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Exhibit R-2, RDT&E Budget Item Justification: PB 2023 Army **Date:** April 2022

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0604622A / <i>Family of Heavy Tactical Vehicles</i>
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
Total Program Element	-	22.254	28.445	50.924	-	50.924	27.866	20.655	5.133	5.182	0.000	160.459
659: <i>Family Of Hvy Tac Veh</i>	-	2.239	5.082	19.089	-	19.089	-	-	-	-	0.000	26.410
E50: <i>TRAILER DEVELOPMENT</i>	-	8.225	2.970	0.737	-	0.737	-	-	-	-	0.000	11.932
EZ8: <i>Leader/Follower</i>	-	10.249	20.393	31.098	-	31.098	27.866	20.655	5.133	5.182	0.000	120.576
VR5: <i>TWV Protection Kits</i>	-	1.541	-	-	-	-	-	-	-	-	0.000	1.541

A. Mission Description and Budget Item Justification

This Program Element (PE) aligns system development and demonstration of Heavy Tactical Vehicles (HTV) with Multi-Domain Operations (MDO) requirements to support combat and combat support missions to include line haul, local haul, and unit resupply. HTV trucks transport water, ammunition, and general cargo over all terrains and throughout the battle-space. Systems include the Heavy Expanded Mobility Tactical Truck (HEMTT), Palletized Load System (PLS), Heavy Equipment Transporter System (HETS), Enhanced Heavy Equipment Transporter System (EHETS), Line Haul, Heavy Dump Truck (HDT), medium tactical trailers including the Medium Equipment Trailer (MET), the family of flatbed semitrailers to include but not limited to the 40-Ton M870, 34-Ton M872 and the 25-Ton M172 that support multiple Army missions and the development and demonstration of enablers. Recovery systems such as the Modular Catastrophic Recovery System (MCRS) that rescue large wheeled vehicle platforms in severe off-road conditions are also included. The Common Tactical Truck (CTT) is the next generation of tactical trucks to meet the Army's Tactical Wheeled Vehicle (TWV) Modernization Strategy to take full advantage of economies of scale and commonality with the objective to procure a commercial based Family of Vehicles to replace HEMTT, PLS and Line Haul tractors and leverage best commercial practices at lower procurement costs that are autonomy ready. Periodic evolutionary upgrade of survivability and crew protection as described in the Long Term Protection Strategy (LTPS) is supported by this PE for both the HTV family of vehicles and the Family of Medium Tactical Vehicles (FMTV).

The Leader Follower (LF) capability provides a Tactical Wheeled Vehicle (TVW) kit (applique) that enables a convoy of up to 9 (initially 4) unmanned TWVs to follow a lead manned TWV. This capability will be made available on Palletized Loading System (PLS) TWVs equipped with by-wire drive capability as an initial increment. PLS convoys equipped with LF will provide increased Soldier Force Protection and increased convoy logistics throughput. These increases are achieved by allowing Soldiers to be removed from threat zones and inserted into security supply convoys resulting in increased transportation utilization rates. The PLSA1 is the initial tactical vehicle used to support By-Wire Active Safety which provides the foundation for autonomous capabilities such as Leader/Follower, taking Soldiers out of harm's way.

Funding also supports modernization of the current Tactical Wheeled Vehicle fleets by investigating technology insertions including, but not limited to: Predictive Logistics, vetronics, Victory Architecture, vehicle electrification, fully autonomous operations, and other emerging technologies. Funding also supports developing initial prototypes to enable refinement of Operational Requirements and early user feedback to support future sustainment and operational movement operating concepts.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0604622A / <i>Family of Heavy Tactical Vehicles</i>
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B. Program Change Summary (\$ in Millions)	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Previous President's Budget	22.254	31.602	0.000	-	0.000
Current President's Budget	22.254	28.445	50.924	-	50.924
Total Adjustments	0.000	-3.157	50.924	-	50.924
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-3.157			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	50.924	-	50.924

Change Summary Explanation

FY 2023 funding increase reflects the fact that the FY 2022 President's Budget request did not include out-year funding.

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Army **Date:** April 2022

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) 659 / Family Of Hvy Tac Veh
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
659: Family Of Hvy Tac Veh	-	2.239	5.082	19.089	-	19.089	-	-	-	-	0.000	26.410
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Enhanced Heavy Equipment Transporter System (EHETS) replaces the Heavy Equipment Transporter System (HETS) and consists of an M1300 tractor and an eight-axle commercially based trailer capable of a minimum payload of 82 tons and worldwide transport. The M1302 trailer is part of the EHETS trailer fleet. The EHETS primary mission is to transport an M1 Abrams series Main Battle Tank (MBT) and other tracked vehicles. It is able to self-load/unload disabled vehicular cargo for evacuation purposes. The system will provide line haul, local haul, and maintenance evacuation of heavy tracked vehicles during tactical operations on primary and secondary roads worldwide.

