Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Army	Date: February 2020
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army I* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 Program Element (Number/Name)** PE 0603645A *I Armored System Modernization - Adv Dev*

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	-	80.106	144.234	151.478	-	151.478	172.700	50.656	44.658	24.979	0.000	668.811
EV7: *Combat Vehicle Prototyping*	-	80.106	144.234	151.478	-	151.478	172.700	50.656	44.658	24.979	0.000	668.811

A. Mission Description and Budget Item Justification

Armored System Modernization provides focused investment for the technology development of combat vehicles for future battlefields. The purpose of this Program Element's (PE) funding is to integrate the next generation of technology enabled capabilities developed in the Science and Technology (S&T) portfolio and Industry to demonstrate new capabilities to meet emerging military needs, provide hardware for Soldier operational experiment/feedback, and determine integration potential across the current Army portfolio of ground vehicles. The primary efforts include but not limited to, maturing and experimenting with Manned Un-Manned Teaming, in conjunction with the Robotic Combat Vehicle, maturing, integrating and experimenting with a variety of technologies for the Optionally Manned Fighting Vehicle (OMFV), and other legacy combat vehicles/platforms within the Maneuver portfolio.

Armored System Modernization allows for aggressive innovation that could provide a bridge from S&T investment to vehicle integration and operational use. It can inform requirements through User Evaluations, mitigate capability gaps and reduce integration risks. The strategy will be to focus on delivering incremental experimental prototypes to the warfighter to demonstrate Manned Un-Manned Teaming (MUM-T), to integrate technologies to maintain overmatch while demonstrating crew task reductions through crew augmentation enabled by optimized Warfighter Machine Interface (WMI) and sensor fusion. The funding will support virtual and physical concept development, trade studies, technical and operational analyses to assess future concepts and designs. This effort will partner government organic capabilities and Industry for an iterative process to develop combat vehicle concepts and prototypes in order to inform and stabilize future capability requirements, performance characteristics, and affordability, evaluate and update operational concepts, and reduce future acquisition risk. This would also include the support for survivability and lethality requirements/qualifications. In addition, this funding will support program management, system integration labs, technology maturation, integration risk reduction, qualification of key lethality/weapon system and sensor technologies to support current and future increments of the Optionally Manned Fighting Vehicle (OMFV), and other legacy combat vehicles/platforms within the Maneuver portfolio.

Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Army					Date: February 2020
Appropriation/Budget Activity 2040: *Research, Development, Test & Evaluation, Army* / BA 4: *Advanced Component Development & Prototypes (ACD&P)*		R-1 Program Element (Number/Name) PE 0603645A / *Armored System Modernization - Adv Dev*			
B. Program Change Summary ($ in Millions)	**FY 2019**	**FY 2020**	**FY 2021 Base**	**FY 2021 OCO**	**FY 2021 Total**
Previous President's Budget	84.297	157.656	151.624	-	151.624
Current President's Budget	80.106	144.234	151.478	-	151.478
Total Adjustments	-4.191	-13.422	-0.146	-	-0.146
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-13.422			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-4.191	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	-0.146	-	-0.146

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army			Date: February 2020
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603645A / *Armored System Modernization - Adv Dev*	Project (Number/Name) EV7 / *Combat Vehicle Prototyping*	

COST ($ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
EV7: *Combat Vehicle Prototyping*	-	80.106	144.234	151.478	-	151.478	172.700	50.656	44.658	24.979	0.000	668.811
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This program supports the Next Generation Combat Vehicle Cross Functional Team (NGCV CFT).

A. Mission Description and Budget Item Justification

Armored System Modernization provides focused investment for the technology development of combat vehicles for future battlefields. The purpose of this Program Element's (PE) funding is to integrate the next generation of technology enabled capabilities developed in the Science and Technology (S&T) portfolio and Industry to demonstrate new capabilities to meet emerging military needs, provide hardware for Soldier operational experiment/feedback, and determine integration potential across the current Army portfolio of ground vehicles. The primary efforts include but not limited to, maturing and experimenting with Manned Un-Manned Teaming, in conjunction with the Robotic Combat Vehicle, maturing, integrating and experimenting with a variety of technologies for the Optionally Manned Fighting Vehicle (OMFV), and other legacy combat vehicles/platforms within the Maneuver portfolio.

