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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 BA 4: Advanced Component Development & Prototypes (ACD&P)					PE 0603653A: ADVANCED TANK ARMAMENT SYSTEM (ATAS)							
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	-	62.343	14.347	49.989	-	49.989	58.600	57.400	40.000	30.000	Continuing	Continuing
C03: Interim Armored Vehicle (IAV) Family	-	21.779	14.347	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
C51: STRYKER MODERNIZATION	-	40.564	0.000	49.989	-	49.989	58.600	57.400	40.000	30.000	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

This Program Element (PE) supports the development of the Stryker Family of vehicles (FOV) in two projects:

The Interim Amored Vehicle Family Project (C03) supports the use of the common platform/common chassis design reducing requirements for repair parts and logistics support in the area of operations. Funding in this project will continue to address Overseas Contingency Operations (OCO), survivability, Operational Needs Statement (ONS) issues.

Engineering Change Proposal (ECP) (C51), will enable the Stryker FOV to host the future network without further degrading vehicle performance. The upgrade will increase available electrical power while ensuring adequate mechanical power, weight margin, and cooling. Combined with an in-vehicle network, this will ensure the FOV can host the future network while retaining its protection and mobility.

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	64.408	14.347	5.820	-	5.820
Current President's Budget	62.343	14.347	49.989	-	49.989
Total Adjustments	-2.065	0.000	44.169	-	44.169
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-2.065	-			
• Other Adjustments 1	-	-	44.169	-	44.169

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army										DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603653A: ADVANCED TANK ARMAMENT SYSTEM (ATAS)				PROJECT C03: Interim Armored Vehicle (IAV) Family			
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
C03: Interim Armored Vehicle (IAV) Family	-	21.779	14.347	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												
Note Not applicable for this item.												
A. Mission Description and Budget Item Justification The Interim Armored Vehicle (IAV) Family Project (C03) supports the development of the Stryker Family of Vehicles (FOV) consisting of 10 variants in the flat bottom configuration. The National Military Strategy requires an Army that is rapidly deployable and strategically responsive across the full spectrum of operations. The Stryker Brigade Combat Team encompasses capabilities and characteristics that are needed but were not available until the first SBCT was declared operationally capable. The Stryker enables the Army to respond immediately to urgent operational requirements. Funding in this project will continue to address survivability enhancements and Operational Needs Statement (ONS) issues.												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Development Engineering Articles: Description: Funding is provided for the following effort FY 2012 Accomplishments: Undergo development and engineering for integration of Targeting Under Armor for the Stryker FSV which includes Sensor Package Vendor Source Selection and initial RWS Integration analysis. FY 2013 Plans: Undergo development and engineering for integration of Targeting Under Armor for the Stryker FSV which includes Integration design, Logistic design, hardware procurement and prototype vehicle build and test.									20.892	5.424	0.000	
									0	0		
Title: Government Engineering and Program Management Articles: Description: Funding is provided for the following effort									0.517	0.672	0.000	
									0	0		

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)				R-1 ITEM NOMENCLATURE PE 0603653A: ADVANCED TANK ARMAMENT SYSTEM (ATAS)				PROJECT C03: Interim Armored Vehicle (IAV) Family			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014
FY 2012 Accomplishments: Funding for Government Systems Engineering and Program Management which includes labor, travel, training, supplies equipment.											
FY 2013 Plans: Funding for Government Systems Engineering and Program Management which includes labor, travel, training, supplies and equipment.											
Title: Contractor Support to Test				Articles:				0.000	1.293 0	0.000	
Description: Funding is provided for:											
FY 2013 Plans: Contractor Support to TUA testing											
Title: Government Test and Evaluation				Articles:				0.370 0	6.958 0	0.000	
Description: Funding is provided for the following effort											
FY 2012 Accomplishments: Government TUA test Execution											
FY 2013 Plans: Government TUA test execution											
Accomplishments/Planned Programs Subtotals									21.779	14.347	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
• G85100: Stryker Vehicle (G85100)	606.984	286.818	374.100		374.100	479.176	185.131			2,541.543	4,473.752
• GM0100: Stryker MOD (GM0100)	51.497	60.881	20.522		20.522	69.686	66.792	383.879	477.000	466.065	1,596.322
• GE0180: Spares and Repair Parts (WTCV) (GE0180)	99.624	31.217								211.066	341.907