The Common Tactical Truck (CTT) is a Family of Vehicles (FoV) modernization effort to replace the HEMTT, PLS, and Line Haul vehicles by leveraging best commercial practices, lower procurement cost (commercial economies of scale) and technology to include Predictive Logistics, Advanced Driver Assistance Systems (ADAS), and autonomy ready without significantly degrading the performance from current platforms.

FY 2023 Project 659 Base funds in the amount of \$19.089 million supports Developmental/Operational Testing (DT/OT) of the Enhanced Heavy Equipment Transporter System (EHETS) trailer. Funds also support the prototype manufacturing of the Common Tactical Truck (CTT). EHETS DT/OT will determine the performance and operational effectiveness of the trailer, while CTT prototype manufacturing will provide up to 15 prototypes for the replacement of the M915 Tractor, Palletized Loading System (PLS) and Heavy Expanded Mobility Tactical Truck (HEMTT). The EHETS supports the National Defense Strategy for modernization with an increased payload that provides the ability for transport, recovery and evacuation of heavy, oversized combat equipment such as the M1A2 Abrams main battle tank (MBT) and M88 recovery vehicle to support flexible theater postures and enhance the ability to compete and provide the transport for freedom of maneuver of the largest track combat weapon systems. The CTT supports the National Defense Strategy for modernization by providing the warfighter the updated transportation technologies that are aligned with what is available in the marketplace.

Matrix Functional Support is required to address/augment Engineering and Logistic functions, capabilities and gaps to supplement core employee competencies. System Engineering oversight and multiple functions of Logistics support such as management, fielding, tracking and documentation is required during the acquisition process

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), these items are necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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

	FY 2021	FY 2022	FY 2023
Title: Enhanced Heavy Equipment Transporter System (EHETS) Developmental/Operational Test	-	-	1.192

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Army		Date: April 2022		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) 659 / Family Of Hvy Tac Veh		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2021	FY 2022	FY 2023
<p>Description: Replacement system for the legacy Heavy Equipment Transporter System (HETS) to transport, deploy, and evacuate payloads up to 85 tons.</p> <p>FY 2023 Plans: FY 2023 continues the Operational testing of the EHETS Trailers to ensure that the design process is complete and meets specs with minimal risks.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: EHETS Developmental/Operational Test will be completed with FY 2023 funding</p>				
<p>Title: Common Tactical Truck (CTT) Non-Recurring Engineering</p> <p>Description: Middle Tier Acquisition is being considered for rapid prototyping, including designs by multiple vendors for replacement of the M915 Tractor, Palletized Loading System (PLS) and Heavy Expanded Mobility Tactical Truck (HEMTT).</p> <p>FY 2022 Plans: Funds will be used for non-recurring engineering for the development of Common Tactical Truck prototypes.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: FY 2022 funding completes CTT Non-Recurring Engineering</p>		-	4.156	-
<p>Title: Common Tactical Truck (CTT) Acquisition Planning and Documentation Development</p> <p>Description: Acquisition planning and documentation development includes matrix personnel program support for the development of contracting/acquisition milestone documentation and systems engineering plans for the Common Tactical Truck.</p> <p>FY 2022 Plans: Preparation of documentation to release Request Project Proposal (RPP) to obtain prototypes.</p> <p>FY 2022 to FY 2023 Increase/Decrease Statement: CTT Acquisition Planning and Documentation Development will be completed with FY 2022 funding.</p>		1.007	0.740	-
<p>Title: Common Tactical Truck (CTT) Prototype Manufacturing</p> <p>Description: Middle Tier Acquisition is being considered for rapid prototyping, including designs by multiple vendors for replacement of the M915 Tractor, Palletized Loading System (PLS) and Heavy Expanded Mobility Tactical Truck (HEMTT).</p> <p>FY 2023 Plans:</p>		-	-	16.377

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) 659 / Family Of Hvy Tac Veh

