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**Exhibit R-2, RDT&E Budget Item Justification: PB 2017 Army** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army / BA 5: System Development &amp; Demonstration (SDD)</i>	<b>R-1 Program Element (Number/Name)</b> PE 0605625A / <i>Manned Ground Vehicle</i>
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COST (\$ in Millions)	Prior Years	FY 2015	FY 2016	FY 2017 Base	FY 2017 OCO	FY 2017 Total	FY 2018	FY 2019	FY 2020	FY 2021	Cost To Complete	Total Cost
Total Program Element	-	47.265	39.247	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	86.512
FC8: <i>BCT Ground Combat Vehicle</i>	-	47.265	39.247	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	86.512

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

Fiscal constraints and competing demands during budget uncertainty forced the Army to make hard choices between near term readiness and modernizing current systems to meet near term capability gaps and developing the Ground Combat Vehicle (GCV). The Army concluded it was not the right time to develop the GCV and ended the program upon completion of the Technology Development (TD) phase in June 2014. The Army has benefited from investment in the GCV program and will use the insights gained to inform technology maturation efforts in support of a strategy for the Army's Future Fighting Vehicle (FFV) modernization program.

Although the GCV program ended at the conclusion of the TD phase, the Army still maintains their requirement to fully modernize their fleet of ground combat vehicles. The FFV program will continue to leverage information and insights gained from the GCV TD phase to allow the Army to make better informed decisions in the future regarding their Combat Vehicle Portfolio. The main goals of the FFV program are to conduct technical, cost, and risk assessments against selected capability trades and future technologies for a FFV system.

Funding is not provided for the FFV Program in FY 2017.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>
Previous President's Budget	49.134	49.247	0.000	-	0.000
Current President's Budget	47.265	39.247	0.000	-	0.000
Total Adjustments	-1.869	-10.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-10.000			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.869	-			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Army										<b>Date:</b> February 2016		
<b>Appropriation/Budget Activity</b> 2040 / 5					<b>R-1 Program Element (Number/Name)</b> PE 0605625A / <i>Manned Ground Vehicle</i>				<b>Project (Number/Name)</b> FC8 / <i>BCT Ground Combat Vehicle</i>			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017 Base</b>	<b>FY 2017 OCO</b>	<b>FY 2017 Total</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
FC8: <i>BCT Ground Combat Vehicle</i>	-	47.265	39.247	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	86.512
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

Fiscal constraints and competing demands during budget uncertainty forced the Army to make hard choices between near term readiness and modernizing current systems to meet near term capability gaps and developing the Ground Combat Vehicle (GCV). The Army concluded it was not the right time to develop the GCV and ended the program upon completion of the Technology Development (TD) phase in June 2014. The Army has benefited from investment in the GCV program and will use the insights gained to inform technology maturation efforts in support of a strategy for the Army's Future Fighting Vehicle (FFV) modernization program.

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Funding is not provided for the FFV Program in FY 2017.

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

	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>
<b>Title:</b> Government System Engineering & Program Management	9.134	9.247	-
<b>Description:</b> Provides for basic Government oversight of the Ground Combat Vehicle (GCV) and Future Fighting Vehicle (FFV) programs. Includes funding for government personnel (labor, travel, training, supplies) and other support (other government agencies, support contractors, automated data processing, communications, and equipment).			
<b>FY 2015 Accomplishments:</b> The Project Management team was significantly scaled back, but will continued to provide oversight to planned contract efforts. The contract efforts were focused on advanced concept development, technology risk reduction, and integration of S&T developed components. The Government Future Fighting Vehicle (FFV) team lead, integrated, and collaborated across technical and analytical efforts with the S&T and Requirements communities.			
<b>FY 2016 Plans:</b> The Project Management team will continue to provide oversight to planned contract efforts. The contract efforts will be focused on advanced concept development, technology risk reduction, and integration of S&T developed components. The Government			

