

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2007

BUDGET ACTIVITY		PE NUMBER AND TITLE								
5 - System Development and Demonstration		0604642A - LIGHT TACTICAL WHEELED VEHICLES								
COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	9192	4450	82300	22220	22820	20800				161782
E40 LTV Prototype	2004	4450	82300	22220	22820	20800				154594
E46 Applied Vehicle Concepts	7188									7188

A. Mission Description and Budget Item Justification: The High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) is a lightweight, high performance, four-wheel drive, air transportable and air droppable, high mobility tactical wheeled vehicle. The HMMWV consists of a basic design with several variants including Cargo/Utility, Armament Carrier, Ambulance, Shelter Carrier and Armored Armament Carrier. Funding supports improvements to the HMMWV family of vehicles through the use of more recent technologies and maintainability improvements, which will result in decreased operational support costs, product improvements and increased power for vehicles with armor in theatre. Technology advancements in both armor and ballistic glass materials have progressed to the point that improved ballistic protection is available that is lighter and less expensive. FY08 and future funding supports the development and testing of the Joint Light Tactical Vehicle (JLTV), being developed as a joint system between the Army and the Marine Corps. The new joint fleet of vehicle is intended to replace the HMMWV. The JLTV concept is based on a Family of Vehicles (FOV) focused on integrated scalable personnel protection, and regaining vehicle agility and mobility required of the light tactical vehicles fleet while addressing passenger protection. JLTV will also reduce system life cycle cost through commonality of replacement spare and repair parts at the sub-assembly and component level. As a light tactical system, the JLTV will provide defensive measures covering troops while in transport, increase payload capability, maintain configuration management to reduce or improve the logistics footprint, and reduce onerous soldier and Marine workload associated with system operation and field maintenance activities.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2007

BUDGET ACTIVITY	PE NUMBER AND TITLE			
5 - System Development and Demonstration	0604642A - LIGHT TACTICAL WHEELED VEHICLES			
<u>B. Program Change Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2007)	7393			
Current BES/President's Budget (FY 2008/2009)	9192	4450	82300	22220
Total Adjustments	1799	4450	82300	22220
Congressional Program Reductions		-17		
Congressional Rescissions				
Congressional Increases		4500		
Reprogrammings	1799	-33		
SBIR/STTR Transfer				
Adjustments to Budget Years			82300	22220

Change Summary Explanation: Funding - FY08 and FY09 increases to support JLTV program.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2007

BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604642A - LIGHT TACTICAL WHEELED VEHICLES							PROJECT E40	
COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
E40 LTV Prototype	2004	4450	82300	22220	22820	20800				154594

A. Mission Description and Budget Item Justification: The High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) is a lightweight, high performance, four-wheel drive, air transportable and air droppable, high mobility tactical wheeled vehicle. The HMMWV consists of a basic design with several variants including Cargo/Utility, Armament Carrier, Ambulance, Shelter Carrier and Armored Armament Carrier. Funding supports logistics improvements to the HMMWV family of vehicles through the use of more recent engine technologies and maintainability improvements, which will result in decreased operational support costs and product improvements and increased power for vehicles with add-on armor in theatre. Technology advancements in both armor and ballistic glass materials have progressed to the point that improved ballistic protection is available that is lighter and less expensive. This effort will also address a removable armor package that could potentially be used on a portion of the HMMWV fleet to increase ballistic and blast protection on non-protected vehicles. FY08 and future funding supports the development and testing of the Joint Light Tactical Vehicle (JLTV), being developed as a joint system between the Army and the Marine Corps. The new joint fleet of vehicle is intended to replace the HMMWV. The JLTV concept is based on a Family of Vehicles (FOV) focused on integrated scalable personnel protection, and regaining vehicle agility and mobility required of the light tactical vehicles fleet while addressing passenger protection. JLTV will also reduce system life cycle cost through commonality of replacement spare and repair parts at the sub-assembly and component level. As a light tactical system, the JLTV will provide defensive measures covering troops while in transport, increase payload capability, maintain configuration management to reduce or improve the logistics footprint, and reduce onerous soldier and Marine workload associated with system operation and field maintenance activities.