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
Funds will be used for the competitive acquisition of Common Tactical Truck prototypes in preparation for test and down-select. FY 2022 to FY 2023 Increase/Decrease Statement: FY 2023 begins the CTT Prototype Manufacturing process.			
Title: Common Tactical Truck (CTT) Matrix Functional Support Description: Matrix Functional Support is required to address/augment Engineering and Logistic functions, capabilities and gaps to supplement core employee competencies. FY 2023 Plans: Funds will be used for CTT Matrix Functional Support to provide engineering and logistics functions through the prototyping process. FY 2022 to FY 2023 Increase/Decrease Statement: FY 2023 is the first year that CTT Matrix Functional Support is listed as a separate planned program. In FY 2022, it was funded via CTT Acquisition Planning and Document Development.	-	-	1.520
Title: EHETS Developmental Engineering Description: Engineering efforts in preparation for the EHETS Trailer Source Selection and Evaluation Board (SSEB).	1.232	-	-
Title: SBIR/STTR Transfer Description: Funding transferred in accordance with Title 15 USC ?638 FY 2022 Plans: Funding transferred in accordance with Title 15 USC ?638 FY 2022 to FY 2023 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC ?638	-	0.186	-
Accomplishments/Planned Programs Subtotals	2.239	5.082	19.089

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• DA0924: Modification Of In Svc Equip	62.712	212.349	31.819	-	31.819	43.620	141.407	208.505	274.860	0.000	975.272

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Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles				Project (Number/Name) 659 / Family Of Hvy Tac Veh			

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

Line Item	FY 2021	FY 2022	FY 2023	FY 2023	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Cost To	Total Cost
			Base	OCO	Total					Complete	
• DA0500: Family Of Heavy Tactical Vehicles (FHTV)	6.500	173.282	96.112	-	96.112	55.839	63.735	63.760	63.658	0.000	522.886
• D01650: SEMITRAILER LOW BED 25 TON, M172	5.348	1.864	4.968	-	4.968	4.951	4.947	6.479	6.469	0.000	35.026

Remarks

DA0924 - Modification Of In Svc Equip is a shared funding line with other product offices.

D. Acquisition Strategy

The Enhanced Heavy Equipment Transporter System (EHETS) is the replacement system for the Heavy Equipment Transporter System (HETS). The strategy is to determine the best value through a Source Selection for Low Rate Initial Production award for trailers in preparation for Developmental/Operational test.

The Common Tactical Truck Family of Vehicles (CTT FoVs) is a modernization effort to replace the HEMTT, PLS, and Line Haul vehicles. The CTT has an approved Abbreviated Capability Development Document (A-CDD), and is being considered for a Middle Tier Acquisition, and if approved, will proceed with rapid prototyping. The rapid prototyping effort will be executed as a competitive OTA awarded to up to four OEMs to procure up to three prototypes per vendor in in order to inform the Capability Development Document (CDD).

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army **Date:** April 2022

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) 659 / Family Of Hvy Tac Veh
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Management Services (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
SBIR/STTR Transfer	TBD	Various : Various	-	-		0.186		-		-		-	0.000	0.186	-
Subtotal			-	-		0.186		-		-		-	0.000	0.186	N/A

Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
CTT Non-Recurring Engineering	C/IDIQ	TBD : TBD	-	-		4.156	Nov 2022	-		-		-	0.000	4.156	-
CTT Prototypes	C/IDIQ	TBD : TBD	-	-		-		16.377	Dec 2022	-		16.377	0.000	16.377	-
EHETS Developmental Engineering	MIPR	Ground Vehicle Systems Center : Warren, MI	-	1.232	Jun 2021	-		-		-		-	0.000	1.232	-
Subtotal			-	1.232		4.156		16.377		-		16.377	0.000	21.765	N/A

Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
CTT Acquisition Planning and Document Development	MIPR	TACOM LCMC : Warren, MI	-	1.007	Nov 2021	0.740	Dec 2021	-		-		-	0.000	1.747	-
CTT Matrix Functional Support	MIPR	TACOM LCMC : Warren, MI	-	-		-		1.520	Dec 2022	-		1.520	0.000	1.520	-
Subtotal			-	1.007		0.740		1.520		-		1.520	0.000	3.267	N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) 659 / Family Of Hvy Tac Veh

