

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2025 Army	<b>Date:</b> March 2024
---	-------------------------

<b>Appropriation/Budget Activity</b> 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					<b>R-1 Program Element (Number/Name)</b> PE 0604852A / Suite of Survivability Enhancement Systems - EMD							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>FY 2029</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	-	75.520	79.250	77.864	-	77.864	77.953	78.787	79.668	80.465	0.000	549.507
FE8: <i>Vehicle Protection Suite</i>	-	75.520	79.250	77.864	-	77.864	77.953	78.787	79.668	80.465	0.000	549.507

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

This funding line is a key enabler of the Army Modernization Priorities in support of the Vehicle Protection Suite (VPS) program.

Current ground combat vehicle platforms and tactical wheeled vehicles within Army Brigade Combat Teams (BCTs) lack the ability to effectively detect, track, divert, disrupt, neutralize, or destroy incoming direct or indirect fired threat munitions. Current solutions to defeat these threats, Explosive Reactive Armor (ERA) and Slat armor, do not provide preemptive or active protection and impose secondary blast hazards to crew, dismounted soldiers, and adjacent vehicles and equipment. The Suite of Vehicle Protection Systems will develop mature and integrate solutions onto multiple ground combat vehicles increase the protection of the Army's ground systems from both current and next generation direct or indirect fired threat munitions.

The Vehicle Protection Suite (VPS) Project (FE8) will design, mature, integrate, evaluate and field combinations of active, reactive, and passive solutions and leverage both Horizontal Technology Integration (HTI) principles and the Army's Vehicle Base Kit (VBK) to develop tailored vehicle Survivability Sets that will mitigate existing protection gaps, allow for future technology insertion to meet evolving threats, and minimize the impact to the current capabilities hosted on Army ground system platforms. Additionally, the VPS project will install and characterize Non-Developmental Item (NDI) Active Protection Systems on Bradley, and Stryker demonstrator vehicles. The Active Protection System effort will assess the maturity, performance, and integration risk of NDI Active Protection Systems, develop, and refine Bradley, and Stryker Active Protection System installation kit designs, and build prototypes necessary to conduct performance and safety testing to obtain an Active Protection System Urgent Materiel Release (UMR). Active Protection System effort will execute installation design refinement and required testing to meet urgent fielding of NDI APS on Bradley and Stryker pending Army leadership approval.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025 Base</b>	<b>FY 2025 OCO</b>	<b>FY 2025 Total</b>
Previous President's Budget	100.384	79.250	79.688	-	79.688
Current President's Budget	75.520	79.250	77.864	-	77.864
Total Adjustments	-24.864	0.000	-1.824	-	-1.824
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-21.200	-			
• SBIR/STTR Transfer	-3.664	-			
• Adjustments to Budget Years	-	-	-1.824	-	-1.824

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0604852A / Suite of Survivability Enhancement Systems - EMD	
<div>Change Summary Explanation</div> <div>Decreased funding in FY25 due to reduced requirement for Vehicle Protection System Base Kit Integration of Non-Developmental Items (NDI) and Developmental Technologies.</div>		

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army										Date: March 2024		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604852A / Suite of Survivability Enhancement Systems - EMD				Project (Number/Name) FE8 / Vehicle Protection Suite			
COST (\$ in Millions)	Prior Years	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
FE8: Vehicle Protection Suite	-	75.520	79.250	77.864	-	77.864	77.953	78.787	79.668	80.465	0.000	549.507
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Current ground combat vehicle platforms and tactical wheeled vehicles within Army Brigade Combat Teams (BCTs) lack the ability to effectively detect, track, divert, disrupt, neutralize, or destroy incoming direct or indirect fired threat munitions. Current solutions to defeat these threats, Explosive Reactive Armor (ERA) and Slat armor, do not provide preemptive or active protection and impose secondary blast hazards to crew, dismounted soldiers, and adjacent vehicles and equipment.												
Vehicle Protection Suite (VPS) will design, mature, integrate, evaluate, and field combinations of active, reactive, and passive solutions and leverage both Horizontal Technology Integration (HTI) principles and the Army's Vehicle Protection System Base Kit (VBK) to develop configurable vehicle Survivability Sets that will mitigate existing protection gaps, allow for future technology insertion to meet evolving threats, and minimize the impact to the current capabilities hosted on Army ground combat and tactical vehicle platforms.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2023	FY 2024	FY 2025	
Title: Vehicle Protection System Base Kit Integration of Non-Developmental Items (NDI) and Developmental Technologies  Description: VBK with Laser Warning Receiver (LWR) effort to incorporate on to the ground combat vehicle platforms the LWR through the Vehicle Protection System (VPS) Base Kit based on the Modular Active Framework (MAF). The maturation and integration effort will include qualification testing, integration design development, prototype build, and platform testing and logistics products.  FY 2024 Plans: On Bradley and Abrams, complete VBK with LWR vehicle level testing, logistic product development and complete ATEC developmental and operational testing (DT/OT). Continuing VBK with LWR integration design efforts on AMPV, Stryker and MPF, which includes integration design development, platform prototype build, and logistics products development, and begin ATEC Developmental and Operational Test planning.  FY 2025 Plans: On AMPV and Stryker, continue VBK with LWR integration, vehicle level testing, logistic product development and ATEC developmental and operational test (DT/OT) planning. Complete Abrams developmental and operational testing (DT/OT). Begin VBK with LWR integration design efforts on M10 Booker (MPF), which includes integration design development, platform prototype build, and logistics products development, and begin ATEC Developmental and Operational Test planning.  FY 2024 to FY 2025 Increase/Decrease Statement:									46.560	46.475	24.211	