Armored System Modernization allows for aggressive innovation that could provide a bridge from S&T investment to vehicle integration and operational use. It can inform requirements through User Evaluations, mitigate capability gaps and reduce integration risks. The strategy will be to focus on delivering incremental experimental prototypes to the warfighter to demonstrate Manned Un-Manned Teaming (MUM-T), to integrate technologies to maintain overmatch while demonstrating crew task reductions through crew augmentation enabled by optimized Warfighter Machine Interface (WMI) and sensor fusion. The funding will support virtual and physical concept development, trade studies, technical and operational analyses to assess future concepts and designs. This would also include the support for survivability and lethality requirements/qualifications. In addition, this funding will support program management, system integration labs, technology maturation, integration risk reduction, qualification of key lethality/weapon system and sensor technologies to support current and future increments of the Optionally Manned Fighting Vehicle (OMFV), and other legacy combat vehicles/platforms within the Maneuver portfolio.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Title: Government Engineering & Program Management	18.694	8.240	15.162
Description: This effort will support Government program management that will cover the costs of government and direct support contractor labor, travel, training, supplies, equipment and facilities to manage the experimental prototyping program as well as the Program Management Office (PMO).			
FY 2020 Plans: The funding supported Government program management that covered the costs of government and direct support contractor labor, travel, training, supplies, equipment and facilities to manage the experimental prototyping program as well as the Program			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603645A / *Armored System Modernization - Adv Dev*	**Project (Number/Name)** EV7 / *Combat Vehicle Prototyping*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Management Office (PMO). This also continued management of Mission Enabled Technology - Demonstrator (MET-D) Phase I cost and schedule during the Performance Test and Soldier Experiment; MET-D Phase II cost, schedule and performance as the project transitioned from the design to build phase and prepared for the test phase; and begun management of MET-D Phase II cost, schedule and performance during the design phase to enable long lead procurement. This funding also supported the PMOs and Combat Capabilities Development Command (CCDC) as needed for labor, travel, and equipment. ***FY 2021 Plans:*** This funding will support Government program management that will cover the costs of government and direct support contractor labor, travel, training, supplies, equipment and facilities to manage the experimental prototyping program as well as the Program Management Office (PMO). This funding will be allocated for MET-D Phase II and III, Combat Capabilities Development Command (CCDC) Command, Control, Communications, Computers, Combat Systems, Intelligence, Surveillance, and Reconnaissance (C5ISR) Phase II & Phase III technology maturation, CCDC Armaments center technology qualification, and other program management support offices. It will fund the management of the experimental prototyping program, continued technology maturation, and software and data architecture. This effort will include management of MET-D Phase II during Shakedown testing, Army Test and Evaluation Command (ATEC) Safety Evaluation, and the Soldier Operational Experiment and MET-D Phase III cost and schedule as the project progresses through the design phase and into the build phase. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Government Engineering and Program Management will increase due to the simultaneous phases of MET-D, CCDC C5ISR, CCDC Armaments Center & other program management support.			
Title: Test & Evaluation ***Description:*** Test and Evaluation activities includes contractor and government testing as well as test documentation development. Contractor prove-out testing will be conducted using United States Army test facilities. Government development testing of prototype vehicles and technologies will evaluate vehicle performance and include user evaluation. ***FY 2020 Plans:*** The funding conducted MET-D Phase I performance and user evaluation; gathered and analyzed all data; and developed and delivered final test report. This furthered the development and refinement of the MET-D Phase II Test and Evaluation Master Plan (TEMP) and test procedures to support Phase II integration, safety, and demonstration testing set to begin in Fiscal Year (FY) 2021. ***FY 2021 Plans:*** The T&E funding will prepare, coordinate, and conduct test and evaluation activities with ATEC for MET-D Phase II Safety Testing to include MET-D Phase II Company-Level Soldier Operational Experiment (SOE). This funding will further develop the MET-D Phase III TEMP and test procedures to support Phase III integration, safety, and demonstration testing. C5ISR will conduct	8.000	1.170	13.364

