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 0604642A: LIGHT TACTICAL WHEELED 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	0.000	0.000	1.990	0.000	1.990	0.000	0.000	0.000	0.000	0	3.980
E40: LTV Prototype	0.000	0.000	1.990	0.000	1.990	0.000	0.000	0.000	0.000	Continuing	Continuing

#### Note

Not applicable for this item.

#### 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. FY 2011 Core funding supports improvements to the HMMWV family of vehicles through the development of an ambulance variant on the ECV chassis. Utilizing current production chassis for the ambulance variant incorporates engine technologies and maintainability improvements, which will result in decreased operational support costs. There are no FY 2011 OCO RDTE dollars under this program.

### **B. Program Change Summary (\$ in Millions)**

	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	0.000	0.000	1.990	0.000	1.990
Total Adjustments	0.000	0.000	1.990	0.000	1.990
<ul> <li>Congressional General Reductions</li> </ul>		0.000			
<ul> <li>Congressional Directed Reductions</li> </ul>		0.000			
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Adds</li> </ul>		0.000			
<ul> <li>Congressional Directed Transfers</li> </ul>		0.000			
<ul> <li>Reprogrammings</li> </ul>	0.000	0.000			
<ul> <li>SBIR/STTR Transfer</li> </ul>	0.000	0.000			
<ul> <li>Adjustments to Budget Years</li> </ul>	0.000	0.000	1.990	0.000	1.990

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army		<b>DATE:</b> February 2010
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	<b>R-1 ITEM NOMENCLATURE</b> PE 0604642A: <i>LIGHT TACTICAL WHEELED VEHICLES</i>	
<u>Change Summary Explanation</u> Funding - FY 2011 Core: Funds added to support the HMMWV ambu	ilance program.	

**DATE:** February 2010

APPROPRIATION/BUDGET ACTIV 2040: Research, Development, Test & E BA 5: Development & Demonstration (	Evaluation, Ar	my		R-1 ITEM N PE 0604642A VEHICLES		TURE CTICAL WHI	EELED	PROJECT E40: LTV Pr	ototype		
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	<b>Total Cost</b>
E40: LTV Prototype	0.000	0.000	1.990	0.000	1.990	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											

#### A. Mission Description and Budget Item Justification

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

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. FY 2011 Core funding supports improvements to the HMMWV family of vehicles through the development of an ambulance variant on the ECV chassis. Utilizing current production chassis for the ambulance variant incorporates engine technologies and maintainability improvements, which will result in decreased operational support costs. There are no FY 2011 OCO RDTE dollars under this program.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1	0.000	0.000	1.990	0.000	1.990
FY 2011 Core Funding supports XM997A3 HMMWV Ambulance Platform Development and Testing					
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			<b>DATE:</b> February 2010
APPROPRIATION/RUDGET ACTIVITY	R-1 ITEM NOMENCI ATURE	PROJECT	

APPROPRIATION/BUDGET ACTIVITY

2040: Research, Development, Test & Evaluation, Army

PE 0604642A: LIGHT TACTICAL WHEELED

E40: LTV II

PE 0604642A: LIGHT TACTICAL WHEELED E40: LTV Prototype VEHICLES

BA 5: Development & Demonstration (SDD)

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

			FY 2011	FY 2011	FY 2011
	FY 2009	FY 2010	Base	OCO	Total
Accomplishments/Planned Programs Subtotals	0.000	0.000	1.990	0.000	1.990

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

			<u>FY 2011</u>	<u>FY 2011</u>	<u>FY 2011</u>					Cost To	
<u>Line Item</u>	<b>FY 2009</b>	<b>FY 2010</b>	<b>Base</b>	<u>oco</u>	<b>Total</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>Complete</b>	<b>Total Cost</b>
• Ord. #1: OPA1 Hi Mob Multi-Purp	1,511.125	1,344.230	0.000	0.000	0.000	202.556	0.000	0.000	27.697	0	3,085.608
Whld Veh (D15400)											

