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

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0604604A: MEDIUM TACTICAL VEHICLES

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	2.169	5.683	3.710	0.000	3.710	5.742	5.753	5.861	5.966	Continuing	Continuing
H07: FAMILY OF MED TAC VEH	2.169	5.683	3.710	0.000	3.710	5.742	5.753	5.861	5.966	Continuing	Continuing

Note

Not applicable for this item.

A. Mission Description and Budget Item Justification

This Program Element (PE) supports continued modernization of the Army's medium truck and trailer fleet and the Armored Security Vehicle (ASV). In the medium fleet, the Family of Medium Tactical Vehicles (FMTV) replaces aging M35 2 1/2-ton trucks, and M809 and M900 Series 5-ton trucks that are beyond their economic useful life of 15-20 years. FMTV fills 2 1/2-ton Light Medium Tactical Vehicle (LMTV) and 5-ton truck Medium Tactical Vehicle (MTV) requirements, and includes companion trailers, performing over 55% of the Army's local and line haul, and unit resupply missions, and operates throughout the theater as multi-purpose transportation vehicles in combat, combat support and combat service support units. The ASV is an all-wheel drive armored vehicle that provides ballistic protection, overhead protection and protection against landmines. It is used by the Military Police to perform missions of area security, maneuver and mobility support, police intelligence, and law and order across the entire operational continuum. It is also being used as a Convoy Protection Platform for Combat Support and Combat Service Support units. This PE funds government technical insertion initiatives that will feed into implementation of the Tactical Wheeled Vehicle (TWV) Modernization Strategy and the TWV Armoring Strategy as a bridge to future tactical vehicle efforts. This PE allows the PM to leverage technology and address capability gaps in performance and reliability as identified by the user community and reported in the field. FY09 funding will be used to continue Technology Insertion and address field issues requiring RDT&E funds to do so. FY10-15 funds will be used to increase protection and survivability of the FMTV through continued development and integration of armor enhancements and applications. ASV funds will be used to develop a Military Police Non-Lethal A-Kit to accept a Non-Lethal Mission Enhancement Package.

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 0604604A: MEDIUM TACTICAL VEHICLES

BA 5: Development & Demonstration (SDD)

B. Program Change Summary (\$ in Millions)

	<u>FY 2009</u>	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	1.943	5.683	5.729	0.000	5.729
Current President's Budget	2.169	5.683	3.710	0.000	3.710
Total Adjustments	0.226	0.000	-2.019	0.000	-2.019
 Congressional General Reductions 		0.000			
 Congressional Directed Reductions 		0.000			
 Congressional Rescissions 	0.000	0.000			
 Congressional Adds 		0.000			
 Congressional Directed Transfers 		0.000			
 Reprogrammings 	0.282	0.000			
 SBIR/STTR Transfer 	-0.054	0.000			
 Adjustments to Budget Years 	0.000	0.000	-2.019	0.000	-2.019
 Adjustments to Balance 	-0.002	0.000	0.000	0.000	0.000

Change Summary Explanation

Change Summary Explanation: FY 2009: Funds increased to support Caterpillar Transmission effort. FY 2011: Funds were decremented to provide for higher priority programs.

DATE: February 2010

5.966

Continuing

Continuing

APPROPRIATION/BUDGET ACTIVITY **PROJECT** R-1 ITEM NOMENCLATURE 2040: Research, Development, Test & Evaluation, Army PE 0604604A: MEDIUM TACTICAL VEHICLES H07: FAMILY OF MED TAC VEH BA 5: Development & Demonstration (SDD) FY 2011 FY 2011 FY 2011 FY 2010 OCO Total FY 2012 FY 2013 FY 2014 FY 2015 **COST (\$ in Millions)** FY 2009 Base Cost To Actual **Estimate Estimate Estimate Estimate Estimate Estimate Estimate Estimate** Complete **Total Cost**

