Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army											Date: February 2018	
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0603778A / *MLRS Product Improvement Program*							
COST ($ in Millions)	**Prior Years**	**FY 2017**	**FY 2018**	**FY 2019 Base**	**FY 2019 OCO**	**FY 2019 Total**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**Cost To Complete**	**Total Cost**
Total Program Element	-	34.391	8.929	8.886	-	8.886	8.877	10.167	12.479	53.296	0.000	137.025
093: *Multi-Launch Rocket System (MLRS)*	-	25.100	5.000	4.947	-	4.947	4.943	5.041	5.040	31.506	0.000	81.577
789: *Guided MLRS (GMLRS) Rocket P3I**	-	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	17.748	0.000	17.748
DX8: *HIMARS Product Improvement Program*	-	9.291	3.929	3.939	-	3.939	3.934	5.126	7.439	4.042	0.000	37.700

*This project's R-2a exhibit has been suppressed due to funding not beginning until after FY 2019

A. Mission Description and Budget Item Justification

Project 093. The Multiple Launch Rocket System (MLRS) launcher is a full spectrum, combat proven, all weather, 24/7 lethal and responsive, precision strike weapon system. MLRS provides critical missile precision strike, operational shaping fires, counterfire, and close support destructive and suppressive fires. MLRS is a tracked, indirect fire, rocket/missile launcher capable of firing two pods of precision rockets/missiles from the Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM), to include the Guided Multiple Launch Rocket System (GMLRS) and the Army Tactical Missile System (ATACMS). These munitions are capable of engaging targets with precision at ranges up to 300 kilometers. This project funds software development for the MLRS launcher. The government assumed responsibility for software development and maintenance from the prime contractor in FY2016. Organic software is defined as government developed, maintained, and owned software. The long-term end state is a convergence of tactical software across the HIMARS and MLRS launcher platforms into a single product supporting both systems.

FY2019 Base funding in the amount of $4.947 million for project 093 supports the continued software development of an organic tactical software build in support of the Fire Control System (FCS) hardware supporting both the current MLRS Fleet (upon upgrade with a modern hardware FCS) and the Army's MLRS Fleet Expansion effort. This software development leverages the program's completed software transition from the prime contractor to the government in FY2016. This FCS solution will be ready to field in FY2021. The tactical software is a critical developmental item required to field additional launchers, maintain backward compatibility for current fleet sustainment, and will be the first release of organic software common to both the MLRS and HIMARS launcher in FY2021.

Project 789. The Multiple Launch Rocket System (MLRS) Low Cost Reduced Range Practice Rocket (LCRRPR) is the only live training rocket for High Mobility Artillery Rocket System (HIMARS) and M270/M270A1 MLRS Launcher units/crews. LCRRPR meets a critical validated requirement for Active and National Guard HIMARS and M270A1 launcher units to achieve and maintain combat readiness. HIMARS and M270A1 Battalions are organic and attached to modular Fires Brigades supporting Brigade Combat Teams (BCTs), Joint Expeditionary Force, and Joint Special Operations Force combatant commanders. The training rocket has an inert payload section and blunt nose for inducing reduced range for use at multiple facilities in the United States and foreign countries. LCRRPRs are manufactured by Lockheed Martin in Camden, Arkansas and Letterkenny Munitions Center (LEMC) in Chambersburg, Pennsylvania. LEMC provides an organic dual source. The LCRRPR is currently produced by reusing the M26 pod and rocket motor, however, the US Government will soon experience inventory depletion of M26 rocket motors and Launch Pod Containers that feed the LCRRPR production line.

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Army	Date: February 2018
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0603778A *I MLRS Product Improvement Program*

Project DX8. The M142 High Mobility Artillery Rocket System (HIMARS) launcher is a full spectrum, combat proven, all weather, 24/7 lethal and responsive, precision strike weapon system. HIMARS provides critical missile precision strike, operational shaping fires, counterfire, and close support destructive and suppressive fires. HIMARS is a C-130 or C-17 transportable, wheeled, indirect fire, rocket/missile launcher capable of firing one pod of precision rockets/missiles from the Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM), to include the Guided Multiple Launch Rocket System (GMLRS) and the Army Tactical Missile System (ATACMS). These munitions are capable of engaging targets with precision at ranges up to 300 kilometers. This project funds software development for the HIMARS launcher. The government assumed responsibility for software development and maintenance from the prime contractor in FY2016. Organic software is defined as government developed, maintained, and owned software. The long-term end state is a convergence of tactical software across the HIMARS and MLRS launcher platforms into a single product supporting both systems.

