

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army **Date:** March 2024

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 6: RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605604A / <i>Survivability/Lethality Analysis</i>
----------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------

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
Total Program Element	-	35.750	37.518	37.604	-	37.604	37.649	38.049	38.464	38.848	0.000	263.882
675: <i>Army Survivability Analysis & Evaluation Supp</i>	-	35.750	37.518	37.604	-	37.604	37.649	38.049	38.464	38.848	0.000	263.882

A. Mission Description and Budget Item Justification

This funding line supports testing of Army Modernization Priority Programs.

This Program Element (PE) funds objective vulnerability assessment products necessary for the inherently-governmental Army Test & Evaluation Command/Army Evaluation Center (ATEC/ AEC) mission and for the Research and Development and analysis communities. Products result from investigating, analyzing, assessing, experimenting and reporting on the survivability of Soldiers, and on the survivability, lethality and vulnerability (SLV) of the highest-priority Army and threat systems. Products are leveraged within the Army Futures Command (AFC), the Cross Functional Teams (CFTs) and Program Managers / Program Executive Offices (PM/PEO) to exercise constructive design influence over materiel development and to provide credible engineering-level underpinning and input to the Army Analytical Community.

This PE provides quantitative analyses and data for fielded and developmental systems as the Army pursues its modernization priorities and ensures readiness through the fielding of lethal and survivable systems for multi-domain operations. This PE funds engineering level analysis and experimentation supporting all CFTs including Long Range Precision Fires systems, Next Generation Combat Vehicles, Future Vertical Lift, Network / Command, Control, Communications (C3I), Air & Missile Defense, Soldier Lethality, and other high Army priority efforts. Principal data and analysis domains are integrated materiel performance, cyber resilience, human engineering and performance, Electronic Warfare threat defense, and mission threat analysis.

Assessments funded by this PE are conducted across the spectrum of multi-domain battlefield threats to include: guns, missiles, mines and other methods of inflicting physical damage; jammers, countermeasures, and other electronic warfare techniques; cyber threats from insiders to nation states; and directed energy weapons. Many different kinds of technical capabilities are used to generate these analyses, including specialized equipment, modeling & simulation, and experimental facilities. This PE ensures these capabilities can represent a live, virtual, or constructive hostile environment required for credible assessment, thus enabling evaluators, developers, users, and decision makers to make informed acquisition judgments. This technical data from earliest AFC experimentation to final operational test is retained and serves as AFC's repository of analysis and information for supporting an ever-improving body of evidence to drive Milestone Decisions. This body of evidence enables properly informed decisions concerning acquisition and production; maximizes Army overmatch in systems and tactics; informs investment priorities; and mitigates system weaknesses prior to actual combat.

Technical data and analysis results funded by this PE are efficiently leveraged for many different Army uses, reducing total cost to the Army by eliminating the need for duplicative capabilities funded by individual system developers. Central funding of this mission assures accurate and consistent technical treatment across all formal system Evaluations, and across the Army's analytical community as it conducts analyses of alternatives and other studies. The United States (U.S.) Army Combat Capabilities Development Command (DEVCOM) and ATEC/AEC integrate the results from the work program into Army's formal Evaluation process to ensure ATEC can comply with its legally-mandated responsibility to assess system survivability along with effectiveness and suitability.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2025 Army	Date: March 2024
-----------------------------------------------------------------------	-------------------------

Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 6: RDT&E Management Support</i>	R-1 Program Element (Number/Name) PE 0605604A / <i>Survivability/Lethality Analysis</i>
----------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------

B. Program Change Summary (\$ in Millions)	FY 2023	FY 2024	FY 2025 Base	FY 2025 OCO	FY 2025 Total
Previous President's Budget	36.500	37.518	37.529	-	37.529
Current President's Budget	35.750	37.518	37.604	-	37.604
Total Adjustments	-0.750	0.000	0.075	-	0.075
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.750	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	0.075	-	0.075

Change Summary Explanation

Minor increase in FY25 funding from the previous PB to the current PB due to revised economic assumptions.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army										Date: March 2024		
Appropriation/Budget Activity 2040 / 6					R-1 Program Element (Number/Name) PE 0605604A / <i>Survivability/Lethality Analysis</i>				Project (Number/Name) 675 / <i>Army Survivability Analysis & Evaluation Supp</i>			
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
675: <i>Army Survivability Analysis & Evaluation Supp</i>	-	35.750	37.518	37.604	-	37.604	37.649	38.049	38.464	38.848	0.000	263.882
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This Project funds objective vulnerability assessment products necessary for the inherently-governmental Army Test & Evaluation Command/Army Evaluation Center (ATEC/ AEC) mission, and for the Research and Development and analysis communities. Products result from investigating, analyzing, assessing, experimenting and reporting on the survivability of Soldiers, and on the survivability, lethality and vulnerability (SLV) of the highest-priority Army and threat systems. Products are leveraged within the Army Futures Command (AFC), the Cross-Functional Teams (CFTs), and Program Managers / Program Executive Offices (PM/PEO) to exercise constructive design influence over materiel development and to provide credible engineering-level underpinning and input to the Army Analytical Community.

