Programs

Exhibit R-2A, RDT&E Project J	u <b>stification</b> : PB	2014 Army						DATE: April 2013			
APPROPRIATION/BUDGET AC 2040: Research, Development, T		. Armv			EM NOMEN	ICLATURE mbat Vehicle	PROJEC 330: Abra	=	nprove Prog		
BA 7: Operational Systems Deve		, ,			vement Prog				,		
C. Other Program Funding Sun	nmary (\$ in Mill	ions)									
			FY 2014	FY 2014	FY 2014					Cost To	
<u>Line Item</u>	FY 2012	FY 2013	Base	OCO	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	<b>Complete</b>	<b>Total Cost</b>
<ul> <li>Abrams Upgrade Program:</li> </ul>	436.329	74.433								0.000	510.762
Abrams Upgrade Program											
(GA0750) WTCV											
M1 Abrams Tank Mod (GA070)	0): 131.098	129.090	178.100		178.100	180.000	202.000	215.000	460.000	1,993.900	3,489.188
Abrams Vehicle Modification											
(GA0700) WTCV											
<ul> <li>Spares (Initial) Abrams Upgrad</li> </ul>	e: 7.219									0.000	7.219
Spares (Initial) Abrams Upgrade											
(GE0161) WTCV											

#### Remarks

## D. Acquisition Strategy

Abrams Engineering Change Proposal (ECP) 1: Research & Development Contract - Sole Source, Cost Plus Incentive Fee (CPIF) Production Contract - Sole Source, Firm Fixed Price

#### 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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DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE **PROJECT** 2040: Research, Development, Test & Evaluation, Army PE 0203735A: Combat Vehicle 330: Abrams Tank Improve Prog BA 7: Operational Systems Development Improvement Programs FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** FY 2012 oco FY 2013 Base Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of Cost Category Item & Type Activity & Location Years Cost Date Date Cost Date Cost Date Complete Cost Contract Cost Cost General Abrams Engineering Dynamics Land SS/CPIF 89.875 0.818 Sep 2012 79.355 Jan 2013 83.900 253.948 83.900 Jan 2014 0.000 0.000 Change Proposal (ECP) 1 Systems:Sterling Heights, MI Subtotal 89.875 0.818 79.355 83.900 0.000 83.900 0.000 253.948 0.000 FY 2014 FY 2014 FY 2014 Support (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract **Program Management** SS/LH 22.638 7.555 Dec 2011 Dec 2012 15.467 Dec 2013 Various:Various 15.934 15.467 Continuing Continuing Continuing Office (PMO)Support 22.638 0.000 Subtotal 7.555 15.934 15.467 15.467 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) oco FY 2012 FY 2013 Base Total Contract Target Method All Prior **Cost To** Performing Award Award Award Award Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract Aberdeen Proving Ground: Yuma Advance Technology 1.952 Continuing Continuing Continuing Various Proving Ground: 8.226 0.974 Feb 2012 1.989 Jan 2013 1.952 Feb 2014 Preparation and Testing White Sands Missile Range,: Various Subtotal 8.226 0.974 1.989 1.952 0.000 1.952 Target All Prior FY 2014 FY 2014 FY 2014 **Cost To** Total Value of Years FY 2012 FY 2013 Base oco Total Complete Cost Contract 120.739 9.347 97.278 101.319 0.000 **Project Cost Totals** 101.319

Remarks

PE 0203735A: Combat Vehicle Improvement Programs Army

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Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY
2040: Research, Development, Test & Evaluation, Army
BA 7: Operational Systems Development

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0203735A: Combat Vehicle
Improvement Programs

PROJECT
330: Abrams Tank Improve Prog

		FY 2012			FY 2013		3	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
Development Contract Award															,		·	·	·							·		
Engineering & Manufacturing Development																												
Preliminary Design Review (PDR)																												
Critical Design Review (CDR)																												
Production Contract Award																												

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

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

PE 0203735A: Combat Vehicle

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0203735A: Combat Vehicle
330: Abrams Tank Improve Prog

## Schedule Details

Improvement Programs

	St	End		
Events	Quarter	Year	Quarter	Year
Development Contract Award	4	2012	4	2012
Engineering & Manufacturing Development	4	2012	3	2018
Preliminary Design Review (PDR)	4	2013	4	2013
Critical Design Review (CDR)	2	2014	2	2014
Production Contract Award	3	2018	3	2018

BA 7: Operational Systems Development

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2014 <i>F</i>	Army							DAIE: Apr	11 2013	
APPROPRIATION/BUDGET AC 2040: Research, Development, To BA 7: Operational Systems Development		PE 020373	NOMENCL 35A: Comba ent Progran	at Vehicle	PROJECT 371: Bradle	T dley Improve Prog						
COST (\$ in Millions)	All Prior Years		FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
371: Bradley Improve Prog	-	11.858	82.586	76.213	-	76.213	84.709	59.010	40.539	0.000	Continuing (	Continuing
Quantity of RDT&E Articles												

