Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0604660A: FCS Manned Grd Vehicles & Common Grd Vehicle

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	760.744	275.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	1,035.860
FC1: FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE	760.744	275.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Future Combat Systems (FCS) Manned Ground Vehicles (MGV) Core Program of Record was terminated in July 2009. FY09 effort prior to termination included completion of design activities leading up to and including MGV SoS PDRs. Associated activities with building Automotive Test Rigs and firing platforms to demonstrate and conduct initial proof of principle on common engine and transmission components long with gun and auto-loading principles. Stop Work contractual direction was issued on June 24th 2009 and was followed by the termination letter on July 17th 2009. The termination letter directed Boeing and its One Team Partners to stop work on all MGV activities except for those items related to the Active Protection System (APS) and portions of the Hit Avoidance Systems (HAS) and Non-Line of Sight-Cannon (NLOS-C). The funding for FY10 will cover the other and special termination cost, the cost for dispositioning all program materials, to include hardware and software, and the cost of continuing the development of the APS to meet future Ground Combat Vehicle (GCV) requirements. For FY09 and prior, this program element supported the development of Manned Ground Vehicles (MGVs) (exclusive of the NLOS-C specific mission equipment). The following common MGV subsystem developments are also included, (NLOS-C common subsystems): armor, suspension, structures, defensive armament system, signature management, Nuclear, Biological, and Chemical, Vetronics, power and energy (includes hybrid electric drive), auxiliary systems and hit avoidance system. Also included in this project is mission specific equipment for the following platforms: Infantry Combat Vehicle (ICV), Mounted Combat System (MCS), Non-Line of Sight Mortar (NLOS-M), Command and Control Vehicle (C2V), Reconnaissance and Surveillance Vehicle (RSV), Field Recovery and Maintenance Vehicle (FRMV), and the Medical Vehicle (MV).

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B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	<u>FY 2010</u>	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	782.664	368.557	0.000	0.000	0.000
Current President's Budget	760.744	275.116	0.000	0.000	0.000
Total Adjustments	-21.920	-93.441	0.000	0.000	0.000
 Congressional General Reductions 		-93.441			
 Congressional Directed Reductions 		0.000			
 Congressional Rescissions 	0.000	0.000			
 Congressional Adds 		0.000			
 Congressional Directed Transfers 		0.000			
 Reprogrammings 	0.000	0.000			
 SBIR/STTR Transfer 	-21.920	0.000			

Change Summary Explanation

Change Summary Explanation: FY10: Congress decremented a portion of the Special and Other Termination costs

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)									PROJECT FC1: FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE		
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
FC1: FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE	760.744	275.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army

Not applicable to this item.

