Exhibit R-2, RDT&E Budget Item 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 0605625A: *Manned Ground 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**
Total Program Element	0.000	79.583	934.366	0.000	934.366	1,882.839	2,242.756	1,375.128	744.771	Continuing	Continuing
FC8: *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

A. Mission Description and Budget Item Justification

The GCV program element was due to the termination of the Manned Ground Vehicle Core Program and subsequently restarted as a new ground combat vehicle program. The Ground Combat Vehicle program is based on a Draft Capabilities Development Document developed by the U.S. Army Training and Doctrine Command (TRADOC). The accomplishments and funding reflected in this justification are based on preliminary analysis of the draft requirements. Upon finalization of the requirement and detailed planning, adjustments will occur which could potentially change planned accomplishments, funding requirements, and program schedule. The funding and accomplishments are a top-level attempt to incorporate the new direction to refocus the Army's ground combat development program.. Currently, the requirements are being defined for this new Ground Combat Vehicle program. Preliminary analysis plan for a contract award in 4Q FY10 to begin the development of the Ground Combat Vehicle (GCV). The GCV program will use an evolutionary acquisition approach based on an open architecture which facilitates the incremental improvement of capabilities over time and subsequent development of other variants. This approach integrates technologies that are mature and found to support the established system requirements. The primary focus of this technical design phase will be on design integration (i.e., integration of mature components and subsystems); however, it is likely that some of the requirements will require design of components and subsystems that are not necessarily mature. As such, the overall goal of the Technology Demonstration (TD) phase is to complete the preliminary design of the system. The overall program strategy will take the GCV program from a Milestone A (MS A- 4QFY10) through Full Rate Production in a manner which will allow the maximum affordable competition. At MS A, two competitive contracts are anticipated to be awarded in support of the Tech Development (TD) phase. A System Functional Review (SFR) will occur after contract award and will review the initial contractor's designs to verify if they are fully compliant with the current user requirements. Contractors will be required to develop, fabricate, integrate and test subsystems based on their initial design. Among other criteria, the contractors will be evaluated based on the performance of these subsystems and their developmental maturity. The focus of this testing is not only to evaluate the capabilities of the contractors, but to mitigate the risk to prototype fabrication. Building subsystems early will allow the contractors to validate key and critical portions of their vehicle designs and identify issues that can be addressed early and improve the robustness of the prototype vehicles. Prototype subsystem competitive testing will be conducted by the Government to support the evaluation of competing designs. This data will also be used to support Modeling and Simulation, and the Preliminary Design Review (PDR). The GCV PDR (4QFY12, prior to MS B), will be conducted to evaluate contractor's preliminary designs and determine if they are mature enough to enter detailed design and then on to the Engineering and Manufacturing Development (EMD) phase.Ground Combat Vehicle (GCV) Network Analysis and Integration Support: GCV capabilities are required to support Joint Forces across the full range of military operations conducted in a wide range of terrain and environments. The GCV will include specific platform capabilities that address current and future tactical Army capability gaps to include a robust networking capability to meet Net Ready Key Performance Parameter (NR KPP) requirements of the GCV Interface Control Document (ICD) and Capability Design Document (CDD). As such, the GCV requires improved network performance, functionality and connectivity to enable superior situational awareness, as well as, responsive well-integrated information systems (INFOSYS) to support command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) for deployed forces. During all operations, this capability will enable the Joint Force Commander to conduct small unit operations, develop the situation through action, and reduce the

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army	DATE: February 2010
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demand for logistics. The GCV network will enable GCV platforms to be an integral component of future Joint war-fighting concepts and will be essential to the Joint Force's ability to dominate all operational environments.

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.000	100.000	350.000	0.000	350.000
Current President's Budget	0.000	79.583	934.366	0.000	934.366
Total Adjustments	0.000	-20.417	584.366	0.000	584.366
• Congressional General Reductions		-20.417			
• 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	0.000	0.000			
• Adjustments to Budget Years	0.000	0.000	584.366	0.000	584.366

Change Summary Explanation

Change Summary Explanation:Funding:FY10: Congress reduced the programFY11: Funds increase was provided to meet the program schedule.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010
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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
FC8: *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
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

Not applicable for this item.