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army								DATE: April 2013		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603653A: <i>ADVANCED TANK</i> <i>ARMAMENT SYSTEM (ATAS)</i>			PROJECT C03: <i>Interim Armored Vehicle (IAV) Family</i>			
C. Other Program Funding Summary (\$ in Millions)										
			<u>FY 2014</u>	<u>FY 2014</u>	<u>FY 2014</u>					<u>Cost To</u>
<u>Line Item</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Complete Total Cost</u>
Remarks										
A Full-Rate Production Decision review for the Nuclear/Biological/Chemical Reconnaissance Vehicle (NBCRV) was completed in 1QFY12. Stryker Mod (GM0100) in FY 17 consists of \$55.000 million for modifications and \$328.879 million for ECP retrofits, FY 18 consists of \$65.000 million for modifications and \$412.000 million for ECP retrofits.										
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												DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)						R-1 ITEM NOMENCLATURE PE 0603653A: ADVANCED TANK ARMAMENT SYSTEM (ATAS)						PROJECT C03: Interim Armored Vehicle (IAV) Family			
Management Services (\$ 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
Project Management Office (PMO) - Base (C03)	Various	TACOM,;MI	55.755	0.517		0.672		-		-		-	0.000	56.944	0.000
Subtotal			55.755	0.517		0.672		0.000		0.000		0.000	0.000	56.944	0.000
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
Stryker Development/Engineering	Various	GDLS:MI	436.319	19.624		-		-		-		-	0.000	455.943	0.000
Targeting Under Armor Development /Engineering	Various	GDLS:MI	0.000	1.268	Sep 2012	5.424	Sep 2013	-		-		-	0.000	6.692	0.000
Subtotal			436.319	20.892		5.424		0.000		0.000		0.000	0.000	462.635	0.000
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
Targeting Under Armor Testing	Various	Various Test Centers:Multiple	0.000	0.370		6.958		-		-		-	0.000	7.328	0.000
Stryker Development Testing	Various	Various Test Centers:Multiple	202.893	-		-		-		-		-	0.000	202.893	0.000
NBCRV Operational Test and Evaluation	Various	Various Test Centers:Various	5.177	-		-		-		-		-	0.000	5.177	0.000
SRAT Testing	Various	Various Test Centers:Various	8.572	-		-		-		-		-	0.000	8.572	0.000
Contractor Support to Test	Various	GDLS:MI	30.829	-		1.293		-		-		-	0.000	32.122	0.000
Subtotal			247.471	0.370		8.251		0.000		0.000		0.000	0.000	256.092	0.000

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Army											DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603653A: ADVANCED TANK ARMAMENT SYSTEM (ATAS)					PROJECT C03: Interim Armored Vehicle (IAV) Family				
	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	739.545	21.779		14.347		0.000		0.000		0.000	0.000	775.671	0.000	

Remarks

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army									DATE: April 2013			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603653A: ADVANCED TANK ARMAMENT SYSTEM (ATAS)				PROJECT C51: STRYKER MODERNIZATION			
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
C51: STRYKER MODERNIZATION	-	40.564	0.000	49.989	-	49.989	58.600	57.400	40.000	30.000	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												
Stryker Modernization (C51) will enable the Stryker FOV to host the future network without further degrading vehicle performance. The upgrade will increase available electrical power while ensuring adequate mechanical power, weight margin, and cooling. Combined with an in-vehicle network, this will ensure the FOV can host the future network while retaining its protection and mobility. Funding in FY14-18 supports continued development engineering efforts on the Stryker Engineering Change Proposal (ECP).												
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)									FY 2012	FY 2013	FY 2014	
Title: Stryker ECP Development (Engineering / Prototypes) Description: Funding is provided for the following efforts FY 2012 Accomplishments: Development engineering for the Stryker ECP upgrades for engine, alternator and suspension on DVH variants and the in-vehicle network on both DVH and FB variants to allow integration of the future Network without additional degradation to overall system performance. FY 2014 Plans: Continuing development engineering for the Stryker ECP upgrades and start procuring prototypes for the engine, alternator and suspension on DVH variants and the in-vehicle network on both DVH and FB variants.									Articles:	37.414 0	0.000	46.036
Title: Training Device Updates Description: Funding is provided for the following effort FY 2014 Plans: Begin the development and design of training device upgrades to reflect the ECP upgrades to the vehicles.												
Title: Government Engineering and Program Management									Articles:	3.150 0	0.000	2.791