Quantity of RDT&E Articles

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	12.729	0.000	0.000	0.000	0.000
CONTRACTOR INFANTRY COMBAT VEHICLE (ICV) FY09 - Engineering & Program Management - Conducted the (ICV) PDR in 2nd qtr FY09 participated and supported FCS SoS PDR in 3rd qtr FY09. Continued to refine the ICV preliminary design of the integrated vehicle, turret, and mission equipment.					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehic Common Grd Vehicle	les &		ANNED GRD GRD VEHICL		&
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #2 CONTRACTOR INFANTRY COMBAT VEHICLE (ICV)- FY09 - Prote Media Slip Ring (MMSR), Gun Turret Drive System (GTDS), M240 Ma (ROK), and 30 mm Ammunition Handling System (AHS) prototype hard these subsystems into the ICV turret test stand and System Integration Laturret firing test stand in the SIL. Began ICV prototype assembly and fall equipment and turret. FY 2009 Accomplishments: FY 2010 Plans: FY 2011 Base Plans: FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO	chine Gun Remote Operating Kit lware brassboards, and integrated lb (SIL) activities. Fabricated the ICV	4.628	0.000	0.000	0.000	0.000
Program #3 CONTRACTOR INFANTRY COMBAT VEHICLE (ICV) FY09 - Softw (SWB2) and completed Life Cycle Architecture (LCA) review in 1st qtr Cycle (EC) 2.5 software development activity phase in 2nd qtr FY09 and development activity phase in 3rd qtr FY09. Completed re-planning of S activities - moved to beyond FY09 due to funding reduction adjustment. subsystem fault management, recovery and reporting, and support for Em	FY09. Completed SWB2 Engineering initiated SWB2 EC2.6 software oftware Build 3 (SWB3) development ICV Build 3 software provides complete	3.207	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicle Common Grd Vehicle	les &		IANNED GRD GRD VEHICL		&
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
and Constructive Training Capability) as well as integration of common cheenhancements, and close combat armament system. FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 OCO Plans:	assis capabilities for hit avoidance					
FY 2011 OCO						
Program #4 CONTRACTOR MOUNTED COMBAT SYSTEM (MCS) FY09 - Engined Conducted Preliminary Design Review (PDR) in 2nd qtr FY09 and enter or and supported FCS SoS PDR in 3rd qtr FY09. PDR confirmed alignment functional, allocated, and emerging product baselines and ensured that the pMCS requirements. Supporting this review confirmed the consistency between performance analyses and interfaces into the design. The PDR verified that acceptable mitigation plans in place in order to proceed into detailed design started the disposition process of components, materials and support equipments: FY 2009 Accomplishments: FY 2009	between the MCS requirements, preliminary design met the Army's ween requirements, architectures, t the identified technical risks had a. Conducted termination activities and	36.308	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehic Common Grd Vehicle	cles &		ANNED GRD GRD VEHICL		&
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #5 CONTRACTOR MOUNTED COMBAT SYSTEM (MCS) FY09 - Prote System (ICS) emulators. Received MCS P21 Electric Gun Turret Drive		1.615	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #6 CONTRACTOR MOUNTED COMBAT SYSTEM (MCS) FY09 - Test of Firing Platform on TARDEC's Turret Motion Based Simulator (TMB		0.707	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehic Common Grd Vehicle	les &		ANNED GRD GRD VEHICL		&
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
rounds during 3-month live fire testing of Firing Platform at Aberdeen Prov XM360 Safety Tests #4 and #5 at Aberdeen Proving Grounds.	ring Grounds. Fired 500 rounds in					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #7 CONTRACTOR MOUNTED COMBAT SYSTEM (MCS) - FY09 - Software 2 (SWB2) and completed Life Cycle Architecture (LCA) review in 1st qtr FC Cycle (EC) 2.5 software development activity phase in 2nd qtr FY09 and in development activity phase in 3rd qtr FY09. Completed re-planning of Soft activities - moved to beyond FY09 due to funding reduction adjustment. Material Beyond Line of Sight (BLOS) engagements, completes subsystem fault material and support for Embedded Training (Live, Virtual, Constructive Training Common chassis capabilities for hit avoidance enhancements, and close common chassis capabilities for hit avoidance enhancements.	FY09. Completed SWB2 Engineering ditiated SWB2 EC2.6 software atware Build 3 (SWB3) development ICS Build 3 software provides MCS magement, recovery and reporting, capability) as well as integration of	2.190	0.000	0.000	0.000	0.000
FY 2009						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicle Common Grd Vehicle	cles &	PROJECT FC1: FCS MA COMMON G			&
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #8		14.704	0.000	0.000	0.000	0.000
CONTRACTOR NLOS-M - FY09 - Engineering & Program M. Ammunition Handling (AHS), Gun Mount, Gun Pointing, Struc Detailed Design. Primary Weapon Detailed Design was completed Detailed Design. The NLOS-M Mission Module (M. completed 1st and 2nd quarter FY09, and supported FCS SoS Plant Programment (N. 1997).	etures and Twist Capsule/Slip Ring Subsystems. eted. Ammunition Handling and Primary Weapon MM) and MGV Preliminary Design Review (PDR)					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #9		1.567	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehic Common Grd Vehicle	les &		ANNED GRD GRD VEHICL		&
B. Accomplishments/Planned Program (\$ in Millions)						
•		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
CONTRACTOR NLOS-M - FY09 - Prototypes - IA&C of the Mortar completed and ready for Phase III testing. Fabrication of MFP 4 bega chassis mounted allowing the unit to be fired at maximum range and r notification.	in and completed. MFP 4 intent was to be					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #10		0.194	0.000	0.000	0.000	0.000
CONTRACTOR NLOS-M - FY09 - Test - Reliability Enhancement T conducted at the Systems Integration Facility (SIF) in Minneapolis, M (RIP) was able to cycle a total of 6821 round using threshold equipme cycle under "simulated operational conditions" at different temperatur F.	IN. The Reliability Improvement Program ent and actual tactical software. Rounds were					
FY 2009 Accomplishments: FY 2009						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicle Common Grd Vehicle	cles &		ANNED GRD GRD VEHICL		&
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO						
Program #11 CONTRACTOR NLOS-M - FY09 - Software - Continued NLOS-M Softw Life Cycle Architecture (LCA) review in 1st qtr FY09. Completed SWB2 development activity phase in 2nd qtr FY09 and initiated SWB2 EC2.6 sof 3rd qtr FY09. Completed re-planning of Software Build 3 (SWB3) develop software provides Line of Sight (LOS) fire mission operations, complete su and reporting, and support for Embedded Training (Live, Virtual, Construct integration of common chassis capabilities for hit avoidance enhancements FY 2009 Accomplishments: FY 2010 Plans: FY 2011 Base Plans: FY 2011 Base	Engineering Cycle (EC) 2.5 software tware development activity phase in oment activities. NLOS-M Build 3 obsystem fault management, recovery tive Training Capability) as well as	1.739	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehi Common Grd Vehicle	cles &	PROJECT FC1: FCS MA COMMON G			Ł
B. Accomplishments/Planned Program (\$ in Millions)			'			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO						
Program #12		11.611	0.000	0.000	0.000	0.000
CONTRACTOR COMMAND & CONTROL VEHICLE (C2V) Prepared Preliminary Design Review (PDR) artifacts for the C2' level PDR in 2nd Qtr FY09, and supported FCS SoS PDR in 3rd compliance assessment. Conducted C2V preliminary design rev Interface Control Documents (ICDs) and Critical Item Developm FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2011 Base Plans: FY 2011 Base	V mission module review in Nov 08 and vehicle d qtr FY09. Completed C2V requirements view, 1st Qtr FY09. Finalized number of C2V					
FY 2011 OCO Plans:						
FY 2011 OCO						
Program #13		0.438	0.000	0.000	0.000	0.000
CONTRACTOR COMMAND & CONTROL VEHICLE (C2V) Integration Lab (SIL) for phase 1 integration and testing of Com Intelligence, Surveillance and Reconnaissance (C4ISR) hardwar controls hardware.	mand, Control, Communications, Computers,					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehic Common Grd Vehicle	les &	PROJECT FC1: FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE		&	
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments:						
FY 2011 OCO Program #14		0.068	0.000	0.000	0.000	0.000
CONTRACTOR COMMAND & CONTROL VEHICLE (C2V) FY deconfliction phase 2 testing at EPG, Ft. Huachuca, AZ using more was used in Phase 1. MGV Rooftops are densely packaged with An system placements which could cause physical, functional, and elect was a potential for co-site interference between MGVs when in clost Deconfliction testing at EPG, Ft. Huachuca was designed for early interaction for design improvements. The objective was to increme become available and mature to increase fidelity of the overall testing integrated design of all MGV vehicles. Test results provided data to was optimized and that any electromagnetic conflicts were mitigate for antenna placement and mitigation measures applicable to other and the state of	mature communications equipment than ntennas, Sensors, Weapons, and Survivability tromagnetic conflicts. In addition, there se proximity. The three phased Rooftop and ongoing assessments of component ntally add new antennas and sensors as they ng to reduce co-site interference and influence of ensure that antenna placement on the C2V dd. Results also provided modeling information					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehic Common Grd Vehicle	eles &	& PROJECT & FC1: FCS MANNED GRD VEHICLE COMMON GRD VEHICLE			&	
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #15 CONTRACTOR COMMAND & CONTROL VEHICLE (C2V) (SWB2) and completed Life Cycle Architecture (LCA) review in Cycle (EC) 2.5 software development activity phase in 2nd qtr F development activity phase in 3rd qtr FY09. Continued integratic hardware deliveries in C2V SIL for Distributed Systems integratic (SWB3) development activities. C2V Build 3 software provides and reporting, and support for Embedded Training (Live, Virtual integration of common chassis capabilities for hit avoidance enhancements: FY 2009 Accomplishments: FY 2010 Plans: FY 2011 Base Plans: FY 2011 Base	1 1st qtr FY09. Completed SWB2 Engineering Y09 and initiated SWB2 EC2.6 software on of latest release of common/C4ISR software/ ion. Completed re-planning of Software Build 3 complete subsystem fault management, recovery , and Constructive Training Capability) as well as	0.795	0.000	0.000	0.000	0.000	