3.710

5.742

5.753

5.861

0.000

A. Mission Description and Budget Item Justification

2.169

5.683

3.710

H07: FAMILY OF MED TAC VEH

Quantity of RDT&E Articles

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

This Program Element (PE) supports continued modernization of the Army's medium truck and trailer fleet and the Armored Security Vehicle (ASV). In the medium fleet, the Family of Medium Tactical Vehicles (FMTV) replaces aging M35 2 1/2-ton trucks, and M809 and M900 Series 5-ton trucks that are beyond their economic useful life of 15-20 years. FMTV fills 2 1/2-ton Light Medium Tactical Vehicle (LMTV) and 5-ton truck Medium Tactical Vehicle (MTV) requirements, and includes companion trailers, performing over 55% of the Army's local and line haul, and unit resupply missions, and operates throughout the theater as multi-purpose transportation vehicles in combat, combat support and combat service support units. The ASV is an all-wheel drive armored vehicle that provides ballistic protection, overhead protection and protection against landmines. It is used by the Military Police to perform missions of area security, maneuver and mobility support, police intelligence, and law and order across the entire operational continuum. It is also being used as a Convoy Protection Platform for Combat Support and Combat Service Support units. This PE funds government technical insertion initiatives that will feed into implementation of the Tactical Wheeled Vehicle (TWV) Modernization Strategy and the TWV Armoring Strategy as a bridge to future tactical vehicle efforts. This PE allows the PM to leverage technology and address capability gaps in performance and reliability as identified by the user community and reported in the field. FY11 funding will be used to continue technology insertion and address field issues requiring RDT&E funds to do so. ASV funds will be used to develop a Military Police Non-Lethal A-Kit to accept a Non-Lethal Mission Enhancement Package.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	1.499	0.000	0.000	0.000	0.000
FMTV Automotive Technological Evaluation, Testing & Insertion					
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					

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 0604604A: MEDIUM TACTICAL VEHICL	ES	PROJECT H07: FAMIL	PROJECT H07: FAMILY OF MED TAC VEH				
B. Accomplishments/Planned Program (\$ in Millions)	,		1					
	FY 2	009	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 #2 FMTV Automotive Technological Evaluation, Testing & Insertion		0.000	0.154	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 #3		0.000	0.000	2.740	0.000	2.740		
FMTV Automotive Technological Evaluation, Testing & Insertion								
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 0604604A: MEDIUM TACTICAL V.	EHICLES	PROJECT H07: FAMILY OF MED TAC VEH					
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 #4		0.000	0.364	0.000	0.000	0.000		
FMTV Suspension								
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 #5		0.000	2.965	0.000	0.000	0.000		
FMTV Armor Spiral Development								

			T				
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 0604604A: MEDIUM TACTICAL VEHICLES	PROJECT H07: FAMI	PROJECT H07: FAMILY OF MED TAC VEH				
B. Accomplishments/Planned Program (\$ in Millions)							
	FY 200	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 #6	0.6	70 0.000	0.000	0.000	0.000		
FMTV CAT Transmission							
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	0.0	00 1.09	0.000	0.000	0.000		

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R-1 Line Item #80 Page 6 of 13 694 of 1922

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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 0604604A: MEDIUM TACTICAL V	EHICLES	PROJECT H07: FAMILY OF MED TAC VEH				
B. Accomplishments/Planned Program (\$ in Millions)			I				
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FMTV CAT Transmission							
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		0.000	0.951	0.000	0.000	0.000	
ASV Military Police Non-Lethal Mission Enhancement Package							
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: February 2010	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0604604A: MEDIUM TACTICAL VEHICLES	H07: <i>FAMII</i>	LY OF MED TAC VEH
BA 5: Development & Demonstration (SDD)			

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #9	0.000	0.000	0.970	0.000	0.970
ASV Military Police Non-Lethal Mission Enhancement Package					
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	0.000	0.158	0.000	0.000	0.000
Small Business Innovative Research/Small Business Technical Transfer Program					
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

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

2040: Research, Development, Test & Evaluation, Army PE 0604604A: MEDIUM TACTICAL VEHICLES H07: FAMILY OF MED TAC VEH

BA 5: Development & Demonstration (SDD)