FY2019 Base funding in the amount of $3.939 million for project DX8 supports HIMARS-unique software build, version 8.2. The Product Manager will field this software to the M142 fleet in FY2019. In addition to addressing software maintenance, software version 8.2 enables portability to the M270A2 (MLRS) tracked launcher upon receipt of a hardware Fire Control System upgrade.

B. Program Change Summary ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	34.763	8.929	8.981	-	8.981
Current President's Budget	34.391	8.929	8.886	-	8.886
Total Adjustments	-0.372	0.000	-0.095	-	-0.095
• Congressional General Reductions	-0.005	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.367	-			
• Other Adjustments 2	-	-	-0.095	-	-0.095

Change Summary Explanation

FY17: $0.367 million SBIR transfer
FY17: $0.005 million FFRDC transfer

Exhibit R-2A, RDT&E Project Justification: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0603778A / *MLRS Product Improvement Program*	Project (Number/Name) 093 / *Multi-Launch Rocket System (MLRS)*	

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
093: *Multi-Launch Rocket System (MLRS)*	-	25.100	5.000	4.947	-	4.947	4.943	5.041	5.040	31.506	0.000	81.577
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project 093. The Multiple Launch Rocket System (MLRS) launcher is a full spectrum, combat proven, all weather, 24/7 lethal and responsive, precision strike weapon system. MLRS provides critical missile precision strike, operational shaping fires, counterfire, and close support destructive and suppressive fires. MLRS is a tracked, indirect fire, rocket/missile launcher capable of firing two pods of precision rockets/missiles from the Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM), to include the Guided Multiple Launch Rocket System (GMLRS) and the Army Tactical Missile System (ATACMS). These munitions are capable of engaging targets with precision at ranges up to 300 kilometers. This project funds software development for the MLRS launcher. The government assumed responsibility for software development and maintenance from the prime contractor in FY2016. Organic software is defined as government developed, maintained, and owned software. The long-term end state is a convergence of tactical software across the HIMARS and MLRS launcher platforms into a single product supporting both systems.

FY2019 Base funding in the amount of $4.947 million for project 093 continues software development of an organic tactical software build in support of the Common Fire Control System (CFCS) hardware supporting both the current MLRS Fleet (upon upgrade with a modern hardware FCS) and the Army's MLRS Fleet Expansion effort. This software development leverages the program's completed software transition from the prime contractor to the government in FY2016. The CFCS solution will be ready to field in FY2021. The tactical software is a critical developmental item required to field additional launchers, maintain backward compatibility for current fleet sustainment, and will be the first release of organic software common to both the MLRS and HIMARS launcher.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: MLRS Product Improvement Program	25.100	5.000	4.947	-	4.947
Description: The MLRS Product Improvement Program provides the preservation of platform viability and readiness to accept technology insertion as capability enhancements and obsolescence mitigations are developed. Support efforts include: obsolescence mitigation and enhancements for the M993A1 carrier, Fire Control System, Launcher Loader Module and Enhanced Command and Control (EC2); develop and update the Fire Control System software to keep pace with changes to the munitions; and perform Command, Control, Communications, Computers and Intelligence (C4I)/interoperability and Information Assurance compliance certification and network interoperability testing. Perform technical assessments and concept studies for: obsolescence mitigation; crew protection; automotive, hardware and software enhancements; improving operational timelines; and risk reduction.					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Army		Date: February 2018
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0603778A / *MLRS Product Improvement Program*	**Project (Number/Name)** 093 / *Multi-Launch Rocket System (MLRS)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
FY 2018 Plans: Began tactical launcher software development to support the Fire Control System obsolescence mitigation hardware upgrade required to operate a MLRS launcher. ***FY 2019 Base Plans:*** Continue tactical launcher software development to support the Fire Control System obsolescence mitigation hardware upgrade required to operate a MLRS launcher. ***FY 2018 to FY 2019 Increase/Decrease Statement:*** Decrease is due to economic adjustment from FY18 to FY19.					
Accomplishments/Planned Programs Subtotals	25.100	5.000	4.947	-	4.947

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• C67500: *MLRS Mods*	25.052	138.235	383.216	122.000	505.216	290.039	412.452	216.428	208.888	Continuing	Continuing
• CA0265: *MLRS MODIFICATION INITIAL SPARES*	0.476	-	0.000	-	0.000	-	-	-	-	Continuing	Continuing