<sup>\*</sup>FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

### A. Mission Description and Budget Item Justification

The M2/M3A3 Bradley Fighting Vehicle is at or exceeds Space, Weight, and Power-Cooling (SWAP-C) limitations. To restore lost platform capability and to host other Army Existing Programs of Record, the Bradley Fighting Vehicle program shall execute a series of Engineering Change Proposals (ECPs). ECP 1 improves vehicle's track and suspension while ECP 2 improves the power train and electrical system to enable the A3 fleet to host inbound technologies from Army Program of Records, including Joint Tactical Radio System (JTRS) and Force XXI Battle Command- Brigade and Below (FBCB2). The ECPs are not intended to exceed the operational capability outlined in current system requirement documents, but rather to ensure that the existing system performance is not further degraded and that Army mission equipment packages can be integrated on the Bradley platform.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
Title: Bradley ECP Program	3.821	72.586	63.623
Articles:	0	0	
<b>Description:</b> The Bradley Fighting Vehicle System (BFVS) improvements implemented through the Engineering Change Proposal (ECP) Program will focus on restoring lost platform capability to support Army inbound technologies and to facilitate integration of technologies currently in development under other existing Programs of Record.			
FY 2012 Accomplishments:  Award major contracts to begin design and integration of subsystems focusing on restoring space, weight and power limitations.			
FY 2013 Plans: Bradley Modernization - The Bradley Fighting Vehicle System (BFVS) improvements implemented through the Engineering Change Proposal (ECP) Program will focus on restoring lost platform capability to support Army inbound technologies and to facilitate integration of technologies currently in development under other existing Programs of Record.			
FY 2014 Plans: Continue design and integration of subsystems with the Preliminary Design Review. Qualification of subsystems leading towards Critical Design Review in 3rd Qtr FY 2014.			
Title: Support Costs	7.237	10.000	7.518
Articles:	0	0	

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<sup>\*\*\*</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army			DATE:	April 2013	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 7: Operational Systems Development	<b>PROJE</b> 371: <i>Bra</i>		T ley Improve Prog		
B. Accomplishments/Planned Programs (\$ in Millions, Article C	Quantities in Each)		FY 2012	FY 2013	FY 2014
<b>Description:</b> Government System Engineering and Program Mana Government salaries, travel and the facilities required to effectively	-				
FY 2012 Accomplishments: Government System Engineering and Program Management Supportravel and the facilities required to effectively manage the program.	<del>-</del>	alaries,			
FY 2013 Plans: Support Costs - Government System Engineering and Program Ma Government salaries, travel and the facilities required to effectively	•	of			
FY 2014 Plans: Government System Engineering and Program Management Supposalaries, travel and the facilities required to effectively manage the					
Title: Test & Evaluation	,	Articles:	0.800 0	0.000	5.072
Description: Test & Evaluations efforts support sub-system test ev	rents and planning and development of test documentat	ion.			
FY 2012 Accomplishments: Test & Evaluations efforts support system sub-system test events a	and planning and development of test documentation.				
FY 2014 Plans: Test & Evaluations efforts support system sub-system test events a	and planning and development of test documentation.				
	Accomplishments/Planned Programs St	ubtotals	11.858	82.586	76.213

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

			FY 2014	FY 2014	FY 2014					Cost 10	
<u>Line Item</u>	FY 2012	FY 2013	<b>Base</b>	<u>000</u>	<u>Total</u>	FY 2015	FY 2016	FY 2017	FY 2018	<b>Complete</b>	<b>Total Cost</b>
GZ2400: Bradley Program (MOD)	250.710	148.193	158.000		158.000	158.000	209.000	478.505	857.546	2,109.000	4,368.954

#### **Remarks**

## D. Acquisition Strategy

Product Manager Bradley will execute an Engineering Change Proposal (ECP) reestablishing Space, Weight, Power and Cooling (SWAP-C) to facilitate integration of technologies being developed under existing Programs of Record (POR). The proposed ECP will restore lost capability, not to exceed operational envelopes outlined

PE 0203735A: Combat Vehicle Improvement Programs Army

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army									
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT							
2040: Research, Development, Test & Evaluation, Army	PE 0203735A: Combat Vehicle	371: Bradley Improve Prog							
BA 7: Operational Systems Development	Improvement Programs								
in current approved requirement documents. The ECP is schedule vehicle to host Army directed inbound technologies with no further incentive fee contract to the current platform Original Equipment M	performance degradation to the vehicle. This ECF								
E. Performance Metrics									
Performance metrics used in the preparation of this justification ma	aterial may be found in the FY 2010 Army Perform	ance Budget Justification Book, dated May 201							