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	0.000	24.450	0.000	0.000	0.000

Government System Engineering and Program Management FY10: Effort to begin initial requirement decomposition and initial design effort of the Infantry Fighting Vehicle (New Combat platform). Develop MS A required documentation. Formulate the Program Office cost Estimate to support MS A and future budget developments. Staff, and facilitize the GCV competitive Source Selection Evaluation Board (SSEB). Provide integrated program management (i.e. planning, directing, tools and controlling functions), for all development activities to include data and supplier management, program control, government training, procurement and contracts management, operations management for the Army's new combat vehicle development. Provide Congressional Title 10 oversight. Develop and publish the detailed plans for cost analysis and management, budget management and execution, Earned Value Management, Schedule management, Complementary Program management and operations management associated with contractor management. These funds also cover the costs of travel and the facilities/operational equipment required for effectively executing the program. Also includes TRADOC support for requirement analysis, Analysis of Alternatives (AoA) support, and Milestone reviews.

FY 2009 Accomplishments:

FY 2009

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 2010 Plans: FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #2 Government System Engineering and Program Management FY11: Implement the GCV Management team and execute the GCV management plan. The plan consists of monitoring and analyzing each separate contractor's detailed Integrated Master Schedules (IMS) and the integration and tracking of all GCV activities into a single GCV program level IMS. Standup the GCV Performance Management Baseline (PMB) team and execute the GCV PMB process for each separate contractor. The PMB process consists of monitoring and analyzing each of the separate contractor's PMB. Standup the GCV Design management/Manned System Integration (MSI) team and execute the Design management plan for each separate contractor in order to monitor and track the design development of the Hull, Turret, Suspension, Electrical, Power Train, Fire Control, Armament, Navigation, Command and Control, Communications systems and provide operational and technical guidance. Monitor the design development of the vehicle's auxiliary systems, testing and training. The government management team will also oversee each separate contractor as they perform systems engineering, requirements analysis, functional analysis, configuration management, risk management, interface management, data management, technical reviews, trade studies, modeling and simulation, specialty engineering, along with software engineering, test and training. Includes the costs of travel and the facilities/operational equipment required for executing the program. Provide integrated program management (i.e. planning, directing, tools and controlling functions), for all development activities to include data and supplier management, program control, government training, procurement and contracts management, operations management for new combat vehicle development.	0.000	0.000	20.454	0.000	20.454

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 0605625A: *Manned Ground Vehicle*	PROJECT FC8: *MANNED GROUND VEHICLE*

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 #3 Government System Engineering and Program Management FY11 (Continued): Provide Congressional Title 10 oversight, cost analysis and management, budget development, justification and tracking, Earned Value Management, Integrated Master Schedule development and management, Complementary Program management and operations management associated with contractor management. These funds also cover the costs of travel and the facilities/operational equipment required for effectively executing the program. Also includes TRADOC support for requirement analysis, AoA support, and Milestone reviews. Develops network interfaces and architecture for integrating the GCV into the Army's Battle Command and Communication Network. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010	0.000	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 Base Plans: FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #4 Contractor: Systems Engineering/Program Management FY10: The Technology Development (TD) phase begins immediately after 4QFY10 contract award. In 4QFY10, prepare for award subsystem and component provider contracts. In 4QFY10, begin balanced vehicle design and integration of subsystems focusing on size, weight, power, and cooling requirements. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base *FY 2011 OCO Plans:* FY 2011 OCO	0.000	55.133	0.000	0.000	0.000
Program #5 Contractor: Systems Engineering/Program Management FY11: In 1QFY11, award subsystem and component provider contracts. Continue vehicle design and integration of subsystems focusing on size, weight, power, and cooling requirements. Include Mobility Systems (propulsion, cooling, suspension, and track); Survivability	0.000	0.000	716.108	0.000	716.108