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2017 Army	<b>Date:</b> February 2016
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<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605625A / <i>Manned Ground Vehicle</i>	<b>Project (Number/Name)</b> FC8 / <i>BCT Ground Combat Vehicle</i>
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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>	FY 2015	FY 2016	FY 2017
Future Fighting Vehicle (FFV) team will also lead, integrate, and collaborate across technical and analytical efforts with the S&T and Requirements communities.			
<p><b>Title:</b> Contractor Systems Engineering/Program Management</p> <p><b>Description:</b> Provides for contractor basic development, engineering, and management for the GCV and FFV prime contracts, less prototype hardware and software development (which are captured in the following sections). Includes material consumed in support of component level engineering efforts.</p> <p><b>FY 2015 Accomplishments:</b> Contractors conducted concept development work and subsystem risk reduction, in collaboration with planned S&amp;T efforts. Concept development effort initially evolved from the design concepts developed under the GCV TD phase resulted in development and delivery of concept data packages that include: 3 dimensional/Computer Aided Design (CAD) model representations, bill of materials, product structure / weight tape / power and energy balance, and cost estimate. In addition, a variety of technical and operational analyses and trades were completed.</p> <p><b>FY 2016 Plans:</b> Contractors will conduct concept development work and subsystem risk reduction, in collaboration with planned S&amp;T efforts. Concept development effort will initially evolve from the design concepts developed under the GCV TD phase and will result in development and delivery of concept data packages that include: 3 dimensional/Computer Aided Design (CAD) model representations, bill of materials, product structure / weight tape / power and energy balance, and cost estimate. In addition, a variety of technical and operational analyses and trades are expected to be completed.</p>	38.131	30.000	-
<b>Accomplishments/Planned Programs Subtotals</b>	47.265	39.247	-

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

N/A

**Remarks**

**D. Acquisition Strategy**

The Army will continue to engage with the prime contractors from the Ground Combat Vehicle (GCV) Technology Development (TD) Phase, to conduct system level trade studies and integrated assessments using their designs relative to a new Future Fighting Vehicle (FFV). In addition, the contractors will perform design excursions based on the Bradley Fighting Vehicle. The data provided will be utilized by the Army to determine if the acquisition of a new FFV is the preferred choice over a modification to existing Fighting Vehicles.

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Exhibit R-2A, RDT&E Project Justification: PB 2017 Army Date: February 2016

Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
2040 / 5	PE 0605625A / <i>Manned Ground Vehicle</i>	FC8 / <i>BCT Ground Combat Vehicle</i>

For the FY 2016 Budget, the Army will continue combat vehicle concept development and synchronization with planned Government S&T investments which will eventually form the foundation for a future fighting vehicle program. The Project Management Office is assessing the full impact of this decision and will ultimately formalize a future fighting vehicle acquisition strategy.

**E. Performance Metrics**

N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2017 Army												Date: February 2016			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0605625A / Manned Ground Vehicle				FC8 / BCT Ground Combat Vehicle							
Product Development (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	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 GCV/FFV	SS/CPFF	BAE / GDLS, Sterling Heights, MI : .	1,052.769	38.131	May 2015	30.000	Jan 2016	-		-		-	Continuing	Continuing	Continuing
Contractor Prototypes GCV	SS/CPFF	BAE / GDLS, Sterling Heights, MI : .	65.659	-		-		-		-		-	Continuing	Continuing	Continuing
Contractor Software GCV	SS/CPFF	BAE / GDLS, Sterling Heights, MI : .	82.478	-		-		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			1,200.906	38.131		30.000		-		-		-	-	-	-
Support (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	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 GCV/FFV	Various	PM Ground Combat Vehicle : Warren, MI	221.872	9.134	Oct 2014	-		-		-		-	Continuing	Continuing	Continuing
Government System Engineering and Prog Mgt FFV	Various	PM FFV : Various Locations	0.000	-		9.247	Nov 2015	-		-		-	0	9.247	0
Assessment of Selected Non-developmental Vehicles (ASNV) GCV	Various	Various Locations : Various Locations	38.304	-		-		-		-		-	0	38.304	0
<b>Subtotal</b>			260.176	9.134		9.247		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2015		FY 2016		FY 2017 Base		FY 2017 OCO		FY 2017 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Tests & Modeling & Simulation GCV	Various	PM Ground Combat Vehicle : Warren, MI	31.110	-		-		-		-		-	Continuing	Continuing	Continuing
<b>Subtotal</b>			31.110	-		-		-		-		-	-	-	-



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**Exhibit R-4, RDT&E Schedule Profile: PB 2017 Army** **Date:** February 2016

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605625A / <i>Manned Ground Vehicle</i>	<b>Project (Number/Name)</b> FC8 / <i>BCT Ground Combat Vehicle</i>
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Event Name	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
Advanced Concept Development FFV	<b>Advanced Concept Dev</b>																											

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**Exhibit R-4A, RDT&E Schedule Details:** PB 2017 Army **Date:** February 2016

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0605625A / <i>Manned Ground Vehicle</i>	<b>Project (Number/Name)</b> FC8 / <i>BCT Ground Combat Vehicle</i>
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Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Advanced Concept Development FFV	1	2015	4	2016