Remarks

D. Acquisition Strategy

The MLRS Product Improvement Program performs development efforts required to address emerging requirements. The Army completed transition from the prime contractor (legacy v7.x) to an organic (government developed, maintained, and owned) approach (v8.x forward)) by utilizing the Aviation & Missile Research & Development Engineering Center's (AMRDEC) Software Engineering Directorate (SED) as the software developer and maintainer. These efforts are funded via Military Interdepartmental Purchase Request (MIPR). Emerging requirements include updates to address emerging threats of the launcher organic version 8.x software, reacting to system changes driven by policy and emerging requirements, and maintaining architectural compatibility. Communication suite changes, munitions updates, and introduction of new munitions require software and/or hardware updates to ensure full compatibility and maintain operational viability. The enduring organic v8.2 software effort is projected for Materiel Release and fielding to the M270A2 (MLRS) launcher when upgraded with the Fire Control System solution.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0603778A / *MLRS Product Improvement Program*	Project (Number/Name) 093 / *Multi-Launch Rocket System (MLRS)*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Program Management	Various	PFRMS Project Office : Redstone Arsenal, AL	8.955	-		-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	8.955	-		-		-		-		-	Continuing	Continuing	N/A

Remarks

PFRMS - Precision Fires Rocket and Missile Systems

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Other Government Agencies OGA	MIPR	FT SILL OK, CECOM-NJ AMRDEC-RSA AL, : various	17.108	-		-		-		-		-	Continuing	Continuing	Continuing
MLRS IAC	C/CPFF	Lockheed Martin : Grand Prairie, TX	30.498	-		-		-		-		-	Continuing	Continuing	Continuing
MLRS FCS Development	SS/CR	Lockheed Martin : Grand Prairie, TX	70.200	-		-		-		-		-	Continuing	Continuing	Continuing
Organic Software Development	MIPR	AMRDEC's Software Engineering Directorate : Redstone Arsenal, AL	-	-		5.000		4.947	Mar 2019	-		4.947	Continuing	Continuing	Continuing
Risk Reduction Effort: Common Fire Control System	SS/TBD	TBD : TBD	-	21.900	Feb 2018	-		-		-		-	0.000	21.900	-
Risk Reduction Effort: Hulls	MIPR	Red River Army Depot : Red River Army Depot, TX	-	3.200	Jan 2018	-		-		-		-	0.000	3.200	-
		Subtotal	117.806	25.100		5.000		4.947		-		4.947	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0603778A / *MLRS Product Improvement Program*	Project (Number/Name) 093 / *Multi-Launch Rocket System (MLRS)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract

Remarks

AMRDEC - Aviation and Missile Research Development and Engineering Center

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Support Contract	Various	Multiple : Multiple	4.834	-		-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	4.834	-		-		-		-		-	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Support, Joint Interoperability Test Certificate	MIPR	CTSF, Ft. Hood : Texas	10.712	-		-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	10.712	-		-		-		-		-	Continuing	Continuing	N/A

Remarks

CTSF - Central Technical Support Facility

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	142.307	25.100		5.000		4.947		-		4.947	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army		Date: February 2018
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0603778A / *MLRS Product Improvement Program*	**Project (Number/Name)** 093 / *Multi-Launch Rocket System (MLRS)*