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
Systems (armor and structures, signal management, chemical, biological, radiological, nuclear, and explosives); Hit Avoidance Systems (long and short range); Crew Systems and Chassis Auxiliary components (close combat armament system, common crew stations, and auxiliary systems); Core Vetronics (data/signal electronics, and power distribution/management); Lethality Systems (fire control, turret structure, slip ring, ammunition handling system, armament); Mission Module Structure (infantry squad compartment, squad situational awareness, equipment stowage, ramp, and infantryman interfaces). Complete preparation and conduct System Functional Review (SFR) in 2QFY11; verify contractor's ability to meet requirements. Conduct Subsystem Preliminary Design Review (SPDR) in 4QFY11 to ensure subsystems are ready for 2QFY12 competitive testing and 4QFY12 Modeling and Simulation (M&S). *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: Prototypes FY11: In 1QFY11 begin building subsystems for prototype subsystem testing in 2QFY12. Begin design and build of the indirect driving and 360 degree situational awareness demonstrator. Begin building two (2) Automotive Test Rigs (ATR) and two (2) each of the following key subsystems and their supporting components: Indirect Vision-Driving/Local Situational Awareness demonstrator; Non-Lethal subsystem demonstrator; Hit Avoidance/Active Protection System demonstrator, Mine Blast Test Asset demonstrator. In	0.000	0.000	75.689	0.000	75.689

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
2QFY11 develop and begin build of System Integration Laboratories (SIL) and Modeling and Simulations (M&S) programs for government testing and design integration in FY12. 4QFY11: Order long-lead item subsystems for prototype fabrication in 1QFY13. *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 Government Tests and Modeling and Simulation FY11: In 2QFY11 begin development of the System Integration Laboratories (SIL) and Modeling and Simulations (M&S) test procedures for government testing in FY12. Additionally, test planning/coordination and safety requirements development and coordination efforts in support of the Prototype subsystem testing will commence in FY11. Begin building the government's subsystem demonstrator test facility. Plan and develop the Indirect driving and 360 degree situational awareness demonstrators testing procedures, which is intended to verify the operational feasibility of the contractor's indirect vision material solution. Plan and develop the subsystem demonstrator Test SIL requirements and test procedures which will evaluate the contractor's ability to safely and effectively operate the IFV over hard surface, cross country, and urban terrain during day and night operations. Begin development of the ATR test requirements that will be used to evaluate the contractor's design feasibility against the mobility Key Performance Parameter (KPP). The ATR will be tested at a Government test facility to evaluate its automotive performance operations in	0.000	0.000	2.650	0.000	2.650

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B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
accordance with the draft GCV Operational Mode Summary/Mission Profile (OMS/MP). Additionally, laboratory testing of integrated Engine/Transmission solution against the fuel efficiency KPP will be required. The Mine Blast Test Asset is intended to reflect the Contractor's vehicle structure, and crew and passenger seating. It will be tested against the Level 1 underbelly threats to assess vehicle/mine kit structural integrity and mitigation of harmful accelerations to the crew to support the Governments evaluation of the Survivability and Force Protection KPPs. The Mine Blast Test Asset will be tested at a Government test facility. *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 #8 Government Tests and Modeling and Simulation FY11 (continued): The Non-Lethal system demonstrator is intended to verify the contractor's design from both a stationary and on the move perspective. Contractors will be allowed to mount their respective systems on a surrogate platform to demonstrate performance on the move. The Non-Lethal system demonstrator will be tested at a Government test facility. Additionally, contractor will be required to test their APS solution set against GCV requirements. If hardware is available for test, APS testing will be tested at a Government test facility.	0.000	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 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 Contractor: Software FY11: Initiate vehicle software development activities in 1QFY11 for supporting FY12 prototype subsystem competitive testing and Modeling and Simulation tests. Define software development plan and schedule. Define and establish software development and integration environments. Initiate work on development of Software Requirements Specification, interface requirements specification, software architecture definition/description, formulate software build plan to align with system and subsystem requirements development, and begin software development and integration. Create vehicle model and selected subsystem models (e.g. Mobility, Survivability, etc.) for M&S. *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010	0.000	0.000	26.880	0.000	26.880