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicle Common Grd Vehicle	PE 0604660A: FCS Manned Grd Vehicles & FC1:		PROJECT FC1: FCS MANNED GRD V. COMMON GRD VEHICLE			
B. Accomplishments/Planned Program (\$ in Millions)	'		1				
•		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2011 OCO Plans: FY 2011 OCO							
Program #16		13.025	0.000	0.000	0.000	0.000	
CONTRACTOR RECONNAISSANCE & SURVEILLANCE V. Management - Conducted RSV mission module review in 1st Qt Qtr FY09. Matured RSV design for proposed Critical Design Re RSV Interface Control Documents (ICDs) and Critical Item Deve SoS PDR in 3rd qtr FY09. FY 2009 Accomplishments:	r FY09 and RSV preliminary design review, 2nd eview (CDR), 2nd Qtr FY10. Finalized several						
FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #17		0.723	0.000	0.000	0.000	0.000	
CONTRACTOR RECONNAISSANCE & SURVEILLANCE VI to populate SIL with RSV subcomponents, surrogates, or emulate CEEU, and Sensor Suite Hardware & Pre-CDR Software) in anti-	ors and other subsystems as available (GPCS, EO						

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B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2009 Accomplishments: FY 2019 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO Plans:							
FY 2011 OCO Program #18		0.064	0.000	0.000	0.000	0.000	
CONTRACTOR RECONNAISSANCE & SURVEILLANCE VEHICLE (RSV) FY09 - Test - Completed Phase I RSV Rooftop Deconfliction Test at Electronic Proving Grounds (EPG) (Nov 08), and published results for use in Modeling and Simulation (M&S) efforts on all MGV platforms. MGV Rooftops are densely packaged with Antennas, Sensors, Weapons, and Survivability system placements which could cause physical, functional, and electromagnetic conflicts. In addition, there is a potential for co-site interference between MGVs when in close proximity. The three phased Rooftop Deconfliction testing at EPG, Ft. Huachuca is designed for early and ongoing assessments of component interaction for design improvements. The objective is to incrementally add new antennas and sensors as they become available and mature to increase fidelity of the overall testing to reduce co-site interference and influence integrated design of all MGV vehicles. FY 2009 Accomplishments:							
FY 2009							
FY 2010 Plans: FY 2010							

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B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO							
		0.475	0.000	0.000	0.000	0.00	