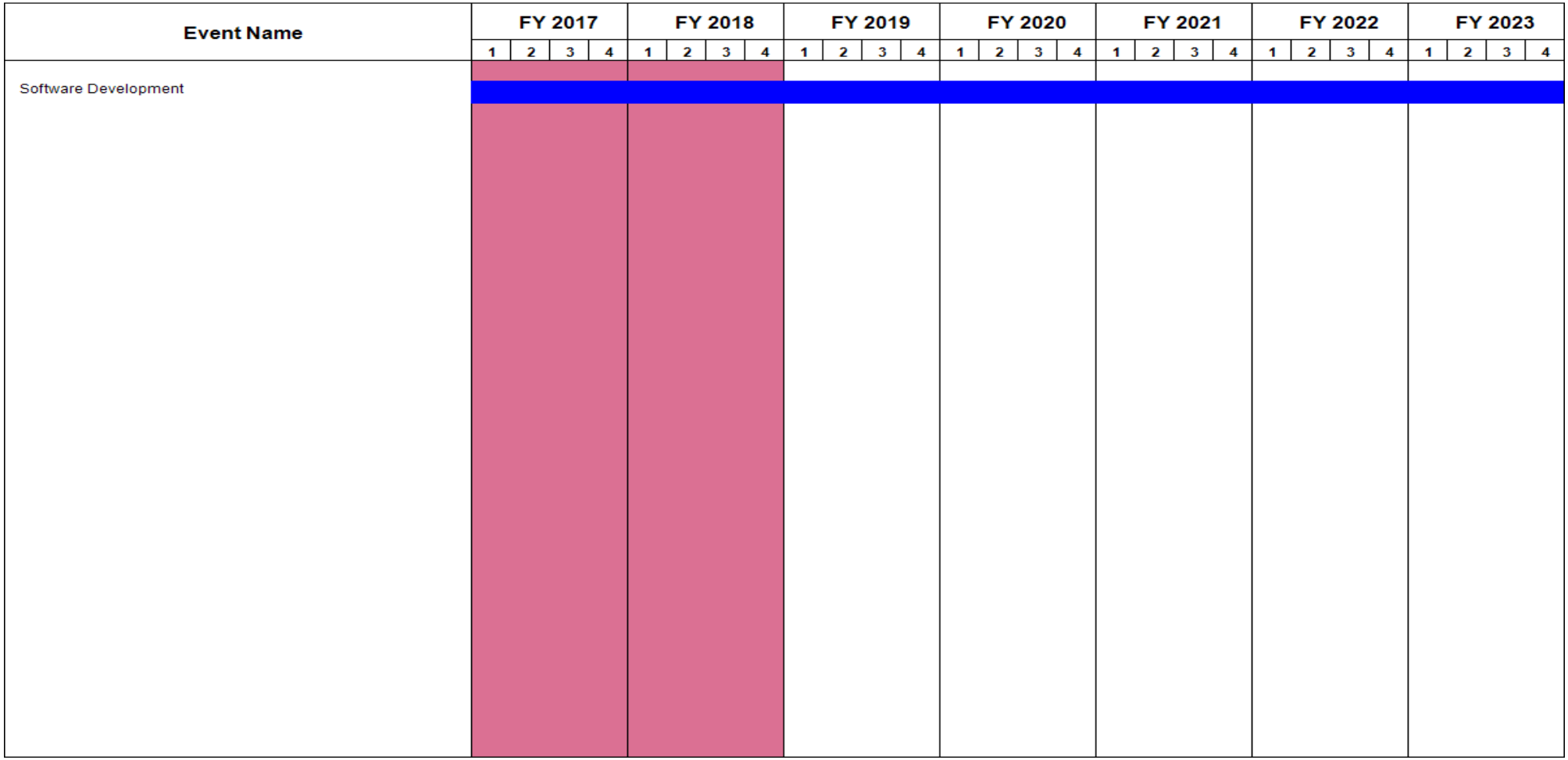

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army		Date: February 2018
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0603778A / *MLRS Product Improvement Program*	**Project (Number/Name)** 093 / *Multi-Launch Rocket System (MLRS)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Software Development	2	2013	4	2023

Note

Software Development by Aviation and Missile Research, Development, and Engineering Center (AMRDEC) Software Engineering Directorate (SED).

Exhibit R-2A, RDT&E Project Justification: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0603778A / *MLRS Product Improvement Program*	Project (Number/Name) DX8 / *HIMARS Product Improvement Program*	

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
DX8: *HIMARS Product Improvement Program*	-	9.291	3.929	3.939	-	3.939	3.934	5.126	7.439	4.042	0.000	37.700
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project DX8. The M142 High Mobility Artillery Rocket System (HIMARS) launcher is a full spectrum, combat proven, all weather, 24/7 lethal and responsive, precision strike weapon system. HIMARS provides critical missile precision strike, operational shaping fires, counterfire, and close support destructive and suppressive fires. HIMARS is a C-130 or C-17 transportable, wheeled, indirect fire, rocket/missile launcher capable of firing one pod of precision rockets/missiles from the Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM), to include the Guided Multiple Launch Rocket System (GMLRS) and the Army Tactical Missile System (ATACMS). These munitions are capable of engaging targets with precision at ranges up to 300 kilometers. This project funds software development for the HIMARS launcher. The government assumed responsibility for software development and maintenance from the prime contractor in FY2016. Organic software is defined as government developed, maintained, and owned software. The long-term end state is a convergence of tactical software across the HIMARS and MLRS launcher platforms into a single product supporting both systems.