Event Name	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	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
USAREUR HETS ONS																												
USAREUR HETS ONS Testing	[Redacted]																											
Testing																												
Enhanced Heavy Equipment Transporter System (EHETS)																												
EHETS Milestone C									3																			
MS C																												
EHETS Developmental/Operational Testing													[Redacted]															
DT/OT Test																												
Common Tactical Truck (CTT)																												
CTT Acquisition Planning and Documentation Development	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
Planning and Documentation																												
CTT Abbreviated Capability Development Document (A-CDD) Approval	1																											
A-CDD																												
CTT Request Prototype Proposal (RPP)					2																							
RPP																												
CTT Requirements Framing Analysis (RFA)					[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]							
RFA																												
CTT Other Transaction Agreement (OTA) Award													4															
OTA Award																												
CTT Prototypes Production													[Redacted]				[Redacted]				[Redacted]							
Prototype Production																												
CTT OTA Test																	[Redacted]				[Redacted]							
OTA Test																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) 659 / Family Of Hvy Tac Veh

Event Name	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027											
	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								
CTT AoA													AoA																							
CTT Capability Development Document (CDD)													5 CDD																							
CTT Request for Proposal (RFP)													6 RFP																							
CTT Source Selection and Evaluation Board (SSEB)																									SSEB											
CTT Competitive Runoff Test																													Runoff Test							
CTT Milestone C																																	7 MS C			

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) 659 / Family Of Hvy Tac Veh

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
USAREUR HETS ONS	1	2018	4	2022
USAREUR HETS ONS Testing	1	2019	4	2021
Enhanced Heavy Equipment Transporter System (EHETS)	1	2017	1	2024
EHETS Milestone C	4	2022	4	2022
EHETS Developmental/Operational Testing	4	2022	1	2024
Common Tactical Truck (CTT)	1	2021	4	2027
CTT Acquisition Planning and Documentation Development	1	2021	4	2022
CTT Abbreviated Capability Development Document (A-CDD) Approval	4	2021	4	2021
CTT Request Prototype Proposal (RPP)	3	2022	3	2022
CTT Requirements Framing Analysis (RFA)	3	2022	3	2023
CTT Other Transaction Agreement (OTA) Award	1	2023	1	2023
CTT Prototypes Production	2	2023	1	2024
CTT OTA Test	1	2024	4	2024
CTT AoA	3	2024	1	2025
CTT Capability Development Document (CDD)	1	2025	1	2025
CTT Request for Proposal (RFP)	2	2025	2	2025
CTT Source Selection and Evaluation Board (SSEB)	4	2025	3	2026
CTT Competitive Runoff Test	1	2026	3	2026
CTT Milestone C	3	2026	3	2026

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Army **Date:** April 2022

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) E50 / TRAILER DEVELOPMENT
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
E50: TRAILER DEVELOPMENT	-	8.225	2.970	0.737	-	0.737	-	-	-	-	0.000	11.932
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Medium Equipment Trailer (MET) provides critical layered, agile and responsive sustainment capability required for Large Scale Combat Operations (LSCO). The MET supports Multi-Domain Operations (MDO) with the ability to maneuver across strategic distances by providing intermediate weight combat vehicles transportation for a competitive advantage. The MET will be assigned to Heavy Equipment Transporter Systems (HETS) Companies and Composite Truck Companies- Heavy (CTC-H) to expeditiously move Combat Tracked Vehicles such as the Bradley Fighting Vehicle, Armored Multi-Purpose Vehicles (AMPV), Paladin and Field Artillery Ammunition Support Vehicles (FAASV) with a threshold of up to 60 tons and an objective to meet up to 70 tons while also obtaining North Atlantic Treaty Organization (NATO) road permits with a 45 ton payload. The MET will also be capable of transporting vehicles at the OCONUS standard minimum bridge and underpass clearance of 157.5 inches (4 meters).

FY 2023 Project E50 Base funds in the amount of \$0.737 million supports the completion of the MET Prototype Testing and Soldier Assessment and delivery of the final test report to determine the best value to the Government and down-select to one vendor for a follow-on production award. The MET supports the National Defense Strategy for modernization with a 60 ton payload that provides the capability for transport of two thirds of the tracked combat platforms to include over height combat platforms to support flexible theater postures and enhance the ability to compete and provide freedom of maneuver.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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

	FY 2021	FY 2022	FY 2023
Title: Medium Equipment Trailer (MET) Prototype Manufacturing	7.311	-	-
Description: MET is a trailer capable of transporting track combat platforms weighing 60 tons or less in an Armored Brigade Combat Team (ABCT). MET will provide flexible capability that reduces duplicative systems.			
Title: Medium Equipment Trailer (MET) Prototype Testing and Soldier Assessment	-	2.862	0.737
Description: MET prototypes will be tested to determine which trailer provides the best value to the Government while meeting the MET requirement. To assist in determining the best value to the Government, a Soldier touch point will also be a part of the evaluation. The best value determination will be used to support a follow on production contract.			
FY 2022 Plans:			