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #20		6.238	0.000	0.000	0.000	0.000
CONTRACTOR FIELD RECOVERY & MAINTENANCE VEHICLE Program Management - Conducted CDR for brassboard hoist winch. C and supported FCS SoS PDR in 3rd qtr FY09. Refined the FRMV vehic design, structure, armor, lifting crane platform, recovery system, mission Integrated some FRMV subsystem hardware with software in the FRMV sensor and communication systems hardware and software deliveries. C to be used for stowage and MANPRINT evaluations. FY 2009 Accomplishments: FY 2010 Plans: FY 2011 Base Plans: FY 2011 Base	onducted FRMV PDR in 2nd qtr FY09, ele design in the areas on integrated a crew system, and maintenance systems.					
FY 2011 OCO Plans: FY 2011 OCO						
Program #21		3.620	0.000	0.000	0.000	0.000
CONTRACTOR FIELD RECOVERY & MAINTENANCE VEHICLE synthetic rope testing. Initiated procurement of brassboard mission equi FRMV crane test stand.	· • •					
FY 2009 Accomplishments: FY 2009						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehi Common Grd Vehicle	PE 0604660A: FCS Manned Grd Vehicles &		PROJECT FC1: FCS MANNED GRD V COMMON GRD VEHICLE		&	
B. Accomplishments/Planned Program (\$ in Millions)							
•		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO							
Program #22 CONTRACTOR FIELD RECOVERY & MAINTENANCE V FRMV Software Build 2 (SWB2) and completed Life Cycle A Completed SWB2 Engineering Cycle (EC) 2.5 software development activity phase in 3rd qtr F 3 (SWB3) development activities. FRMV Build 3 software program and software reprogramming, complete subsystem fault manage Embedded Training (Live, Virtual, Constructive Training Capcapabilities for hit avoidance enhancements, and close combate FY 2009 Accomplishments: FY 2010 Plans: FY 2010 Base Plans: FY 2011 Base Plans: FY 2011 Base	precipitation of common chassis are fully as well as integration of common chassis	1.070	0.000	0.000	0.000	0.000	