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army		<b>Date:</b> March 2024		
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604852A / <i>Suite of Survivability Enhancement Systems - EMD</i>	<b>Project (Number/Name)</b> FE8 / <i>Vehicle Protection Suite</i>		
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>
Funding decrease is due to completion of VBK with LWR integration onto Abrams and completion of developmental testing and operational testing (DT/OT) for Bradley.				
<b>Title:</b> Survivability Improvements  <b>Description:</b> Funding for the continued maturation of Science and Technology (S&T) funded protection technologies, continued maturation, design development of the platform integration, test, logistic product development, and fielding of active, reactive, and passive survivability improvements onto ground combat vehicle platforms.  <b>FY 2024 Plans:</b> Continue passive and reactive armor tile engineering development, testing, and logistic product development on ground combat platforms. Continue interim Soft Kill acquisition program for system maturation to support future integration activities on ground combat platforms. Continued engineering studies, characterization / demonstrations, improvement assessments, B-kit development, platform integration, and testing of Active Protection Systems, Camouflage, Concealment, Deception and Obscuration (CCDO) (Signature Management (SIGMAN)) and other emerging technologies. Continue execution of Bradley expedited active protection system to include system-level testing, UMR activities, planning to support future Conditional Material Release, and delta A Kit development to support MAF compliant system.  <b>FY 2025 Plans:</b> Continue passive and reactive armor tile engineering development, testing, Technical Data Package and logistic product development on ground combat platforms. Continue interim Soft Kill acquisition program for system maturation to support future integration activities on ground combat platforms. Continued engineering studies, characterization / demonstrations, improvement assessments, B-kit development, platform integration, and testing of Active Protection Systems, Camouflage, Concealment, Deception and Obscuration (CCDO) (Signature Management (SIGMAN)) and other emerging technologies. Initiate Softkill Phase 1 EMD B Kit Maturation.  <b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Funding increase supports EMD Contract Award for Softkill Phase 1.		20.151	18.843	43.984
<b>Title:</b> Vehicle Protection Suite Government Engineering and Program Management  <b>Description:</b> Government program management support and program oversight.  <b>FY 2024 Plans:</b>		8.809	10.869	9.669