FY2019 Base funding in the amount of $3.939 for project DX8 supports development of HIMARS-unique software build, version 8.2. In addition to addressing software maintenance, software version 8.2 enables portability to the M270A2 (MLRS) tracked launcher upon receipt of a hardware Fire Control System upgrade.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: MLRS Production Improvement Program (PIP)-HIMARS PIP	9.291	3.929	3.939	-	3.939
Description: Provide enduring tactical software development and maintenance required to address security concerns, implement fixes to newly discovered issues, and address emerging threats.					
FY 2018 Plans: Completed version 8.1 tactical software build for HIMARS launcher and achieve readiness for operational fielding. Began version 8.2 tactical software build to add support to launcher Insensitive Munitions Propulsion System (IMPS) Guided Multiple Launch Rocket System (GMLRS) munitions starting production. This software upgrade will be required to launch the newest production munitions.					
FY 2019 Base Plans: Complete developing version 8.2 tactical software build to add support to launcher IMPS GMLRS munitions starting production. This software upgrade will be required to launch the newest production munitions.					
FY 2018 to FY 2019 Increase/Decrease Statement:					

Exhibit R-2A, RDT&E Project Justification: PB 2019 Army		Date: February 2018
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0603778A / *MLRS Product Improvement Program*	**Project (Number/Name)** DX8 / *HIMARS Product Improvement Program*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
No change					
Accomplishments/Planned Programs Subtotals	9.291	3.929	3.939	-	3.939

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• C67501: *HIMARS Modifications (C67501)*	1.847	9.566	10.196	-	10.196	12.483	6.089	7.300	9.711	204.749	261.941
• C02901: *High Mobility Artillery Rocket System (HIMARS)*	-	41.000	0.000	171.138	171.138	-	-	89.077	41.274	0.000	342.489

Remarks

D. Acquisition Strategy

The HIMARS Product Improvement Program performs development efforts required to address emerging requirements. The Army completed transition from the prime contractor (legacy v7.x) to an organic approach organic (government developed, maintained, and owned) approach (v8.x forward)) by utilizing the Aviation & Missile Research & Development Engineering Center's (AMRDEC) Software Engineering Directorate (SED) as both the software developer and maintainer. These efforts are funded via Military Interdepartmental Purchase Request (MIPR). Emerging requirements include updates to address emerging threats of the launcher organic version 8.x software, reacting to system changes driven by policy and emerging requirements, and maintaining architectural compatibility. Communication suite changes, munitions updates, and introduction of new munitions require software and/or hardware updates to ensure full compatibility and maintain operational viability. The enduring organic version 8 software effort is projected for Materiel Release and fielding to HIMARS fleet in FY2019. When fielded, Version 8.2 will enable portability to the M270A2 (MLRS) launcher when upgraded with the Common Fire Control System solution.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0603778A / *MLRS Product Improvement Program*	Project (Number/Name) DX8 / *HIMARS Product Improvement Program*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Government Program Management	Various	PFRMS Project Office : Redstone Arsenal, AL	0.422	0.395	Oct 2016	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	0.422	0.395		-		-		-		-	Continuing	Continuing	N/A

Remarks

PFRMS - Precision Fires Rocket and Missile Systems

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Other Government Agencies (OGA)	MIPR	AMCOM, GSA, RSA : Various	3.318	-		-		-		-		-	Continuing	Continuing	Continuing
Organic Software Development & Maintenance	MIPR	AMRDEC's Software Engineering Directorate : Redstone Arsenal, AL	0.463	6.400	Feb 2017	3.929		3.939	Mar 2019	-		3.939	Continuing	Continuing	Continuing
		Subtotal	3.781	6.400		3.929		3.939		-		3.939	Continuing	Continuing	N/A

Remarks

AMRDEC - Aviation & Missile Research, Development, and Engineering Center

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test Support	MIPR	Ft Hood, TX, ATEC, APG, MD, WSMR, RTC, RSA : Various	0.963	2.496	Aug 2017	-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	0.963	2.496		-		-		-		-	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Army			Date: February 2018
Appropriation/Budget Activity 2040 / 7	R-1 Program Element (Number/Name) PE 0603778A / *MLRS Product Improvement Program*	Project (Number/Name) DX8 / *HIMARS Product Improvement Program*	

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks ATEC - US Army Test and Evaluation Command; APG MD - Aberdeen Proving Ground, Maryland; WSMR - White Sands Missile Range; RTC RSA - Redstone Test Center, Redstone Arsenal, Alabama															

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	5.166	9.291		3.929		3.939		-		3.939	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Army		Date: February 2018
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0603778A / *MLRS Product Improvement Program*	**Project (Number/Name)** DX8 / *HIMARS Product Improvement Program*