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
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B. Accomplishments/Planned Program (\$ in Millions)		'				
•	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2011 OCO Plans: FY 2011 OCO						
Program #23	3.64	6 0.000	0.000	0.000	0.000	
CONTRACTOR MEDICAL VEHICLE (MV-E/T) - FY09 - Engineering & MV PDR in 2nd qtr FY09 in preparation for FCS SoS PDR in 3rd qtr FY09 maturation of MV integrated design, structure, litter lift handling system, positioning equipment, on-board oxygen concentrator, treatment table, blood integration of medical equipment sets and patient movement items into the FY 2009 Accomplishments:	9. Continued the development atient stabilization system, medical od refrigerator, and shelter. Continued					
FY 2009 FY 2010 Plans: FY 2010						
FY 2011 Base Plans:						
FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #24	1.54	0.000	0.000	0.000	0.000	
CONTRACTOR MEDICAL VEHICLE (MV-E/T) - FY09 - Software - Co (SWB2) and completed Life Cycle Architecture (LCA) review in 1st qtr FY Cycle (EC) 2.5 software development activity phase in 2nd qtr FY09 and in development activity phase in 3rd qtr FY09. Completed re-planning of Sof activities. MV Build 3 software provides Automatic Network Reporting (A	Y09. Completed SWB2 Engineering nitiated SWB2 EC2.6 software ftware Build 3 (SWB3) development					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicle Common Grd Vehicle	PE 0604660A: FCS Manned Grd Vehicles & FC1: FCS M		IANNED GRD GRD VEHICL	&	
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
management, recovery and reporting, and support for Embedded Capability) as well as integration of common chassis capabilities termination activities and started the disposition process of comp FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO	for hit avoidance enhancements. Conducted					
Program #25 CONTRACTOR Common Crew Station (FY09)- Supplier Costs to produce common Crew Systems end-items and display for cre development costs for Crew Station Hardware IAW Manned Grow Hierarchy. Developed and releases Request for Proposals for confoot controls, intercom adapter, control panels, and seating. FY 2009 Accomplishments: FY 2010 Plans: FY 2010	w/mission stations. Supplier's Design & ound Vehicle (MGV) Product Structure	9.010	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010				
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehic Common Grd Vehicle	cles &		IANNED GRD GRD VEHICL	&		
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans:							
FY 2011 OCO Program #26		36.095	0.000	0.000	0.000	0.000	
CONTRACTOR Common Vetronics (Vehicle Electronics) (FY Electronics (Vetronics) end-items common to one or more vehi assembly, test, and checkout for common Vetronics component common Vetronics end-items. Does not include integration ont delivered Core Vetronics power distribution / control systems fi issued. Servo Motor Controller Type VII Contractor selected by	cle variants. Supplier Costs for Integration, is. Hardware and supporting components of the to associated vehicles. FY09 - Partially (72%) or IPC MGV Prototypes before Stop Work Order						
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicle Common Grd Vehicle	es &	PROJECT FC1: FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE			&
B. Accomplishments/Planned Program (\$ in Millions)			I			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
CONTRACTOR Common Survivability Suite - FY09 - Includes Defe Countermeasures, Signature Management, Software, Survivability Se Biological, Chemical detection, filtration subsystem and Subsystem L and deliver defensive armament FY09 - Continued LRCM interceptor vehicle vulnerability tests with SRCM. Continued Hit Avoidance Systems assessment. Completed APS Design Verification Phase I (Technolog software Integration and Verification begins. Support Highly Acceler Nuclear Radiation (INR) testing. Complete B1 Threshold Armor and 6 demonstration. Development CCAS Remote Weapon Station. Initiate Conducted termination activities and started the disposition process of equipment. FY 2009 Accomplishments: FY 2010 Plans: FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO Plans: FY 2011 OCO	nsors, Survivability Processor, Nuclear, AT&C. Efforts to design, develop, procure, r subcomponent designs. Conducted stem (HAS) detail design analysis and y Readiness Level 6). APS hardware/ rated Life Testing (HALT) and Initial U1 Mine Kit Technology Readiness Level ate double pin band track mine testing.					
Program #28		11.312	0.000	0.000	0.000	0.000
CONTRACTOR Common Traction/Suspension (FY09)- Supplier cossubsystem end-items. These items were developed or procured by the integration into the Primary Vehicle. Supplier Costs for Integration, a	e Primary Vehicle manufacturer for					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicles & Common Grd Vehicle		PROJECT FC1: FCS MANNED GRD COMMON GRD VEHICLE			&
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Traction / Suspension end-items. Conducted engineering, analysis and administration effort to integrate the components into the sub-assemblies, labs, test cells, emulators, simulators, final end item(s) and modeling. The cost for labor to fabricate and assemble sub-assemblies, labs, test cells, emulators, simulators, final end item(s) and modeling. This included receiving and in-process inspection associated with the assembly. It included the special tools required for assembly. Completed testing and performance checking. This included the cost of test equipment. All labor and travel related to the delivery and set up of the end item and labor for Vehicle Subsystem Validation. Continued band track testing of segmented and continuous loop track. FY 2009 Accomplishments: FY 2010 Plans: FY 2011 Base Plans: FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO Plans: FY 2011 OCO						
Program #29		57.692	0.000	0.000	0.000	0.000
CONTRACTOR Common Powertrain (FY09)- Supplier costs for engine components into the sub-assemblies, labs, test cells, emulators, simulators Continued the development and support integration of Propulsion compor C P7, 8 prototype vehicles. Completed Critical Design review for All electrication, E-X Drive, Traction Drive System and Brakes. Completed Test Drive System.	s, final end item(s) and modeling nents for Increment 1 design into NLOS- ctronic propulsion components, Air					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicles Common Grd Vehicle	s &		ANNED GRD GRD VEHICL		CLES &	
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #30		10.338	0.000	0.000	0.000	0.000	
CONTRACTOR Common Structure (FY09) - Supplier costs for delivering the Common Hull structure end-items. Supplier cont procurement, and delivering of Common Base Armor end-items Cannon P7, 8, 2 and continue to support Integration. Assembly and machine hull raw materials. Procured appendages and first I	inued efforts of design development, Completed component deliveries for NLOS and Checkout (IAC) of these vehicles. Assemble,						
FY 2009 Accomplishments: FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010					
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicle	cles &		ANNED GRD GRD VEHICL		&		
B. Accomplishments/Planned Program (\$ in Millions)								
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
FY 2011 OCO Plans: FY 2011 OCO								
Program #31		14.610	0.000	0.000	0.000	0.000		
CONTRACTOR Common Vehicle Utility (FY09)- Common Vehicle Util that are part of multiple vehicles. Examples are Hydraulic systems, fuel s Environmental Control systems, and lighting. Supplier costs for design, do Common "Chassis Auxiliary" systems. Effort to design, develop, procure system end-item(s). Complete objective designs and procure for all SDD hardware in support of NLOS Cannon prototypes through P7, P8 and P2 of through PDR level of design detail. FY 2009 Accomplishments: FY 2009	ystems, fire suppression systems, evelopment or procurement of these , and deliver the environmental control prototypes. Completed delivery of							
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #32		5.676	0.000	0.000	0.000	0.000		
CONTRACTOR Common Vehicle Software (FY09) - Embedded Software of Manned Vehicles that is not specifically included in a particular Commpackage. For MGV, this includes software for mode and state control, sys	on Subsystem or Mission Software							