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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 Base *FY 2011 OCO Plans:* FY 2011 OCO					
Program #10 Contractor: APS FY11: Contractor: continue to design, develop, integrate, model/simulate and test the Active Protection System. Continue maturation of the Short Range APS (Execute/Complete the Short Range Design Verification and Test (DVT)) number 2 using 20 Countermeasures that were purchased in FY10, execute Insensitive Munitions testing with the 10 countermeasures and warheads, plan and prepare Short Range Counter Measure Initial Qualification Test (IQT) and Short Range (SR) Active Protection System (APS) Production Qualification test (PQT) in FY12 with the purchase of 159 Countermeasures. Transition the Kinetic Energy (KE Army Technology Objective (ATO) Kinetic Energy Interceptor program into the Long Range APS System, prepare for Long Range Design Verification Test (DVT) number 1 by procuring 10 countermeasures for FY12. Development and Integration of APS Fire Control System: Integrate the Passive Threat Warner, Laser Warning Receiver and APS Radar (integration of the Hit Avoidance System to Common Radar Design Interface (HCRDIF) Full Spectrum Software and Ballistic Radome) with the APS Countermeasure Controller Software and APS Operations Controller Software; Design and Construction of Surrogate Test Vehicle (Trailer). *FY 2009 Accomplishments:* FY 2009 *FY 2010 Plans:* FY 2010 *FY 2011 Base Plans:* FY 2011 Base	0.000	0.000	92.585	0.000	92.585

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					
Accomplishments/Planned Programs Subtotals	0.000	79.583	934.366	0.000	934.366

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #1: *0604646A Non Line of Sight - Launch System*	253.684	91.223	81.247	0.000	81.247	58.718	27.418	0.000	0.000	0	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: *0604660A FCS Manned Ground Vehicles & Common Grd Vehicle*	760.744	275.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	1,035.860
• Ord. #4: *0604661A FCS System of Systems Engr & Program Management*	1,022.165	912.399	568.711	0.000	568.711	566.378	582.775	618.755	727.415	Continuing	Continuing
• Ord. #5: *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. #6: *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. #7: *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. #8: *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. #9: *0604666A Spin Out Technology/Capability Insertion*	122.788	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	122.788

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C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• 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
• Ord. #12: *WTCV G86000 Ground Combat Vehicle (GCV)*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	98.030	778.220	Continuing	Continuing
• Ord. #13: *ACFT A00015 BCT Unmanned Aerial Veh (UAVs) Incr 1*	0.000	0.000	44.206	0.000	44.206	40.216	12.770	3.718	1.850	Continuing	Continuing
• Ord. #14: *ACFT A00016 BCT Unmanned Aerial Veh (UAVs) Incr 2*	0.000	0.000	0.000	0.000	0.000	2.141	85.345	90.245	92.686	Continuing	Continuing
• Ord. #15: *OPA B00001 BCT Unattended Ground Sensor*	0.000	0.000	29.718	0.000	29.718	60.578	9.582	1.544	1.328	Continuing	Continuing
• Ord. #16: *OPA B00004 BCT Unattended Ground Sensor Incr 2*	0.000	0.000	0.000	0.000	0.000	19.093	87.478	96.172	86.259	Continuing	Continuing
• Ord. #17: *OPA B00002 BCT Network*	0.000	0.000	176.543	0.000	176.543	192.632	20.619	0.317	0.187	Continuing	Continuing
• Ord. #18: *OPA B00003 BCT Network Incr 2*	0.000	0.000	0.000	0.000	0.000	81.277	301.864	454.480	431.835	Continuing	Continuing
• Ord. #19: *OPA F00001 BCT Unmanned Ground Vehicle*	0.000	0.000	20.046	0.000	20.046	42.703	6.002	2.288	1.870	Continuing	Continuing
• Ord. #20: *OPA F00002 BCT Unmanned Ground Vehicle Incr 2*	0.000	0.000	0.000	0.000	0.000	373.193	710.680	676.230	711.940	Continuing	Continuing
• Ord. #21: *OPA G80001 BCT Training/Logistics/Management*	0.000	0.000	61.581	0.000	61.581	12.178	94.491	68.033	50.468	Continuing	Continuing
• Ord. #22: *OPA G00002 BCT Training/Logistics/Management Incr 2*	0.000	0.000	0.000	0.000	0.000	75.069	387.173	396.593	446.806	Continuing	Continuing
• Ord. #23: *MSLS C64501 BCT NLOS-LS Incr 1*	0.000	0.000	350.574	0.000	350.574	758.657	112.115	0.000	0.000	0	1,221.346
	0.000	0.000	0.000	0.000	0.000	0.000	605.192	679.078	579.210	Continuing	Continuing

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C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #24: *MSLS C64601 BCT NLOS-LS Incr 2*											