#### D. Acquisition Strategy

The HMMWV Ambulance strategy involves the integration of the M997A2 ambulance box on an Expanded Capacity Vehicle (ECV) chassis. The new vehicle platform is anticipated to be classified as XM997A3. Integration of the two full materiel release systems is anticipated to allow the XM997A3 to enter the acquisition system post-milestone B. FY 2011 Core RDT&E will be used to fund the developmental testing portion of the XM997A3 program. Developmental testing will occur in a relevant environment at Government and contractor test facilities. The main goals of the developmental testing for this program are: 1.) to ensure that the modified air conditioning configuration on the XM997A3 will meet or exceed the air conditioning requirements of the current ECV platforms; 2.) to ensure that the air conditioning configuration on the XM997A3 will not degrade vehicle powertrain and driveline performance; and 3.) to ensure structural integrity of the integration of the legacy ambulance box on the ECV chassis. This will ensure that the XM997A3 platform will be ready for operational testing to properly support needs of the Army medical community.

#### 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.

#### UNCLASSIFIED

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 0604642A: LIGHT TACTICAL WHEELED

**VEHICLES** 

PROJECT

E40: LTV Prototype

## **Product Development (\$ in Millions)**

				FY	2010	FY 2 Ba	2011 ase	FY :	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
FY 2011 Core funding supports XM997A3 Ambulance Platform Development/Testing	SS/FFP	Mishawaka IN	0.000	0.000		0.390		0.000		0.390	Continuing	Continuing	0
		Subtotal	0.000	0.000		0.390		0.000		0.390			0.000

#### Remarks

## **Support (\$ in Millions)**

				FY	2010	FY : Ba	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
Cost Category Item is empty.	С	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

Not applicable

### **UNCLASSIFIED**

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 0604642A: LIGHT TACTICAL WHEELED

**VEHICLES** 

PROJECT

E40: LTV Prototype

### **Test and Evaluation (\$ in Millions)**

				FY	2010	FY : Ba	2011 ase	FY 2	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
FY 2011 Core Funding Supports XM997A3 Structural/Endurance Testing	С	ATC Aberdeen, MD	0.000	0.000		1.600		0.000		1.600	Continuing	Continuing	0
		Subtotal	0.000	0.000		1.600		0.000		1.600			0.000

#### Remarks

## **Management Services (\$ in Millions)**

				FY	2010	FY 2 Ba	2011 ise	FY O	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
Cost Category Item is empty.	С	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

Not applicable

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army	<b>DATE:</b> February 2010				
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT			
2040: Research, Development, Test & Evaluation, Army	PE 0604642A: LIGHT TACTICAL WHEELED	E40: <i>LTV P1</i>	rototype		
BA 5: Development & Demonstration (SDD)	VEHICLES				

	Total Prior Years Cost	FY 2010	FY 2	2011 ase	FY 2	2011 CO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000	1.990		0.000		1.990			0.000

Remarks

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

APPROPRIATION/BUDGET ACTIVITY

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

PE 0604642A: LIGHT TACTICAL WHEELED VEHICLES

DATE: February 2010

PROJECT

E40: LTV Prototype

	FY 2009		FY 2009 FY 2010			]	FY	201	1	1	FY 2	201	2	FY 2013				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
Contract Award									#																			
XM997A3 Developmental Testing									#	#	#																	

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army		<b>DATE:</b> Febr	uary 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
2040: Research, Development, Test & Evaluation, Army	PE 0604642A: LIGHT TACTICAL WHEELED	E40: LTV Prototype	
BA 5: Development & Demonstration (SDD)	VEHICLES		

# Schedule Details

	Start		End				
Event	Quarter	Year	Quarter	Year			
Contract Award	1	2011	1	2011			
XM997A3 Developmental Testing	1	2011	3	2011			