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
MET Prototype Competitive Run-off Testing and Soldier Assessment <i>FY 2023 Plans:</i> Completion of the MET Prototype Competitive Run-off Testing and Soldier Assessment. <i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> FY 2023 funds decreased because the effort ends during FY 2023.			
<i>Title:</i> Common Tactical Truck (CTT) Acquisition Planning and Document Development <i>Description:</i> Acquisition planning and documentation development includes matrix personnel program support for the development of contracting/acquisition milestone documentation and systems engineering plans for the Common Tactical Truck.	0.914	-	-
<i>Title:</i> SBIR/STTR Transfer <i>Description:</i> Funding transferred in accordance with Title 15 USC ?638 <i>FY 2022 Plans:</i> Funding transferred in accordance with Title 15 USC ?638 <i>FY 2022 to FY 2023 Increase/Decrease Statement:</i> Funding transferred in accordance with Title 15 USC ?638	-	0.108	-
Accomplishments/Planned Programs Subtotals	8.225	2.970	0.737

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u> <u>Base</u>	<u>FY 2023</u> <u>OCO</u>	<u>FY 2023</u> <u>Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• DA0926: MODIFICATION APPLICATION	27.827	11.710	13.070	-	13.070	27.266	100.461	146.826	193.056	0.000	520.216
• D08921: MEDIUM EQUIPMENT TRAILER (MET)	-	-	20.265	-	20.265	42.493	63.735	63.760	63.658	0.000	253.911

Remarks

D. Acquisition Strategy

The Acquisition Strategy is to execute the MET as a competitive Other Transaction Agreement (OTA) awarded to two Original Equipment Manufacturers (OEMs). The OEMs will provide three prototypes per vendor in preparation to test and down-select to one vendor for follow-on production.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army												Date: April 2022			
Appropriation/Budget Activity				R-1 Program Element (Number/Name)				Project (Number/Name)							
2040 / 5				PE 0604622A / Family of Heavy Tactical Vehicles				E50 / TRAILER DEVELOPMENT							
Management Services (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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
SBIR/STTR Transfer	TBD	Various : Various	-	-		0.108		-		-		-	0.000	0.108	-
Subtotal			-	-		0.108		-		-		-	0.000	0.108	N/A
Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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
MET Prototype Manufacturing	C/TBD	TBD : TBD	-	7.311	Nov 2021	-		-		-		-	0.000	7.311	-
Subtotal			-	7.311		-		-		-		-	0.000	7.311	N/A
Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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
CTT Acquisition Planning and Document Development	MIPR	TACOM LCMC : Warren, MI	-	0.914		-		-		-		-	0.000	0.914	-
Subtotal			-	0.914		-		-		-		-	0.000	0.914	N/A
Test and Evaluation (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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
MET Prototype Testing	MIPR	Aberdeen Test Center (ATC) : Abderdeen, MD	-	-		2.862	Jun 2022	0.737	Oct 2022	-		0.737	0.000	3.599	-
Subtotal			-	-		2.862		0.737		-		0.737	0.000	3.599	N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) E50 / TRAILER DEVELOPMENT

Event Name	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	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
Medium Equipment Trailer (MET)																												
MET Materiel Development Decision	1 MDD																											
MET Request Prototype Proposal (RPP)		2 RPP																										
MET Other Transaction Agreement (OTA) Award			3 Prototype Contract Award																									
MET Prototype Manufacturing					Prototype Build																							
MET Competitive Run-off Test									Runoff Test																			
MET OTA Down Select													OTA Down Select															
MET Milestone C													MS C															
Common Tactical Truck (CTT)																												
CTT Acquisition Planning and Document Development					CTT Acquisition Planning and Document Development																							

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / <i>Family of Heavy Tactical Vehicles</i>	Project (Number/Name) E50 / <i>TRAILER DEVELOPMENT</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Medium Equipment Trailer (MET)	1	2022	4	2023
MET Materiel Development Decision	2	2021	2	2021
MET Request Prototype Proposal (RPP)	3	2021	3	2021
MET Other Transaction Agreement (OTA) Award	1	2022	1	2022
MET Prototype Manufacturing	1	2022	4	2022
MET Competitive Run-off Test	1	2023	3	2023
MET OTA Down Select	3	2023	3	2023
MET Milestone C	4	2023	4	2023
Common Tactical Truck (CTT)	1	2021	4	2022
CTT Acquisition Planning and Document Development	1	2021	4	2022