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603645A / *Armored System Modernization - Adv Dev*	**Project (Number/Name)** EV7 / *Combat Vehicle Prototyping*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
comprehensive and enhanced fabrication, integration, analyst and test and evaluation events along with CCDC conducting qualification testing for survivability and lethality requirements. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Test & Evaluation has increased in FY 2021 due to the execution of MET-D Phase II Shakedown, ATEC Safety testing and a company-level SOE of 6 MET-D vehicles. The increase also includes additional testing maturation of technologies and software.			
Title: Modeling & Simulation ***Description:*** The modeling and simulation effort is to assess operational needs and operational employment by using the Maneuver Battle lab at Fort Benning and One Semi-Automated Forces (OneSAF) modeling. The results will provide the analytical underpinnings to support development of requirements. Modeling and simulation efforts will produce the ability to experiment in a virtual environment to conduct data collection. ***FY 2020 Plans:*** This funding refined models utilized across ground vehicle platforms based on MET-D Phase I test results. Models then were updated with technologies identified for MET-D Phase II integration to conduct analysis prior to integration informing performance characteristics and identifying potential integration challenges. Analysis conducted for performance and operational analysis concepts were to inform and stabilize capability requirements, performance characteristics, and operational concepts to reduce future acquisition risk. ***FY 2021 Plans:*** The continued modeling and simulation efforts will produce the ability to experiment in a virtual environment to conduct data collection and results that will inform the physical testing desires of the Soldier Operational Experiments (SOE).The update of models from MET-D Phase II technologies are identified for integration into Phase III will be used to conduct analysis prior to integration in order to inform performance characteristics and identify potential integration challenges. Soldier virtual experiments will be conducted with Phase III technology configuration in conjunction with the Robotic Combat Vehicle (RCV) to determine any Manned Un-Manned Teaming (MUM-T) areas of concern that should be addressed prior to execution of the Phase III SOE. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Modeling & Simulation has increased in FY 2021 due to further maturation of the virtual and physical concept development of the MET-D Phase III and the OMT.	1.834	3.050	7.407
Title: Experimental Prototyping ***Description:*** This effort will accelerate prototyping and technology maturation, both organic and from Industry, for combat vehicles and internal fusion of data from different sensors and how it will be displayed and used by manned and autonomous systems. Experimental prototyping allows for aggressive innovation through integration of next generation technologies developed	51.578	124.534	46.972

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603645A / *Armored System Modernization - Adv Dev*	**Project (Number/Name)** EV7 / *Combat Vehicle Prototyping*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
in the S&T portfolio and public/private partnerships. This includes the development of the XM-913 and the development of ammunition needed for lethality improvements. Experimentation will help to inform requirements for the OMFV and other legacy platforms and how they will operate, mitigate capability gaps, and reduce technology maturation and integration risks. The experimentation will also provide improved capabilities for command and control of the RCV. ***FY 2020 Plans:*** This funding delivered the second phase of MET-D experimental prototypes in FY 2021. The MET-D Phase II efforts continued system level prototype development and integration; maintained system level software; and developed software stability upgrades based on results from the MET-D Phase I Experimentation. The platform software upgrades supported integration of advanced technologies, improved Warfighter Machine Interface (WMI), and improvements for RCV command and control. Based on feedback from the Phase I Experiment, MET-D Phase II also updated the software system integration laboratory (SIL), crew station SIL, and software test benches in order to simulate integrated system functionality prior to physical integration for Phase II. The MET-D Phase II effort begun to build prototypes with increased capability provided from the next increment of S&T technological deliverables. The effort begun with the purchase of long lead materials and technologies, design of the Phase II prototype upgrades for integration of the technologies, and system software updates. The effort continued the refinement and maturation of foundational architectures and technologies for power and mobility, lethality, protection, and situational awareness. The effort conducted the developmental engineering effort for maturation and integration of technologies such as indirect driver's vision and situational awareness technologies, sensors, crew interfaces and autonomous systems for crew augmentation, lethality solutions, high voltage power architecture, data architecture, communications, active and adaptive protection solutions and payloads. ***FY 2021 Plans:*** This funding will deliver the third phase of MET-D experimental prototypes in FY 2023. The MET-D Phase III efforts will continue system level prototype development and integration; maintain existing system level software; and develop software upgrades based on results from the MET-D Phase II Experimentation. The system software upgrades will support integration of advanced technologies, improved WMI, improvements for MUM-T, additional autonomous behaviors, improvements in electrical power and network architecture, advancements in slip ring technologies, and enhancements to CCDC C5ISR technologies. This funding will also support the development of technologies to include but not limited to; unmanned turret, UAS/UGS target feed, 3D printing, suspension/track, Pre Shot/Laser warning, Aided Target Recognition, MAPS, 50mm MCAS, and hybrid electric power, that will be integrated onto the OMFV and other legacy platforms/vehicles. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Experimental Prototyping will decrease in FY 2021 due to the completion of MET-D Phase I in FY 2020 resulting in the execution of prototyping costs for only two phases simultaneously (MET-D Phase II and III) rather than all three. In addition, the amount of			