PE 0203735A: Combat Vehicle Improvement Programs Army

DATE: April 2013 Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army **R-1 ITEM NOMENCLATURE** APPROPRIATION/BUDGET ACTIVITY **PROJECT** 2040: Research, Development, Test & Evaluation, Army PE 0203735A: Combat Vehicle 371: Bradley Improve Prog BA 7: Operational Systems Development Improvement Programs FY 2014 FY 2014 FY 2014 **Product Development (\$ in Millions)** FY 2012 oco FY 2013 Base Total Contract Target Method Performing All Prior Award Award Award Award **Cost To** Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Complete Cost Contract Cost **Bradley Modernization** TBD PMO:Warren, MI 79.009 0.000 79.009 0.000 Program L3COM:Muskegon, Non Recurring Engineering SS/CPFF 0.000 2.202 Aug 2013 6.237 Mar 2014 13.525 Continuing 6.237 5.086 BAE:Sterling SS/CPIF 0.000 3.821 Sep 2012 70.384 May 2013 57.386 Mar 2014 145.447 277.038 0.000 Non Recurring Engineering 57.386 Heights, MI Subtotal 79.009 3.821 72.586 63.623 0.000 63.623 150.533 369.572 FY 2014 FY 2014 FY 2014 Support (\$ in Millions) FY 2012 FY 2013 Base oco Total Contract **Target** Method Performing All Prior Award Award Award Award **Cost To** Value of Total **Cost Category Item** & Type Activity & Location Cost Cost Cost Cost Complete Contract Years Date Date Date Date Cost Cost PMO:Bradley ECP MIPR 3.061 Dec 2012 PMO 3.500 Dec 2011 4 000 2.600 Dec 2013 2.600 10.400 23.561 Continuing Program Various:Bradley ECP Government Engineering 4.176 Dec 2011 4.918 Dec 2013 **MIPR** 11.043 6.000 Dec 2012 4.918 13.090 39.227 Continuing Program Support Subtotal 14.543 7.237 10.000 0.000 7.518 23.490 7.518 62.788 FY 2014 FY 2014 FY 2014 Test and Evaluation (\$ in Millions) FY 2012 FY 2013 oco Total Base Contract Target Method All Prior **Cost To** Performing Award Award Award Award Total Value of **Cost Category Item** & Type Activity & Location Years Cost Date Cost Date Cost Date Cost Date Cost Complete Cost Contract

												Target
	All Prior					FY 2014	FY 2	014	FY 2014	Cost To	Total	Value of
	Years	FY 2	012	FY 2	2013	Base	oc	0	Total	Complete	Cost	Contract
Project Cost Totals	93.552	11.858		82.586		76.213	0.000		76.213	215.363	479.572	

0.000

5.072

5.072

Remarks

Army

Component Qualification

PE 0203735A: Combat Vehicle Improvement Programs

MIPR

Various:Test Sites

Subtotal

0.000

0.000

0.800

0.800

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0.000

5.072

5.072

41.340

41.340

47.212

47.212

0.000

0.000

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Army

APPROPRIATION/BUDGET ACTIVITY
2040: Research, Development, Test & Evaluation, Army
BA 7: Operational Systems Development

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0203735A: Combat Vehicle
Improvement Programs

PROJECT
371: Bradley Improve Prog

		FY 2012				FY 2013			FY 2014				FY 2015			FY 2016				FY 2017			•	FY 2018				
	1	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
System Requirements Review			,							,	·	,																
Preliminary Design Review																												
Critical Design Review																												
Component Qualification Testing																												
Contractor Vehicle Testing																												
Government Vehicle Testing																												

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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

2040: Research, Development, Test & Evaluation, Army PE 0203735A: Combat Vehicle 371: Bradley Improve Prog

BA 7: Operational Systems Development Improvement Programs

## Schedule Details

	Si	Start					
Events	Quarter	Year	Quarter	Year			
System Requirements Review	2	2013	2	2013			
Preliminary Design Review	4	2013	4	2013			
Critical Design Review	3	2014	3	2014			
Component Qualification Testing	3	2014	2	2015			
Contractor Vehicle Testing	2	2015	2	2016			
Government Vehicle Testing	2	2016	2	2018			

Exhibit R-2A, RDT&E Project J	Exhibit R-2A, RDT&E Project Justification: PB 2014 Army											
APPROPRIATION/BUDGET AC 2040: Research, Development, 7 BA 7: Operational Systems Deve	PE 020373	NOMENCL 35A: Comba ent Program	at Vehicle		PROJECT DS5: Armored Multi Purpose Vehicle							
COST (\$ in Millions)	All Prior Years		FY 2013 <sup>#</sup>	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
DS5: Armored Multi Purpose Vehicle	-	13.841	74.095	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles												

<sup>\*</sup> FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

## **Note**

The new program element is 0605028A, Project EB5, Armored Multi Purpose Vehicle (AMPV). The previous program element was 0203735A, Project DS5, Combat Vehicle Improvement Program.