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Army **Date:** April 2022

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) EZ8 / Leader/Follower
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
<i>EZ8: Leader/Follower</i>	-	10.249	20.393	31.098	-	31.098	27.866	20.655	5.133	5.182	0.000	120.576
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Leader Follower (LF) automated capability, through Manned Unmanned Teaming, provides convoy commanders the option to run either manned or unmanned vehicles. Unmanned LF operation allows Tactical Wheeled Vehicle (TWV) convoys to be led by a manned lead vehicle and followed autonomously by four LF equipped TWVs as the first increment, with continued development towards a fully-autonomous capability. This LF capability reduces Soldier exposure to hostile effects by four drivers when the commander chooses the unmanned option. Additionally, LF enables delivery to be more Soldier efficient, allowing at least as many ton-miles or more to be delivered per transportation unit as current capabilities, with less Soldier exposure to hostile effects.

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

	FY 2021	FY 2022	FY 2023
Title: Tactical Wheeled Vehicle Leader Follower	10.249	19.648	31.098
Description: Leader Follower program enables a single operator to control 5 vehicles in a convoy reducing the number of Soldier at risk while increasing convoy throughput.			
FY 2022 Plans: FY22 funds support extension of FY21 existing Operational Technology Demonstration (OTD) [Note: Previously described in PB21 as follow-on testing of the Leader Follower configuration fielded assets] to mature the Leader Follower design solution under Middle Tier of Acquisition (MTA) [Note: revised from PB22 planned ?down-select? strategy]. Funding supports maturation of OTD design, By-Wire Active Safety development and test, development of MTA ADM documentation, contract development and award of production representative test assets.			
FY 2023 Plans: FY 2023 funds support continuation of Operational Technology Demonstration (OTD) and evaluations at the Army Joint Readiness Training Center (JRTC) and National Training Center (NTC). Funding will support development of logistics documentation, and completion of 19 production representative assets for use in performance testing and logistics development. The Operational Technology Demonstration (OTD) supports the development of new Doctrine, Tactics, Techniques, Procedures (TTPs), and identifies sustainment requirements for Leader Follower capability. Logistics documentation supports development of Maintenance Manuals and Training for Optionally Manned Leader Follower solution. Production representative assets will support test and evaluation in FY 2024.			
FY 2022 to FY 2023 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Army	Date: April 2022
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) EZ8 / Leader/Follower
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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
Funding increase due to increased Operational Technology Demonstration (OTD) activities to include Leader Follower technical support, and completion of 19 production representative assets.			
Title: SBIR / STTR Transfer	-	0.745	-
Description: Funding transferred in accordance with Title 15 USC ?638			
FY 2022 Plans: Funding transferred in accordance with Title 15 USC ?638			
FY 2022 to FY 2023 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC ?638			
Accomplishments/Planned Programs Subtotals	10.249	20.393	31.098

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
• R06806: Leader/ Follower Applique (L/F)	-	-	0.000	-	0.000	15.949	20.607	40.141	40.113	0.000	116.810

Remarks

D. Acquisition Strategy
The Leader Follower program adopted the Operational Technology Demonstration (OTD) vehicle configuration from Science and Technology Projects conducted by the Army Development Command. Leader Follower is maturing this project to achieve Army materiel release requirements, in support of production and fielding. Software development and maturation is planned to continue throughout production.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army												Date: April 2022				
Appropriation/Budget Activity				R-1 Program Element (Number/Name)					Project (Number/Name)							
2040 / 5				PE 0604622A / Family of Heavy Tactical Vehicles					EZ8 / Leader/Follower							
Management Services (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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	
LF Program Management	Allot	PM FP : Warren, MI; Harrison Twp, MI	0.874	1.761	Oct 2020	1.450	Oct 2021	1.750	Oct 2022	-		1.750	0.000	5.835	-	
SBIR / STTR Transfer	TBD	Various : Various	-	-		0.745		-		-		-	0.000	0.745	-	
Subtotal			0.874	1.761		2.195		1.750		-		1.750	0.000	6.580	N/A	
Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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	
LF Operational Technology Demonstration	C/CPFF	Multiple : Various	-	6.312	Dec 2020	-		-		-		-	0.000	6.312	-	
LF Software Development	C/CPFF	Multiple : Various	-	0.309	Dec 2020	-		-		-		-	0.000	0.309	-	
LF Operational Technology Demonstration and Maturation	C/CPFF	Multiple : Various	-	-		15.883	Feb 2022	23.028	Oct 2022	-		23.028	0.000	38.911	-	
Subtotal			-	6.621		15.883		23.028		-		23.028	0.000	45.532	N/A	
Support (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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	
LF Tech Support	MIPR	GVSC, TACOM : Warren, MI	1.334	0.300	Oct 2020	0.791	Oct 2021	5.570	Oct 2022	-		5.570	0.000	7.995	-	
Subtotal			1.334	0.300		0.791		5.570		-		5.570	0.000	7.995	N/A	
Test and Evaluation (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 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	
LF Test Support	MIPR	ATEC : Aberdeen, MD	2.086	1.567	Oct 2020	1.524	Apr 2022	0.250		-		0.250	0.000	5.427	-	