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603645A / *Armored System Modernization - Adv Dev*	**Project (Number/Name)** EV7 / *Combat Vehicle Prototyping*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
prototyping costs for Phase II has also decreased due to the execution of the SOE in FY 2021. Funding has also been broken out into Other support & technology costs.			
Title: Powertrain Maturation ***Description:*** This effort will emphasize improving component engine and transmission subsystem maturity and reduce engine and transmission cost and manufacturing time. The Army will conduct maturation and demonstration activities to expedite technology transition from laboratory to operational use and prepare for low rate initial production of the advanced combat engine and transmission. This effort will conduct the evaluation of reliability, maintainability, and logistical analyses necessary to transition to a vehicle platform and conduct maturation to the components as a result of these evaluations. ***FY 2020 Plans:*** Advanced Combat Engine efforts developed and delivered in FY 2019 under the Advanced Powertrain Demonstrator Science and Technology project will be assessed for manufacturability of the design. Design improvements will be made to further improve integration of the components and reduce cost and manufacturing time of the components. In FY 2020, the focus was on the manufacturability of the design which included replacing expensive custom subcomponents against mass produced hardware. These efforts led to iterative engine prototypes that required performance testing to ensure they could achieve durability metrics while maintaining their performance capabilities. These were the initial assessments for the reliability, maintainability, and logistical analyses necessary to transition to a vehicle platform. ***FY 2021 Plans:*** Focus will be on the manufacturability of the design which includes replacing expensive custom subcomponents with mass produced hardware and improving the assembly process to use more automation and create less waste. These efforts will result in iterative engine and transmission prototypes that require performance and durability testing to ensure they can be integrated while maintaining their performance capabilities. These will be the foundation for the reliability, maintainability, and logistical analyses necessary to transition to a vehicle platform. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Powertrain Maturation funding has increased in FY 2021 due to the amount of funding necessary to prepare the contractor to be able to build the Advanced Combat Engine and Transmission.	-	0.690	4.000
Title: Other support & technology costs ***Description:*** This effort includes the MET-D Phase II advancements in technology, Phase III development with the development of the software SIL, CCDC C5ISR Phase II & Phase III technology maturation, and CCDC Armaments Center technology maturation and qualification, as well as supporting the XM-913 development/qualification and development of the ammunition. ***FY 2021 Plans:***	-	-	64.573

Exhibit R-2A, RDT&E Project Justification: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603645A / *Armored System Modernization - Adv Dev*	**Project (Number/Name)** EV7 / *Combat Vehicle Prototyping*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2019	FY 2020	FY 2021
Based on feedback from the MET-D Phase II Experiment and advancements in technology, MET-D Phase III will also develop and update software SIL, crew station training simulators, and software test benches in order to represent the new integrated system functionality prior to physical integration for Phase III. The efforts include but are not limited to, maturing and experimenting with Manned Un-Manned Teaming in conjunction with the Robotic Combat Vehicle, and maturing, integrating and experimenting with a variety of technologies for the OMFV and other legacy combat vehicles/platforms within the Maneuver portfolio in the SILs. This effort also includes the CCDC C5ISR Army mission command software maturation, architecture maturation, technical and operational analytical studies, and mission targeting support software and algorithms. The CCDC Armaments center will also conduct technology maturation and qualification of survivability and lethality requirements. The funding will support other efforts such as the development of the XM-913 development/qualification and the development of the ammunition. ***FY 2020 to FY 2021 Increase/Decrease Statement:*** The increase in Other support & technology costs in FY 2021 is due to the breakout of costs within the Experimental Prototyping cost.			
Title: FY 2020 SBIR/STTR Transfer ***Description:*** Funding transferred in accordance with Title 15 USC ?638 ***FY 2020 Plans:*** Funding transferred in accordance with Title 15 USC ?638 ***FY 2020 to FY 2021 Increase/Decrease Statement:*** Funding transferred in accordance with Title 15 USC ?638	-	6.550	-
Accomplishments/Planned Programs Subtotals	80.106	144.234	151.478