## A. Mission Description and Budget Item Justification

The Armored Multi Purpose Vehicle Program is submitted under Program Element 0605028A, Project EB5 for the FY2014 President's Budget.

B. Accomplication farmed Fregrams (\$ in minions, Article Quantities in Each)	1 1 2012	1 1 2013	1 1 2014
Title: Armored Multi-Purpose Vehicle	13.841	74.095	0.000
Articles:	0	0	
<b>Description:</b> The Armored Multi-Purpose Vehicle (AMPV) is a material solution to support the Heavy Brigade Combat Team (HBCT) across the Spectrum of Conflict by replacing five mission roles currently performed by the M113 Family of Vehicles (FOV) and integrating the current M113 FOV Mission Equipment Packages (MEP) to a modified existing vehicle platform.			
FY 2012 Accomplishments:  The Training and Doctrine Command Analysis Center completed the AMPV Analysis of Alternatives (AoA) and determined a tracked vehicle was the best solution. In preparation for a competitive acquisition a performance specification was developed for incorporation into the Request for Proposal (RFP). PM AMPV also held an Industry Day and Defense Acquisition University (DAU) workshop to support a competitive acquisition approach. Government furnished material is being prepped by Red River Army Depot (RRAD) and Anniston Army Depot (ANAD) and a Bradley chassis Technical Data Package (TDP) is being validated to make available to potential contractors during proposal development. FY 2012 also included preparation of Milestone Documents in anticipation of an FY12 Defense Acquision Board (DAB) Integrated Process Review (IPR), and an Integrated Support Plan to support staffing of the Capabilities Development Document. Test support activities were funded in support of the Test and Evaluation Master Plan preparation (TEMP).  FY 2013 Plans:			
1 1 2013 1 Idilo.			

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FY 2012

FY 2013

FY 2014

<sup>##</sup> The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Army	DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0203735A: Combat Vehicle	DS5: Armored Multi Purpose Vehicle
BA 7: Operational Systems Development	Improvement Programs	

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2012	FY 2013	FY 2014
In FY 2013 funding will be used for continued support of Milestone Documentation preparation, configuration/data management efforts for performance specification updates, RFP development and staffing, test support activities for development, coordination and staffing of the TEMP and Government Furnished Material (GFM) preparation. Request for Proposal will be released and a Source Selection Evaluation Board will be stood up for contractor proposal evaluation.			
Accomplishments/Planned Programs Subtotals	13.841	74.095	0.000

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

N/A

# Remarks

# D. Acquisition Strategy

N/A

## 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

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0203735A: Combat Vehicle

Improvement Programs

PROJECT

DS5: Armored Multi Purpose Vehicle

DATE: April 2013

Product Developmer	Product Development (\$ in Millions)			FY 2	2012	FY 2	2013	FY 2 Ba			FY 2014 OCO				
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
AMPV Development	MIPR	Other Government Agencies:Various locations	0.000	8.263	Sep 2012	57.101	Dec 2012	-		-		-	0.000	65.364	0.000
		Subtotal	0.000	8.263		57.101		0.000		0.000		0.000	0.000	65.364	0.000

#### Remarks

Armored Multi Purpose Vehicle Tech data and system level product development costs.

Support (\$ in Million	ns)				FY 2012		FY 2014 FY 2013 Base						FY 2013						FY 2014 OCO				
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								
AMPV Documentation	C/FFP	Camber:Michigan	0.000	1.000	May 2012	1.016	Jan 2013	-		-		-	0.000	2.016	0.000								
Program Management Office (PMO)	MIPR	PMO:Warren, MI	0.000	1.790	Feb 2012	2.973	Dec 2012	-		-		-	0.000	4.763	0.000								
Other Program Support	MIPR	OGAs:Various locations	0.000	2.788	Feb 2012	13.005	Feb 2013	-		-		-	0.000	15.793	0.000								
		Subtotal	0.000	5.578		16.994		0.000		0.000		0.000	0.000	22.572	0.000								

#### Remarks

**AMPV Support Costs** 

									Target
	All Prior	<b>5</b> 1/ 00 / 0	<b>5</b> 1/ 00 / 0	FY 2014	FY 2014	FY 2014	Cost To	Total	Value of
	Years	FY 2012	FY 2013	Base	000	Total	Complete	Cost	Contract
Project Cost Totals	0.000	13.841	74.095	0.000	0.000	0.000	0.000	87.936	0.000

#### Remarks

PE 0203735A: Combat Vehicle Improvement Programs Army

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