D. Acquisition Strategy

Pursuant to an Acquisition Decision Memorandum (ADM), signed 23 June 2009, which directed the cancellation of the FCS (BCT) Acquisition Program and the termination of the Manned Ground Vehicle system, the Army chartered the Program Executive Office - Integration. The PEO-I, in order to meet the ADM requirements, initiated the Ground Combat Vehicle program. The strategy is to execute the program incrementally in three phases. It will enter the acquisition process at MS A (4Q FY10) with the competitive selection of multiple contractors to execute the Technology Development (TD) phase. The TD phase will consist of designing an Infantry Fighting Vehicle which meets the Capability Design Document (CDD) and Army Specification (A-Spec) and building sub-system prototype components. (FY10 into FY12). The TD phase will end with competitive testing & evaluation of sub-system prototype components and the successful completion of a Preliminary Design Review (PDR) (3Q FY12). Upon successful completion of the TD phase the program will enter MS B (1Q FY13). At MS B the program will enter the Engineering and Manufacturing Development (EMD) phase which will end at MS C (1Q FY16). During this phase each contractor will successfully complete a Critical Design Review (CDR) and produce ten (10) complete prototypes. The EMD phase will end with a competitive down select to one contractor. The selected contractor will execute Low Rate Initial Production (LRIP).

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.

Exhibit R-3, RDT&E Project Cost Analysis: 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 0605625A: *Manned Ground Vehicle*	PROJECT FC8: *MANNED GROUND VEHICLE*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Contractor System Engineering and Prog. Mgt	C/TBD	TBD Location could not be determined.	0.000	55.133		911.262		0.000		911.262	Continuing	Continuing	0
		Subtotal	0.000	55.133		911.262		0.000		911.262			0.000

Remarks

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government System Engineering and Prog. Mgt	C	PEO Integration St. Louis, MO	0.000	24.450		20.454		0.000		20.454	Continuing	Continuing	0
		Subtotal	0.000	24.450		20.454		0.000		20.454			0.000

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: 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 0605625A: *Manned Ground Vehicle*	PROJECT FC8: *MANNED GROUND VEHICLE*	

Test and Evaluation ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Tests & Modeling & Simulation	C	PEO Integration St. Louis, MO	0.000	0.000		2.650		0.000		2.650	Continuing	Continuing	0
		Subtotal	0.000	0.000		2.650		0.000		2.650			0.000

Remarks

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
New R3 Line	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		0.000		0.000		0.000	0	0	0
		Subtotal	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000

Remarks

All Management Service costs for this project are included in 0604661 FC2 SoS Engineering and Program Management project.

Exhibit R-3, RDT&E Project Cost Analysis: 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 0605625A: *Manned Ground Vehicle*	PROJECT FC8: *MANNED GROUND VEHICLE*	

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	79.583		934.366		0.000		934.366			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: 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 0605625A: *Manned Ground Vehicle*	**PROJECT** FC8: *MANNED GROUND VEHICLE*	

	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				FY 2014				FY 2015			
	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
Material Development Decision					#																							
Milestone A							#																					
Technical Development Source Selection Board						#	#																					
Technical Development Contract Award							#																					
Technical Design (Infantry Fighting Vehicle)								#	#	#	#	#	#	#	#	#												
Order Subsystems for Prototypes											#																	
Prototype Subsystem Testing												#	#	#	#													
Subsystem PDR											#																	
System PDR													#															
Milestone B																#												
Engineering / Manufacturing Development Contract Award																#												

Exhibit R-4A, RDT&E Schedule Details: 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 0605625A: *Manned Ground Vehicle*	**PROJECT** FC8: *MANNED GROUND VEHICLE*

Schedule Details

	Start		End	
Event	**Quarter**	**Year**	**Quarter**	**Year**
Material Development Decision	1	2010	1	2010
Milestone A	3	2010	3	2010
Technical Development Source Selection Board	2	2010	3	2010
Technical Development Contract Award	3	2010	3	2010
Technical Design (Infantry Fighting Vehicle)	4	2010	4	2012
Order Subsystems for Prototypes	3	2011	3	2011
Prototype Subsystem Testing	4	2011	3	2012
Subsystem PDR	3	2011	3	2011
System PDR	1	2012	1	2012
Milestone B	4	2012	4	2012
Engineering / Manufacturing Development Contract Award	4	2012	4	2012