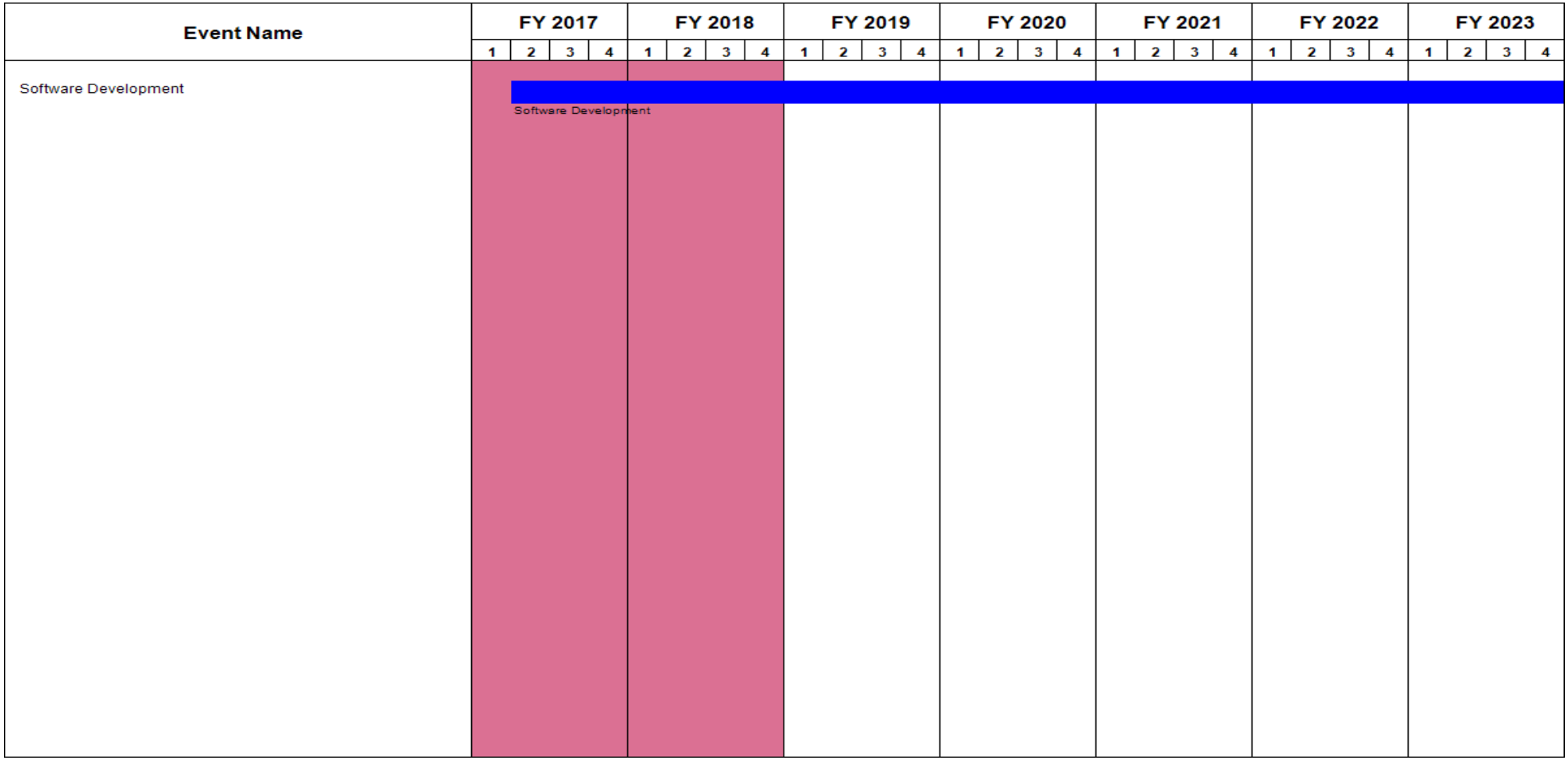

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Army		Date: February 2018
Appropriation/Budget Activity 2040 / 7	**R-1 Program Element (Number/Name)** PE 0603778A / *MLRS Product Improvement Program*	**Project (Number/Name)** DX8 / *HIMARS Product Improvement Program*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Software Development	2	2017	4	2023

Note

Software Development by Aviation and Missile Research, Development, and Engineering Center (AMRDEC) Software Engineering Directorate (SED).