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) EZ8 / Leader/Follower

Event Name	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	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
LEADER FOLLOWER (LF)	[Redacted]																											
LF Sustain Operational Technology Demonstration	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
LF Mature OTD / MTA Configuration	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
LF Mature OTD Award	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
LF ADM - MTA Rapid Prototype / Extend OTD OTAs	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
LF Build Production Representative Test Assets	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
LF Logistics Development	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
LF Test and Evaluation	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
LF Software Acquisition Pathway	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			
LF Production Qualification Testing	[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]				[Redacted]			

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / <i>Family of Heavy Tactical Vehicles</i>	Project (Number/Name) EZ8 / <i>Leader/Follower</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
LEADER FOLLOWER (LF)	1	2020	4	2027
LF Safety Release Testing	4	2019	4	2020
LF Operational Technology Demonstration	1	2020	4	2020
LF Sustain Operational Technology Demonstration	1	2021	4	2021
LF Mature OTD / MTA Configuration	1	2022	4	2027
LF Mature OTD Award	2	2022	2	2022
LF ADM - MTA Rapid Prototype / Extend OTD OTAs	3	2022	3	2022
LF Build Production Representative Test Assets	4	2022	4	2023
LF Logistics Development	1	2023	2	2025
LF Test and Evaluation	1	2022	1	2025
LF Software Acquisition Pathway	4	2024	4	2027
LF Production Qualification Testing	1	2025	4	2025

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Army **Date:** April 2022

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) VR5 / TWV Protection Kits
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COST (\$ in Millions)	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	Cost To Complete	Total Cost
VR5: TWV Protection Kits	-	1.541	-	-	-	-	-	-	-	-	0.000	1.541
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Project VR5 Tactical Wheeled Vehicle (TWV) Protection Kits completes test efforts in Fiscal Year (FY) 2021.

A. Mission Description and Budget Item Justification

The Heavy Dump Truck (HDT) supports construction projects by loading, transporting and dumping payloads of sand and gravel aggregates, crushed rock, hot asphalt mixes, earth, clay, rubble, large boulders and other materials up to gross vehicle weight rating to job sites under world-wide climatic conditions. The HDT also serves as a quarry truck for the quick transport of bulk raw earth materials to and from the crushing, screening and washing plant and the asphalt mixing plant. The HDT also serves as a transportation asset for organization equipment. The HDT is Long Term Armor Strategy (LTAS) compliant with MRAP 1.1 underbody protection. The armor solution is developed concurrently with the production of armor capable HDTs. This line also supports modernization of the current Tactical Wheeled Vehicle fleets through Predictive Logistics Development.

There are no FY 2023 Project VR5 Base or OCO funding requirements.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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

	FY 2021	FY 2022	FY 2023
Title: Heavy Dump Truck (HDT) Testing	0.261	-	-
Description: Reliability, Availability, and Maintainability (RAM) testing and system performance testing / evaluation of the armored HDTs. Developmental Test, Operational Test and Live Fire Test of armored vehicle.			
Title: Predictive Logistics Development	1.000	-	-
Description: Development of a maintenance process that includes self-diagnosis and alerts regarding operational status and maintenance needs of tactical vehicles.			
Title: DS Viper Development	0.280	-	-
Description: DS Viper is a diagnostic framework that will maintain accurate synchronization between Technical Manuals and diagnostic equipment.			