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD) B. Accomplishments/Planned Program (\$ in Millions)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicles Common Grd Vehicle		PROJECT FC1: FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE				
B. Accomplishments/Planned Program (\$ in Millions)		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
vehicle performance sensors (Speed, Oil Pressure, Fuel level, etc.) specific software is rolled up under each Mission platform. This el Simulation effort associated with this Software Subsystem (if any) Build. Continued Software Build 2 (SWB2) and completed Life Cy Completed SWB2 Engineering Cycle (EC) 2.5 software developmed SWB2 EC2.6 software development activity phase in 3rd qtr FY09 Build 2 ongoing, Build 3 began (FSE from MS&I). Integration and test. NBC SIL IV2 complete with NBC IV2 complete, began SEIT System hardware/software Integration and verification began. SOS termination activities and started the disposition process of comport FY 2009 Accomplishments: FY 2010 Plans: FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO Plans: FY 2011 OCO	ement will also contain costs for Modeling and that is not specifically attributable to a specific vele Architecture (LCA) review in 1st qtr FY09. ent activity phase in 2nd qtr FY09 and initiated. Modeling & Simulation: Build 1 complete, d Verification: began SEIT SIL integration and SIL integration and test. Active Protection SIL SIM/ IV2 MV model updated. Conducted						
Program #33		9.728	0.000	0.000	0.000	0.000	
CONTRACTOR Common Support Equipment (FY09) - Collection and development of Support Equipment end-items Common to multiproducts. Cost to support testing and evaluation of the components IPTs PM/SE/PPP effort. Coordinate with LSI management in development.	Itiple platforms, or Support Equipment and subsystems resides within the subsystem						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehic Common Grd Vehicle	les &	PROJECT FC1: FCS M COMMON (VEHICLES &	
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Training Requirements for any such equipment. Continued Common supported the development of Common Chassis SIL test and integration						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #34 CONTRACTOR Common Controller (FY09)- Supplier's cost to design Hardware for the Common Controller (cc) Successfully completed all Integration, Assembly, Test and Checkout (IAT&C) of 6 CC Spiral 1 support a functional demonstration at the Lockheed Martin Test Track exercise at Ft. Bliss with AETF soldiers controlling the SUGV, CLI U and lessons learned from these exercises were used by the contractor of spiral 3 designs. Basic maintenance and service was performed to kee and spare cable sets were fabricated. As a result of the termination of development efforts of the CC were moved to Networks. (4th Qtr FY0)	1 Spiral 1 development activities, to include: CC systems. These units were used to a in Grand Prairie, TX as well as a 3 week UAV, Urban UGS, and the MULE. Data design team to improve the CC spiral 2 and p the six (6) Spiral 1 systems operational the MGV program the follow-on design and	8.487	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehic Common Grd Vehicle	cles &		ANNED GRD GRD VEHICL		&
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans:						
FY 2011 OCO Pians: FY 2011 OCO						
Program #35 CONTRACTOR Common Platform Integration (FY09)- The overall morganizations to manage all manned ground vehicles System Engineeri Checkout, Project Management and Logistics Management work. Supplessign analyses in the context of the manned ground vehicle family of functional, and logical integration; and to perform system performance to establish and manage the system architectures and requirements inclicommon Subsystems, Mission Equipment, and other components of the acceptable unit for SoS integration and testing prior to delivery. Supplied be directed in support of functional, physical, and logical integration of the distributed network, common equipment, and mission equipment. On the distributed network, common equipment, integration, test, and check out Mission Equipment items, and Primary Vehicle items into the delivered in all program planning and management efforts as required. Continued SIL integration and check out facilities, completed testing of individual NLOS-C integration and to feed performance/compliance data into MC FY 2009 Accomplishments: FY 2009 Accomplishments: FY 2009	ng, Integration, Assembly, Test & plier costs to Conduct performance and systems to maintain baseline performance, analyses and trade studies. Supplier costs adding interfaces in order to ensure that the Primary Vehicle are integrated into an er's management effort collected here will each unique system developed including costs for subcontractor management teams to of Common Subsystem end-items, I vehicle variants, and to support the LSI I the development of the Common Chassis common subsystems in preparation for	151.698	0.000	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicle Common Grd Vehicle	es &	PROJECT S & FC1: FCS MANNED GRD VEHICLES OF COMMON GRD VEHICLE				
B. Accomplishments/Planned Program (\$ in Millions)							
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2010 Plans: FY 2010							
FY 2011 Base Plans: FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
Program #36		2.908	0.000	0.000	0.000	0.000	
GFX FY09 - APS SME Support, ARDEC IM Explosive Fill Test, ARL Impact Test Study. Continued APS SME Support, ARDEC IM Explosive							
FY 2009 Accomplishments:							
FY 2009							
FY 2010 Plans: FY 2010							
FY 2011 Base Plans:							
FY 2011 Base							
FY 2011 OCO Plans: FY 2011 OCO							
		4.40=	0.000	0.000	0.000	0.000	
Program #37		4.497	0.000	0.000	0.000	0.000	
Armor Development (FY09)- Develop unique facilities required for ARI	L Armor development.						