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

This program provides the Optionally Manned Fighting Vehicle and other legacy combat vehicle platforms within the Maneuver portfolio the focused investment for the development and demonstration of technology and prototyping for future combat vehicles in the battlefield. The purpose of this funding is to integrate the next generation of technology enabled capabilities developed in the S&T portfolio to demonstrate new capabilities to meet emerging military needs, provide hardware for Soldier operational evaluation/feedback, to determine integration potential across the current Army portfolio of ground vehicles and to develop platform level prototypes.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Army			Date: February 2020
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603645A / *Armored System Modernization - Adv Dev*	Project (Number/Name) EV7 / *Combat Vehicle Prototyping*	

Management Services ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
FY 2020 SBIR/STTR Transfer	TBD	Various : Various	-	-		6.550		-		-		-	0.000	6.550	-
		Subtotal	-	-		6.550		-		-		-	0.000	6.550	N/A

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
NGCV Contract(s)	C/Various	Various : Various	5.671	31.254	Mar 2019	44.583	Mar 2020	-		-		-	Continuing	Continuing	Continuing
Prototyping with Industry	C/Various	Various : Various	-	15.324	Jul 2019	79.079	Feb 2020	-		-		-	0.000	94.403	-
Sensor Fuse/Crew/SIL	SS/TIA	Various : Various	10.000	5.000	Jul 2019	-		-		-		-	0.000	15.000	-
Powerttrain Maturation	TBD	TBD : TBD	-	-		0.908	Jul 2020	4.000	Jul 2021	-		4.000	Continuing	Continuing	Continuing
Other support & technology costs	TBD	TBD : TBD	-	-		-		64.573	Jul 2021	-		64.573	Continuing	Continuing	Continuing
Experimental Prototyping (MET-D)	TBD	TBD : TBD	-	-		-		46.972	Jul 2021	-		46.972	Continuing	Continuing	Continuing
		Subtotal	15.671	51.578		124.570		115.545		-		115.545	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PMO/PEO Support	MIPR	PM/PEO : Warren, MI	13.546	18.694	Dec 2018	8.458	Jan 2020	15.162	Jan 2021	-		15.162	Continuing	Continuing	Continuing
		Subtotal	13.546	18.694		8.458		15.162		-		15.162	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603645A / *Armored System Modernization - Adv Dev*	**Project (Number/Name)** EV7 / *Combat Vehicle Prototyping*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2019 Cost	FY 2019 Award Date	FY 2020 Cost	FY 2020 Award Date	FY 2021 Base Cost	FY 2021 Base Award Date	FY 2021 OCO Cost	FY 2021 OCO Award Date	FY 2021 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Modeling & Simulation	MIPR	Various : Various	3.000	1.834	Mar 2019	3.268	Mar 2020	7.407		-		7.407	Continuing	Continuing	Continuing
Developmental testing	MIPR	Various : Various	-	8.000	Jul 2019	1.388	Jun 2020	13.364		-		13.364	0.000	22.752	-
		Subtotal	3.000	9.834		4.656		20.771		-		20.771	Continuing	Continuing	N/A

	Prior Years	FY 2019		FY 2020		FY 2021 Base		FY 2021 OCO		FY 2021 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	32.217	80.106		144.234		151.478		-		151.478	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603645A / *Armored System Modernization - Adv Dev*	**Project (Number/Name)** EV7 / *Combat Vehicle Prototyping*