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)					R-1 ITEM NOMENCLATURE PE 0603653A: ADVANCED TANK ARMAMENT SYSTEM (ATAS)					PROJECT C51: STRYKER MODERNIZATION		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)										FY 2012	FY 2013	FY 2014
Description: Funding is provided for the following effort												
FY 2012 Accomplishments: Continuing Government Systems Engineering and Program Management which includes labor, travel, training, supplies and equipment.												
FY 2014 Plans: Continuing Government Systems Engineering and Program Management which includes labor, travel, training, supplies and equipment.												
Accomplishments/Planned Programs Subtotals										40.564	0.000	49.989
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	
• G85100: Stryker Vehicle (G85100)	606.984		374.100		374.100	479.176	185.131			2,541.543	4,186.934	
• GM0100: Stryker MOD (GM0100)	51.497		20.522		20.522	69.686	66.792	383.879	477.000	466.065	1,535.441	
• GE0180: Stryker Spares and Repair Parts (GE0180)	99.624									211.066	310.690	
Remarks												
The Phase III (Production) decision point associated with the Stryker ECP will be the first point at which WTCV funds will be required. Currently, funding begins in FY17 for this effort. Stryker MOD (GM0100) in FY17 consists of \$55.000 million for modifications and \$328.879 million for ECP retrofits, FY18 consists of \$65.000 million for modifications and \$412.000 million for ECP retrofits.												
D. Acquisition Strategy												
The Stryker upgrade effort is to buy back the vehicle space, weight, and power margin lost due to the addition of numerous kits in response to nine years of war (15-combat rotations & 27 million total miles), in order to allow integration of the future network (as directed by VCSA in August 2011) without further degrading the performance of the platform. In May 2012, Phase I (Development) of the Stryker ECP program was approved, permitting preliminary design and integration efforts on both the Flat Bottom (FB) and Double-V Hull (DVH) variants. The Phase II (Continued Engineering Design/Logistics Design/Prototype Build/Test) decision is scheduled for 14 March 2013. This decision will select what technologies will go forward to Preliminary Design Review (PDR) and the variants to which the technologies will be applied (i.e., Flat Bottom and/or Double V Hull). Based on the Phase II decision, development engineering will continue to support Preliminary Design Review (PDR), prototype build, and test and evaluation. The Phase III (Production) decision point will determine the production requirements of the technologies selected in Phase II.												

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Exhibit R-2A, RDT&E Project Justification: PB 2014 Army		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603653A: <i>ADVANCED TANK ARMAMENT SYSTEM (ATAS)</i>	PROJECT C51: <i>STRYKER MODERNIZATION</i>

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			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)						R-1 ITEM NOMENCLATURE PE 0603653A: ADVANCED TANK ARMAMENT SYSTEM (ATAS)						PROJECT C51: STRYKER MODERNIZATION			
Management Services (\$ 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
Project Management Office (PMO)	Various	TACOM:MI	2.026	3.150		-		2.791		-		2.791	21.492	29.459	0.000
Subtotal			2.026	3.150		0.000		2.791		0.000		2.791	21.492	29.459	0.000
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
Stryker ECP Development	Various	GDLS:MI	255.283	37.414		-		46.036	Apr 2014	-		46.036	60.189	398.922	0.000
Training Device Updates	PO	PEO STRI:FL	0.000	-		-		1.162		-		1.162	10.798	11.960	0.000
Subtotal			255.283	37.414		0.000		47.198		0.000		47.198	70.987	410.882	0.000
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
Stryker ECP Testing	Various	Various Test Centers:Various	0.905	-		-		-		-		-	61.724	62.629	0.000
Contractor Support to Test	SS/TBD	GDLS, MI:Various	0.000	-		-		-		-		-	31.175	31.175	0.000
Test Vehicle Refurbishment	SS/TBD	GDLS, MI:Various	0.000	-		-		-		-		-	26.990	26.990	0.000
Subtotal			0.905	0.000		0.000		0.000		0.000		0.000	119.889	120.794	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			258.214	40.564		0.000		49.989		0.000		49.989	212.368	561.135	0.000
Remarks															

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

DATE: April 2013

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army
BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE

PE 0603653A: *ADVANCED TANK
ARMAMENT SYSTEM (ATAS)*

PROJECT

C51: STRYKER MODERNIZATION

[illegible]

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Exhibit R-4A, RDT&E Schedule Details: PB 2014 Army			DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603653A: <i>ADVANCED TANK</i> <i>ARMAMENT SYSTEM (ATAS)</i>	PROJECT C51: <i>STRYKER MODERNIZATION</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Army System Acquisition Review Counsel (ASARC) Phase I	2	2012	2	2012
Army System Acquisition Review Counsel (ASARC) Phase II	2	2013	2	2013
Stryker Engineering Change Proposal (ECP)	1	2014	4	2018
ECP Preliminary Design Review	4	2013	4	2013
ECP Critical Design Review	3	2014	3	2014
Army System Acquisition Review Counsel (ASARC) Phase III	2	2017	2	2017