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army	PRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE					
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehicles Common Grd Vehicle	s &	PROJECT FC1: FCS M. COMMON C		&	
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO						
Program #38 CONTRACTOR Active protection System - FY10 -Continue to design, dev Protection System (APS)-Long Range APS, Short Range APS, MFRF Rada System Engineering, Software and Test to include APS Modeling and Simu of Surrogate Test Vehicle (Trailer), Development and Integration of APS Fi Avoidance Countermeasure Controller (HACC), Support to deign low-laten ICS, and Other system engineering and software activities specifically requi Controller and Hit Avoidance Countermeasure Controller software Build 2 of FY 2009 Accomplishments: FY 2010 Plans: FY 2010	ar, HCRDIF Full Spectrum Software, alation, Design and Construction are Control and MFRF with the Hit acy interface between MFRF and aired for APS Design and Test Has	0.000	68.588	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010						
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604660A: FCS Manned Grd Vehic Common Grd Vehicle	eles &		ANNED GRD GRD VEHICL	O VEHICLES & LE			
B. Accomplishments/Planned Program (\$ in Millions)								
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO								
Government Testing: FY10 costs are to continue the testing support Warhead/Dynamic Threat Test 1st QTR, which tests the data that Analysis Agency (AMSAA) and Army Research Laboratory (ARC (M&S) of the Short Range Counter Measure (SRCM) against diffication inventory 1st QTR, SRCM Design Verification Test which will with threats, to be used from inventory; 20 SRCMs to be purchased) 4t Test, with will examine the "Insensitive Munition (IM)" WHD, M and re-design test, SRCM WHD and Rocket Motor test, along with Measure (LRCM) against (14 additional foreign threats which need FY 2009 Accomplishments: FY 2010 Plans: FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO Plans: FY 2011 OCO	will be utilized by Army Materiel Systems L) to refine their Modeling and Simulation erent threats (10 foreign threats, to be used from erify SRCM component maturation (20 foreign th QTR, SRCM Warhead (WHD) and M&S and &S and Test, 1st QTR, Also SRCM Baseline th component testing of Long Range Counter	0.000	6.719	0.000	0.000	0.000		

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: Febr	uary 2010	
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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #40 Disposition of Terminated Material: FY09 and FY10- Develop, commission Product Team (IPT) for dispositioning all Hardware and Software both design and all items furnished by the government (GFX). These funds also include and short and long term storage of selected materials IAW FAR 45/49 that contract. Over 30,000 individual items, 8 primary vehicle platforms and 5 items are displaced among three primary contractors throughout the United FY 2009 Accomplishments: FY 2010 Plans: FY 2011 Base Plans: FY 2011 OCO Plans: FY 2011 OCO	signed and built under the SDD contract e all cost for packaging, transporting, are currently not covered under the SILs will require disposition. These	0.000	14.175	0.000	0.000	0.000
Program #41 Special termination liability FY09: Costs are paid to the contractor and su Severance Pay, Reasonable costs continuing after termination, Settlement service personnel from remote or liaison sites.		188.000	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 OCO	FY 2011 Total	
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #42		100.000	171.936	0.000	0.000	0.000
Other Terminations Cost FY09 and FY10: These funds are for costs that ar Government contract and are required by FAR part 31. These costs include Cost incurred, but not billed to the FAR contract, Non-cancelable committed restorations required by leases, and Loss of useful value of capital property June 30th 2009.	but are not limited to Allowable Fee, nents, Unexpired leases, Alterations/					
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #43		0.000	6.859	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)								
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total		
Contractor Fee								
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								
Program #44		0.000	6.839	0.000	0.000	0.000		
Small Business Innovative Research/Small Business Technology Transfer	Programs							
FY 2009 Accomplishments: FY 2009								
FY 2010 Plans: FY 2010								
FY 2011 Base Plans: FY 2011 Base								
FY 2011 OCO Plans: FY 2011 OCO								

Exhibit R-2A, RDT&E Project Justific	cation: PB 20	11 Army							DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIV 2040: Research, Development, Test & Ev BA 5: Development & Demonstration (S.	aluation, Arn	ıy		R-1 ITEM NO PE 0604660A Common Grd	: FCS Manne						&
B. Accomplishments/Planned Program	ı (\$ in Millior	ns)									
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
			Accom	plishments/Pla	nned Prograi	ns Subtotals	760.744	275.116	0.000	0.000	0.000
C. Other Program Funding Summary	(\$ in Millions	<u>s)</u>									
Line Item • Ord. #1: 0604646A Non-Line of Sight - Launch Sytem	FY 2009 253.684	FY 2010 91.223	FY 2011 Base 81.247	FY 2011 OCO 0.000	FY 2011 Total 81.247	FY 2012 58.718	FY 2013 27.418	FY 2014 0.000	FY 2015 0.000	Cost To Complete	<u>Total Cost</u> 512.290
• Ord. #2: 0604647A Non-Line of Sight - Cannon	87.038	47.964	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	135.002
• Ord. #3: 0604661A FCS System of Systems Engr & Program Management	1,022.165	912.399	568.711	0.000	568.711	566.378	5,825.775	618.755	727.415	Continuing	Continuing
• Ord. #4: 0604662A FCS Reconnaissance (UAV) Platforms	55.923	75.107	50.304	0.000	50.304	12.058	4.180	0.000	0.000	0	197.572
• Ord. #5: 0604663A FCS Unmanned Ground Vehicles	104.571	124.962	249.948	0.000	249.948	98.737	25.368	0.000	0.000	0	603.586
• Ord. #6: 0604664A FCS Unattended Ground Sensors	20.135	26.778	7.515	0.000	7.515	1.071	1.071	0.000	0.000	0	56.570
• Ord. #7: 0604665A FCS Sustainment & Training R&D	819.721	655.745	610.389	0.000	610.389	523.580	366.647	253.810	258.367	Continuing	Continuing
Ord. #8: 0604666A Spin Out Technology/Capability Insertion	112.788	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	112.788
• Ord. #9: 0605625A Manned Ground Vehicle	0.000	79.583	934.366	0.000	934.366	1,882.839	2,242.756	1,375.128	744.771	Continuing	Continuing
• Ord. #10: WTCV G86100 FCS Core Program	154.127	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	154.127
• Ord. #11: WTCV G86200 FCS Spin Out Program	67.268	326.909	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	394.177