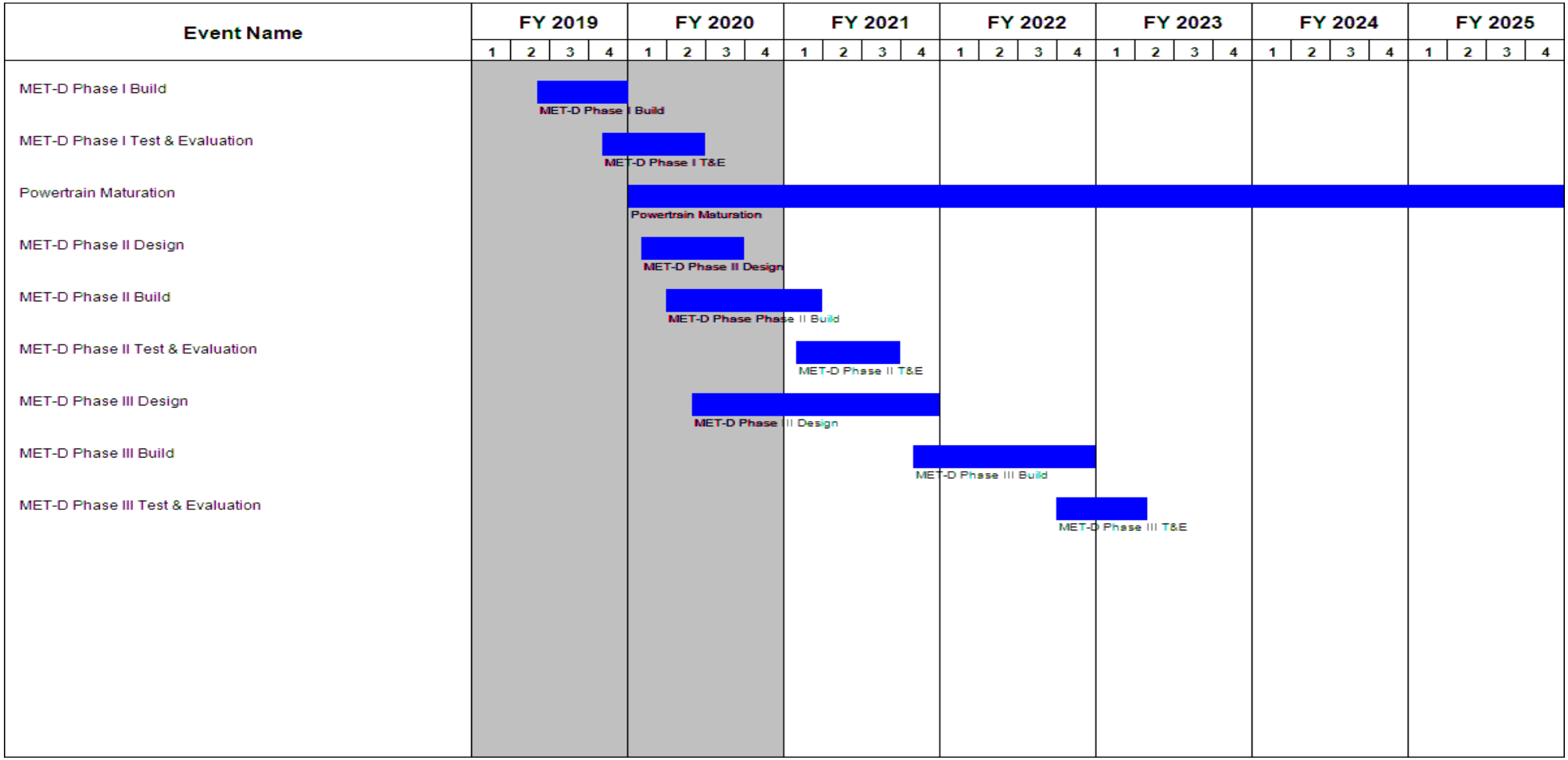

Exhibit R-4A, RDT&E Schedule Details: PB 2021 Army		Date: February 2020
Appropriation/Budget Activity 2040 / 4	**R-1 Program Element (Number/Name)** PE 0603645A / *Armored System Modernization - Adv Dev*	**Project (Number/Name)** EV7 / *Combat Vehicle Prototyping*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
MET-D Phase I Build	2	2019	4	2019
MET-D Phase I Test & Evaluation	4	2019	2	2020
Powertrain Maturation	1	2020	4	2025
MET-D Phase II Design	1	2020	3	2020
MET-D Phase II Build	2	2020	1	2021
MET-D Phase II Test & Evaluation	1	2021	3	2021
MET-D Phase III Design	2	2020	4	2021
MET-D Phase III Build	4	2021	4	2022
MET-D Phase III Test & Evaluation	4	2022	2	2023