**UNCLASSIFIED**

<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2025 Army		<b>Date:</b> March 2024	
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604852A / Suite of Survivability Enhancement Systems - EMD	<b>Project (Number/Name)</b> FE8 / Vehicle Protection Suite	
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2023</b>	<b>FY 2024</b>
Funding is provided for program management support for VPS programs to include VPS Base Kits (VBK) w/LWR, Survivability Improvements (RAT and Signature Management (CCDO)), trade studies, platform integration, vehicle testing, and logistic product development.			
<b>FY 2025 Plans:</b> Funding is provided for program management support for VPS programs to include VPS Base Kit (VBK) w/LWR, Survivability Improvements (RAT, Signature Management (CCDO), and Softkill Phase 1), platform integration, vehicle testing, and logistic product development.			
<b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Funding decrease to Program Management is in accordance with FY24 Congressional Marks to maintain Program Management level of effort.			
<b>Title:</b> VPS Trade Study  <b>Description:</b> VPS will execute a trade study/feasibility assessment to identify capabilities for active, reactive and passive protection solutions, to pursue in the next phase of the program (Future Tranches). A Trade Study/feasibility assessment will provide the data deemed sufficient for the identification of capabilities to pursue in Future Tranches. This Trade Study/feasibility assessment will build off previous studies to identify the benefit of adding capabilities to current set. The trade study/feasibility assessment will also look at emerging threats to identify capabilities and evolution of those capabilities used to protect against those threats.  <b>FY 2024 Plans:</b> VPS will identify preemptive, active, reactive, passive (or a combination thereof) vehicle defense capabilities that are mature. The trade study/feasibility assessment will look at capabilities that are able to detect, track, divert, disrupt, neutralize, and/or destroy incoming threats, non-lethal/lethal unmanned aircraft systems (UAS), air to ground missiles, Improvised Explosive Device (IEDs)/mines, as well as prevent, mitigate and recover from Electronic Warfare (EW) and Cyber threats. These capabilities will be analyzed via a Trade Study/feasibility assessment and/or characterization/demonstration to understand the benefit the capability or combination of capabilities provide to address platform capability gaps. This analysis will identify capabilities to pursue in future tranches.  <b>FY 2024 to FY 2025 Increase/Decrease Statement:</b> Funding decrease is due to VPS Trade Studies/Feasibility assessments being conducted every other fiscal year.		-	3.063
<b>Accomplishments/Planned Programs Subtotals</b>		75.520	77.864

**UNCLASSIFIED**

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army									Date: March 2024		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604852A / Suite of Survivability Enhancement Systems - EMD				Project (Number/Name) FE8 / Vehicle Protection Suite			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total	FY 2026	FY 2027	FY 2028	FY 2029	Cost To Complete	Total Cost
• E97900: REACTIVE ARMOR TILES	59.127	-	0.000	-	0.000	-	-	-	-	0.000	59.127
Remarks											
On 21 SEPT 2016 - Directed Requirement for Reactive Armor Tiles and Installation Kits received and on 17 NOV 2017 Army Requirements Oversight Council (AROC) approved VPS ICD as the requirements to move forward with production of reactive armor tiles for the Armored Multi-Purpose Vehicle (AMPV) in Fiscal Year (FY) 2022, \$17.755 million APPN: 2034A; BA 1; Line Item Number: 9847E97900; Title: Reactive Armor Tiles.											
NOV 2020 Army Requirements Oversight Council (AROC) approved VPS Capability Development Document (CDD) and on 16 DEC 2020 AROCM 20-27 approved the CDD for protection improvements to include VPS Base Kit, Softkill, Hardkill, LWR, Signature Management and Obscuration, SEPT 2021 CARD # 03005 was approved for VPS CDD and resides within the JCIDS repository.											
June 2023 Annual VPS Governance Board was held and approved by the co-chaired Maneuver Capabilities Development and Integration Directorate (MCDID) and Next Generation Combat Vehicle (NGCV) Cross Functional Team (CFT).											
D. Acquisition Strategy											
VPS Trade Studies/Feasibility Assessments will assess the cost, maturity, complexity, performance, and physical properties of enhanced survivability technologies to determine the optimal application of VPS capabilities onto the Army's ground combat platforms. In FY 2018, the VPS program initiated the initial VPS Trade Study/Feasibility Assessment to confirm survivability capabilities for focus in Tranche I and II, to include integration with Vehicle Protection System Base Kit (VBK). Focus of Tranche I was Reactive Armor Tiles, Vehicle Base Kit with Laser Warning Receiver and signature management reduction. Support of Tranche efforts will be achieved through bailments, Cooperative Research and Development Agreements (CRADA), and Other Transactional Agreements (OTA) with industry and government partners. The VPS Tranche II solutions (soft and hard kill integration, threat detection, Camouflage, Concealment, Deception and Obscuration (CCDO) now known as Signature Management (SIGMAN), top attack protection, and other emerging protection technologies) based on the results of the Trade Study will have decision points and program initiations beginning in FY 2020. Along with the Tranche II activities starting in FY 2020, the VPS program will continue, maturation, qualification testing, platform integration, vehicle testing and fielding efforts (i.e. logistics and software development) with Tranche I programs. A Tranche III trade study/feasibility assessment was initiated in FY 2022 to define the next set of VPS technologies, based on evolving enemy threats, to focus on. These capabilities include counter-unmanned aerial systems and the integration of artificial intelligence into vehicle survivability technologies. A Tranche IV trade study/feasibility assessment will initiate in FY 2024 to define the next set of Unmanned Aircraft System (UAS) and cooperative formation protection and integration of artificial intelligence into vehicle survivability technologies.											

## UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army												Date: March 2024			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604852A / Suite of Survivability Enhancement Systems - EMD				Project (Number/Name) FE8 / Vehicle Protection Suite					
Management Services (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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
Vehicle Protection Suite Program Management	MIPR	TACOM/GVSC Warren, Michigan : Various	24.738	8.809	Oct 2022	10.869	Dec 2023	9.669	Dec 2024	-		9.669	24.549	78.634	-
Subtotal			24.738	8.809		10.869		9.669		-		9.669	24.549	78.634	N/A
Product Development (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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
Vehicle Protection System Base Kit	Various	Various: TBD : TBD	101.601	43.121	Jun 2023	32.262	Jun 2024	20.177	Jun 2025	-		20.177	32.010	229.171	-
Survivability Improvements	Various	Various TACOM Warren : Warren, MI	38.280	11.732	Jan 2023	16.913	Jan 2024	34.979	Mar 2025	-		34.979	230.687	332.591	-
Subtotal			139.881	54.853		49.175		55.156		-		55.156	262.697	561.762	N/A
Support (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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
Vehicle Protection Suite Trade Study	MIPR	Various : TACOM Warren Michigan	6.053	-		3.063	Mar 2024	-		-		-	0.000	9.116	-
Subtotal			6.053	-		3.063		-		-		-	0.000	9.116	N/A
Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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
Survivability Improvements	MIPR	Various Army Test and Evaluation Command (ATEC) : Various	9.169	8.419	Jun 2023	1.930	Jun 2023	9.005	Jun 2025	-		9.005	1.823	30.346	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2025 Army												Date: March 2024			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604852A / Suite of Survivability Enhancement Systems - EMD						Project (Number/Name) FE8 / Vehicle Protection Suite			
Test and Evaluation (\$ in Millions)				FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 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
Vehicle Protection System Base Kit	MIPR	Various Army Test and Evaluation Command (ATEC) : Various	15.848	3.439	Jun 2023	14.213	Jun 2023	4.034	Jun 2025	-		4.034	76.663	114.197	-
Subtotal			25.017	11.858		16.143		13.039		-		13.039	78.486	144.543	N/A
Remarks N/A															
			Prior Years	FY 2023		FY 2024		FY 2025 Base		FY 2025 OCO		FY 2025 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			195.689	75.520		79.250		77.864		-		77.864	365.732	794.055	N/A
Remarks															



# UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army

Date: March 2024

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0604852A / Suite of Survivability Enhancement Systems - EMD

Project (Number/Name)

FE8 / Vehicle Protection Suite

Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	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
VBK - MAC and LWR (MAC) with (LWR) - Maturation and MAF...																												
VBK - Software Development																												
VBK - Component Qualification Testing																												
VBK - Integration Design (Abrams, Bradley, AMPV, Stryker...																												
VBK - Competitive Technical Data Package and Logistic P...																												
VBK - ATEC Testing (Bradley, Abrams, AMPV, Stryker, M10 ...																												
VBK - Base Kit Improvements Maturation																												
VBK - Procurement Contract Award																												
Survivability Improvements Development																												
Survivability Improvements - Armor Upgrade Qualificatio...																												
Survivability Improvements - Armor Upgrade Logistics Pr...																												
Survivability Improvements - Armor Upgrade TDP Development																												
Survivability Improvements - SIGMAN (previously known as...																												

# UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army

Date: March 2024

Appropriation/Budget Activity  
2040 / 5

R-1 Program Element (Number/Name)  
PE 0604852A / Suite of Survivability Enhancement Systems - EMD

Project (Number/Name)  
FE8 / Vehicle Protection Suite

Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	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
Survivability Improvements - SIGMAN (previously known as...																												
Survivability Improvements - SIGMAN (previously known as...																												
Survivability Improvements - Top Attack Protection Armor...																												
Survivability Improvements - Top Attack Protection Armor...																												
Survivability Improvements - Top Attack Protection Armor...																												
Survivability Improvements - Top Attack Protection Armor...																												
Survivability Improvements - Top Attack Protection Armor...																												
Survivability Improvements - Top Attack Protection Armor...																												
Survivability Improvements - Soft Kill System Development...																												
Survivability Improvements - Soft Kill B-Kit Maturation ...																												
Survivability Improvements - Soft Kill Platform Integrat...																												
Survivability Improvements - Soft Kill Platform Integration																												
Survivability Improvements - Soft Kill System Vehicle Te...																												
Survivability Improvements - Soft Kill A and B Kit TDP a...																												