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals	2.169	5.683	3.710	0.000	3.710

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

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	<u>OCO</u>	Total	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• Ord. #1: OPA1 Family of Medium	631.476	1,359.606	918.195	516.351	1,434.546	408.428	396.611	486.170	381.239	3,602.300	8,700.376
Tactical Vehicles (D15500)											
• Ord. #2: OPA 1 Armored Security	318.732	149.379	114.478	52.780	167.258	0.000	0.000	0.000	0.000	0	635.369
Vehicle (ASV) (D02800)											

D. Acquisition Strategy

FMTV - Technological insertion will be accomplished by a Fixed Price or Cost Plus Fixed Fee (Level of Effort) basis. ASV - The Mission Enhancement Package (MEP) effort will be completed by TARDEC on a level of effort basis.

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

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)

PE 0604604A: MEDIUM TACTICAL VEHICLES

H07: FAMILY OF MED TAC VEH

Product Development (\$ in Millions)

_			_									Į.	
				FY	2010		2011 ase	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
FMTV Automotive Technological Evaluation and Insertion	C/Various	BAE Systems TVS Sealy, TX/Other	4.197	0.140		2.740		0.000		2.740	Continuing	Continuing	0
FMTV Suspension	C/Various	TARDEC Warren, MI	0.000	0.400		0.000		0.000		0.000	Continuing	Continuing	0
FMTV Armor Spiral Development	C/Various	TARDEC Warren, MI	0.000	2.965		0.000		0.000		0.000	Continuing	Continuing	0
FMTV CAT Transmission	С	BAE Systems TVS Sealy, TX	0.493	0.000		0.000		0.000		0.000	Continuing	Continuing	0
ASV Mission Enhancement Package (MEP)	С	TARDEC Warren, MI	0.000	0.978		0.970		0.000		0.970	Continuing	Continuing	0
		Subtotal	4.690	4.483		3.710		0.000		3.710			0.000

Remarks

Test and Evaluation (\$ in Millions)

Test and Evaluation (9 111 1V111111011	.5)											
				FY :	2010		2011 ase		2011 CO	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
FMTV Export Power Test	С	Aviation Ground Support Equipment	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0604604A: MEDIUM TACTICAL VEHICLES	H07: <i>FAMIL</i>	Y OF MED TAC VEH
BA 5: Development & Demonstration (SDD)			

Test and Evaluation (\$ in Millions)

				FY	2010		2011 ase		2011 CO	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
		Location could not be determined.											
FMTV CAT Transmission Test	С	Aberdeen Test Center Location could not be determined.	0.000	1.200		0.000		0.000		0.000	Continuing	Continuing	0
		Subtotal	0.000	1.200		0.000		0.000		0.000			0.000

Remarks

	Total Prior Years Cost	FY 2			2011 FY 2011 CO Total	Cost To	Total Cost	Target Value of Contract
	Years Cost	r r z	2010 Bs	ase	CO Total	Complete	Total Cost	Contract
Project Cost Totals	4.690	5.683	3.710	0.000	3.710			0.000

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)

PE 0604604A: MEDIUM TACTICAL VEHICLES

H07: FAMILY OF MED TAC VEH

		FY 2009			FY 2010			FY 2011			FY 2012				FY 2013			3	FY 2014				FY 2015			5		
	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
FMTV Armor Technology Insertion				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	
ASV Mission Enhancement Package (MEP)					#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	
FMTV Competitive Rebuy Award			#																									
FMTV Competitive Rebuy & Follow-on Production				#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0604604A: MEDIUM TACTICAL VEHICLES	H07: FAMIL	LY OF MED TAC VEH
BA 5: Development & Demonstration (SDD)			

Schedule Details

	Sta	art	E	nd
Event	Quarter	Year	Quarter	Year
FMTV Armor Technology Insertion	4	2009	3	2015
ASV Mission Enhancement Package (MEP)	1	2010	3	2015
FMTV Competitive Rebuy Award	3	2009	3	2009
FMTV Competitive Rebuy & Follow-on Production	4	2009	3	2015