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Exhibit R-2A, RDT&E Project Justification: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) VR5 / TWV Protection Kits

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2021	FY 2022	FY 2023
Accomplishments/Planned Programs Subtotals	1.541	-	-

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

<u>Line Item</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u> <u>Base</u>	<u>FY 2023</u> <u>OCO</u>	<u>FY 2023</u> <u>Total</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• D16001: TRUCK, DUMP, 20T (CCE)	29.368	29.382	0.000	-	0.000	-	-	-	-	0.000	58.750

Remarks

D. Acquisition Strategy

The Heavy Dump Truck (HDT) entered the acquisition cycle pre-Milestone C, based on a competitive source selection process that resulted in the award of a five year plus two option years firm-fixed price (FFP) indefinite delivery indefinite quantity (IDIQ) contract. The contract award was for one Original Equipment Manufacturer (OEM) to develop an armor solution for a commercially-based dump truck. The commercially-based dump truck will be armor-capable and will be produced concurrently with the development of the armor solution, which will ensure that the armor solution correctly interfaces with the commercially-based dump truck.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army **Date:** April 2022

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) VR5 / TWV Protection Kits
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Product Development (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Predictive Logistics Development	MIPR	Washington Headquarters Services : Washington, DC	0.200	1.000	Feb 2021	-		-		-		-	0.000	1.200	-
DS Viper Development	MIPR	Data and Analysis Center : Redstone Arsenal, AL	-	0.280	Feb 2021	-		-		-		-	0.000	0.280	-
Subtotal			0.200	1.280		-		-		-		-	0.000	1.480	N/A

Test and Evaluation (\$ in Millions)				FY 2021		FY 2022		FY 2023 Base		FY 2023 OCO		FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
HDT - Live Fire Testing	MIPR	Aberdeen Test Center (ATC) : Aberdeen, MD	1.305	0.070	Feb 2021	-		-		-		-	0.000	1.375	-
HDT - Familiarization Training	C/IDIQ	Mack Defense : Allentown, PA	0.007	-		-		-		-		-	0.000	0.007	-
HDT - DT/OT	MIPR	Aberdeen Test Center (ATC) : Aberdeen, MD	0.503	0.191	Mar 2021	-		-		-		-	0.000	0.694	-
HEMTT Characterization Testing	SS/FFP	Michigan Tech, Keweenaw Research Center : Calumet, MI	0.115	-		-		-		-		-	0.000	0.115	-
USAREUR HETS ONS - Test Support	SS/FFP	Oshkosh Defense : Oshkosh, WI	0.358	-		-		-		-		-	0.000	0.358	-
USAREUR HETS ONS - Testing	MIPR	Ground Vehicle Systems Center : Warren, MI	0.359	-		-		-		-		-	0.000	0.359	-
Subtotal			2.647	0.261		-		-		-		-	0.000	2.908	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2023 Army								Date: April 2022			
Appropriation/Budget Activity 2040 / 5			R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles			Project (Number/Name) VR5 / TWV Protection Kits					
	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals	2.847	1.541	-	-	-	-	0.000	4.388	N/A		

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / Family of Heavy Tactical Vehicles	Project (Number/Name) VR5 / TWV Protection Kits

Event Name	FY 2021				FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027			
	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
HEAVY DUMP TRUCK (HDT)																												
HDT Armored PVT	[Blue Bar]																											
	Production Verification Testing																											
HDT Armored Live Fire Testing	[Blue Bar]																											
	Live Fire Testing																											
HDT Armored Developmental/Operational Test																												
	[Blue Square]																											
	DT/OT																											
HDT Type Classification/Materiel Release																												
					[Blue Triangle 1]																							
					TC/MR																							
HDT Initial Operating Capability																												
					[Blue Triangle 2]																							
					IOC																							
HEMTT Characterization Testing	[Blue Bar]																											
HETS M1070A1 Tractor Modifications & System-Level Testing	[Blue Bar]																											
Predictive Logistics Development													[Blue Bar]															
DS Viper Development													[Blue Bar]															

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Exhibit R-4A, RDT&E Schedule Details: PB 2023 Army		Date: April 2022
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604622A / <i>Family of Heavy Tactical Vehicles</i>	Project (Number/Name) VR5 / <i>TWV Protection Kits</i>

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
HEAVY DUMP TRUCK (HDT)	1	2017	4	2021
HDT Armor Development	3	2019	4	2019
HDT Armored Prototypes	4	2019	3	2020
HDT Armored Cab Live Fire Exploitation Test	1	2020	1	2020
HDT Armored PVT	4	2019	3	2021
HDT Armored Live Fire Testing	4	2020	2	2021
HDT Armored Developmental/Operational Test	3	2021	3	2021
HDT Type Classification/Materiel Release	1	2022	1	2022
HDT Initial Operating Capability	2	2022	2	2022
HEMTT Characterization Testing	4	2020	4	2021
HETS M1070A1 Tractor Modifications & System-Level Testing	4	2020	4	2021
Predictive Logistics Development	2	2021	4	2022
DS Viper Development	2	2021	4	2022