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2025 Army			Date: March 2024		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0604852A / Suite of Survivability Enhancement Systems - EMD		Project (Number/Name) FE8 / Vehicle Protection Suite	

Event Name	FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028				FY 2029			
	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
Survivability Improvements - Interim Soft Kill Maturation																												
Vehicle Protection Suite Trade Study																												
Vehicle Protection Suite Trade Study - Tranche IV																												
Bradley Iron Fist Light Decoupled (IFLD) LUT / Software ...																												
Bradley Iron Fist Light Decoupled (IFLD) MR																												

Note  
n/a

# UNCLASSIFIED

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Army			<b>Date:</b> March 2024
<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604852A / Suite of Survivability Enhancement Systems - EMD	<b>Project (Number/Name)</b> FE8 / Vehicle Protection Suite	

## Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
VBK - MAC and LWR (MAC) with (LWR) - Maturation and MAF Compliance	4	2019	3	2023
VBK - Software Development	4	2019	4	2029
VBK - Component Qualification Testing	1	2020	4	2023
VBK - Integration Design (Abrams, Bradley, AMPV, Stryker and M10 Booker)	1	2021	4	2028
VBK - Competitive Technical Data Package and Logistic Product Development	4	2021	2	2028
VBK - ATEC Testing (Bradley, Abrams, AMPV, Stryker, M10 Booker)	3	2023	2	2027
VBK - Base Kit Improvements Maturation	2	2022	4	2029
VBK - Procurement Contract Award	1	2024	1	2024
Survivability Improvements Development	1	2020	4	2025
Survivability Improvements - Armor Upgrade Qualification Testing	1	2020	3	2026
Survivability Improvements - Armor Upgrade Logistics Product Development	4	2021	3	2026
Survivability Improvements - Armor Upgrade TDP Development	3	2022	2	2025
Survivability Improvements - SIGMAN (previously known as CCDO) Testing AMPV, M10 Booker, XM30	2	2021	4	2029
Survivability Improvements - SIGMAN (previously known as CCDO) Production Contract Award	3	2023	3	2023
Survivability Improvements - SIGMAN (previously known as CCDO) Log Product Development and Provisioning	4	2021	4	2029
Survivability Improvements - Top Attack Protection Armor Environmental Testing	1	2021	3	2023
Survivability Improvements - Top Attack Protection Armor Platform Testing	3	2021	4	2023
Survivability Improvements - Top Attack Protection Armor Integration	2	2022	2	2023
Survivability Improvements - Top Attack Protection Armor TDP and Log Product Development, Validation/Verification and Provisioning	3	2022	2	2026

**UNCLASSIFIED**

<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2025 Army	<b>Date:</b> March 2024
---	-------------------------

<b>Appropriation/Budget Activity</b> 2040 / 5	<b>R-1 Program Element (Number/Name)</b> PE 0604852A / Suite of Survivability Enhancement Systems - EMD	<b>Project (Number/Name)</b> FE8 / Vehicle Protection Suite
--	--	--

Events	Start		End	
	Quarter	Year	Quarter	Year
Survivability Improvements - Top Attack Protection Armor Production Ready	2	2026	2	2026
Survivability Improvements - Soft Kill System Development EMD Contract Award	2	2025	2	2025
Survivability Improvements - Soft Kill B-Kit Maturation and Validation	2	2025	2	2027
Survivability Improvements - Soft Kill Platform Integration Contract Award	1	2027	1	2027
Survivability Improvements - Soft Kill Platform Integration	1	2027	4	2028
Survivability Improvements - Soft Kill System Vehicle Testing	4	2028	3	2029
Survivability Improvements - Soft Kill A and B Kit TDP and Log Product development	3	2025	1	2030
Survivability Improvements - Interim Soft Kill Maturation	2	2023	1	2025
Vehicle Protection Suite Trade Study	1	2022	2	2023
Vehicle Protection Suite Trade Study - Tranche IV	2	2024	2	2025
Bradley Iron Fist Light Decoupled (IFLD) LUT / Software Testing	3	2025	1	2026
Bradley Iron Fist Light Decoupled (IFLD) MR	1	2026	1	2026

**Note**

n/a