<u>Accomplishments/Planned Program:</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
HMMWV Technology Improvement		4192		
Support Costs (Engineering/Quality/Matrix Support)		133		
JLTV Documentation Development	2004			
JLTV Program Management			4619	5329
JLTV Variant Prototype Design, Development and Fabrication			77681	
JLTV Developmental Test and Evaluation				16891
Small Business Innovative Research/Small Business Technology Transfer Programs		125		
Total	2004	4450	82300	22220

<u>B. Other Program Funding Summary</u>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
OPA1 Hi Mob Multi-Purp Whld Veh (D15400)	1281393	1659007	596627	668548	721542	645437	721915	291141		6585610

Comment:

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2007

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

0604642A - LIGHT TACTICAL WHEELED VEHICLES

PROJECT

E40

C. Acquisition Strategy The JLTV Acquisition Strategy is to competitively award up to three (3) contracts for System Development and Demonstration (SDD). Testing performed during SDD will result in a decision point based on system test results, to award contracts for a single vehicle system or set of vehicle systems that closely meet the spectrum of the Capability Development Document (CDD) requirements and complete the development and definition of the selected systems into each of the variants and/or sub-configurations of the JLTV. It is intended to acquire existing sub-system technologies that are at or above Technology Readiness Level seven (7) and manage the integration of them into specific mission capable vehicles.

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY			PE NUMBER AND TITLE									PROJECT		
5 - System Development and Demonstration			0604642A - LIGHT TACTICAL WHEELED VEHICLES									E40		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
In-House Engineering (TACOM)	N/A	TACOM, Warren, MI	2121			100	2Q						2221	2481
HMMWV Technology Improvement	SS/FFP	AM General, Mishawaka, IN	64			3100	3Q						3164	64
JLTV Documentation Development				2004	1-4Q								2004	
JLTV Variant Prototype Design & Development		TBD						77681	1-2Q				77681	
JLTV Program Management		TACOM, Warren, MI						4619	1-4Q	5329	1-4Q		9948	
JLTV Development Test & Evaluation		TBD								16891	1-4Q		16891	
Subtotal:			2185	2004		3200		82300		22220			111909	2545
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:														
Remarks: Not applicable														
III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Test/Validate Near Term Armor Protection	MIPR	ATC, Aberdeen, MD	807										807	807
Repower Testing	MIPR	ATC, Aberdeen, MD	2042										2042	1027
HMMWV Bloc Mod Improvement Testing	MIPR	ATC, Aberdeen, MD				625	2-3Q						625	
HMMWV Bloc Mod Improvement Testing	MIPR	Yuma Proving Ground, AZ				625	2-3Q						625	

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604642A - LIGHT TACTICAL WHEELED VEHICLES								PROJECT E40		
Subtotal:				2849			1250						4099	1834

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:														

Remarks: Not applicable

Project Total Cost:				5034	2004		4450		82300		22220		116008	4379
----------------------------	--	--	--	-------------	-------------	--	-------------	--	--------------	--	--------------	--	---------------	-------------

Schedule Profile (R4 Exhibit)

February 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604642A - LIGHT TACTICAL WHEELED VEHICLES

PROJECT
E40

Event Name	FY 06				FY 07				FY 08				FY 09				FY 10				FY 11				FY 12				FY 13			
	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	1	2	3	4
Request For Information (RFI)	RFI				RFI																											
(1) Request for Proposal (RFP)									RFP ▲ ₁																							
Source Selection Evaluation									SSEB																							
(2) Milestone B Decision									MS B ▲ ₂																							
Contract Award									Award ▲ ₂																							

Schedule Detail (R4a Exhibit)

February 2007

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604642A - LIGHT TACTICAL WHEELED VEHICLES

PROJECT
E40

<u>Schedule Detail</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>
Request For Information (RFI)		1Q - 2Q						
Request for Proposal (RFP)		3Q						
Source Selection Evaluation		3Q - 4Q	1Q					
Milestone B Decision			1Q					
Contract Award			1Q					