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army									DATE: February 2010			
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C. Other Program Funding Summary	(\$ in Millions	<u>s)</u>		1								
			FY 2011	FY 2011	FY 2011					Cost To		
<u>Line Item</u>	FY 2009	FY 2010	Base	<u>OCO</u>	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cos	
• Ord. #12: WTCV G86000 Ground	0.000	0.000	0.000	0.000	0.000	0.000	0.000	98.030	778.220	Continuing	Continuing	
Combat Vehicle (GCV)												
• Ord. #13: ACFT A00015 BCT	0.000	0.000	44.206	0.000	44.206	40.216	12.770	3.718	1.850	Continuing	Continuing	
Unmanned Aerial Veh (UAVs) Incr 1												
• Ord. #14: ACFT A00016 BCT	0.000	0.000	0.000	0.000	0.000	2.141	85.345	90.245	92.686	Continuing	Continuing	
Unmanned Aerial Veh (UAVs) Incr 2												
• Ord. #15: <i>OPA B00001 BCT</i>	0.000	0.000	29.718	0.000	29.718	60.578	9.582	1.544	1.328	Continuing	Continuing	
Unattended Ground Sensor												
• Ord. #16: <i>OPA B00004 BCT</i>	0.000	0.000	0.000	0.000	0.000	19.093	87.478	96.172	86.259	Continuing	Continuing	
Unattended Ground Sensor Incr 2												
• Ord. #17: <i>OPA B00002 BCT</i>	0.000	0.000	176.543	0.000	176.543	192.632	20.619	0.317	0.187	Continuing	Continuing	
Network												
• Ord. #18: <i>OPA B00003 BCT</i>	0.000	0.000	0.000	0.000	0.000	81.277	301.864	454.480	431.835	Continuing	Continuing	
Network Incr 2												
• Ord. #19: <i>OPA F00001 BCT</i>	0.000	0.000	20.046	0.000	20.046	42.703	6.002	2.288	1.870	Continuing	Continuing	
Unmanned Ground Vehicle												
• Ord. #20: <i>OPA F00002 BCT</i>	0.000	0.000	0.000	0.000	0.000	373.193	710.680	676.230	711.940	Continuing	Continuing	
Unmanned Ground Vehicle Incr 2												
• Ord. #21: <i>OPA G80001 BCT</i>	0.000	0.000	61.581	0.000	61.581	12.178	94.491	68.033	50.468	Continuing	Continuing	
Training/Logistics/Management												
• Ord. #22: <i>OPA G00002 BCT</i>	0.000	0.000	0.000	0.000	0.000	75.069	387.173	396.593	446.806	Continuing	Continuing	
Training/Logistics/Management Incr 2												
• Ord. #23: MSLS C64501 BCT NLOS-	0.000	0.000	350.574	0.000	350.574	758.657	112.115	0.000	0.000	0	1,221.340	
LS Incr 1												
	0.000	0.000	0.000	0.000	0.000	0.000	605.192	679.078	579.210	Continuing	Continuing	

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army

APPROPRIATION/BUDGET ACTIVITY

| R-1 ITEM NOMENCLATURE | PE 0604660A: FCS Manned Grd Vehicles &

FC1: FCS MANNED GRD VEHICLES & COMMON GRD VEHICLE

PROJECT

Common Grd Vehicle

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

2040: Research, Development, Test & Evaluation, Army

<u>FY 2011</u> <u>FY 2011</u> <u>FY 2011</u> <u>Cost To</u>

<u>Line Item</u> <u>FY 2009</u> <u>FY 2010</u> <u>Base</u> <u>OCO</u> <u>Total</u> <u>FY 2012</u> <u>FY 2013</u> <u>FY 2014</u> <u>FY 2015</u> <u>Complete</u> <u>Total Cost</u>

• Ord. #24: MSLS C64601 BCT NLOS-

BA 5: Development & Demonstration (SDD)

LS Incr 2

D. Acquisition Strategy

The Army awarded the original FCS Contract to the Boeing Company, 30 May 2003 as the Lead System Integrator (LSI). The contract was definitized 10 Dec 2003. The LSI contracted BAE Systems and General Dynamic Land Systems (GDLS) as One Team Partner's to execute the MGV portion of the SDD contract. The MGV family consist of (7) vehicle platforms which was to be produced cooperatively by BAE and GDLS corporations. During FY09, FCS completed the systems of systems platform Preliminary Design Review (PDRs). In July 09 the MGV portion of the SDD contract was terminated after completion of all SoS PDR activities. The contract prototype and component assets will be dispositioned in accordance with FAR-45/29 ensuring the most cost efficient method to the government. The Active Protection System (APS) will be continued under the current SDD contract through FY10, at which time the Acquisition Strategy will be re-evaluated.

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.