This Project provides quantitative analyses and data for fielded and developmental systems as the Army pursues its modernization priorities and ensures readiness through the fielding of lethal and survivable systems for multi-domain operations. This Project funds engineering level analysis and experimentation supporting all CFTs including Long Range Precision Fires systems, Next Generation Combat Vehicles, Future Vertical Lift, Network / Command, Control, Communications (C3I), Air & Missile Defense, Soldier Lethality, and other highest Army priority efforts Principal data and analysis domains are integrated materiel performance, cyber resilience, human engineering and performance, Electronic Warfare threat defense, and mission threat analysis.

Assessments funded by this Project are conducted across the spectrum of multi-domain battlefield threats to include: guns, missiles, mines and other methods of inflicting physical damage; jammers, countermeasures, and other electronic warfare techniques; cyber threats from insiders to nation states; and directed energy weapons. Many different kinds of technical capabilities are used to generate these analyses, including specialized equipment, modeling & simulation, and experimental facilities. This Project ensures these capabilities can represent a live, virtual, or constructive hostile environment required for credible assessment, thus enabling evaluators, developers, users, and decision makers to make informed Acquisition judgments. This technical data from earliest AFC experimentation to final operational test is retained and serves as AFC's repository of analysis and information for supporting an ever-improving body of evidence to drive Milestone Decisions. This body of evidence enables properly informed decisions concerning acquisition and production; maximizes Army overmatch in systems and tactics; informs investment priorities; and mitigates system weaknesses prior to actual combat.

Technical data and analysis results funded by this Project are efficiently leveraged for many different Army uses, reducing total cost to the Army by eliminating the need for duplicative capabilities funded by individual system developers. Central funding of this mission assures accurate and consistent technical treatment across all formal system Evaluations, and across the Army's analytical community as it conducts analyses of alternatives and other studies. The United States (U.S.) Army Combat Capabilities Development Command (DEVCOM) and ATEC/AEC integrate the results from the work program into Army's formal Evaluation process to ensure ATEC can comply with its legally-mandated responsibility to assess system survivability along with effectiveness and suitability.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024		
Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605604A / <i>Survivability/Lethality Analysis</i>	Project (Number/Name) 675 / <i>Army Survivability Analysis & Evaluation Supp</i>		
Work in this Project is performed by the United States Army Futures Command (AFC), U.S. Army Combat Capabilities Development Command (DEVCOM) Analysis Center (DAC), Aberdeen Proving Ground, MD				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2023	FY 2024	FY 2025
<p>Title: Survivability, Lethality, Vulnerability Analyses (SLVA) for Ground, Aviation, Munitions, and Soldier Systems</p> <p>Description: This activity provides integrated multi-domain Survivability, Lethality, Vulnerability (SLV) Analyses for highest priority Ground, Aviation, Munitions, and Soldier Systems.</p> <p>FY 2024 Plans: Will develop and advance foundational SLVA capabilities to conduct analyses and assessments of ground, aviation, munitions, and Soldier technologies as specified by AFC/DEVCOM and AEC highest priority systems. Will provide data and analysis support throughout AFC experimentation, including the Project Convergence Campaign of Learning and the Future Study Program. For DEVCOM Centers/ARL, will work with prototype technology developers to constructively influence design and provide performance data to mature ground, aviation, munitions, and Soldier technologies and reduce risk.</p> <p>FY 2025 Plans: Will develop and advance foundational SLV analytical capabilities to conduct analyses and assessments of ground, aviation, munitions, and Soldier technology survivability/lethality as specified by AFC/DEVCOM and AEC highest priority systems including vulnerabilities related to Artificial Intelligence (AI), autonomy, human-agent teaming, and Cyber and Electromagnetic Activities (CEMA). Will provide data and analysis support throughout AFC Persistent Experimentation events and the Future Study Program. For DEVCOM Centers/Army Research Laboratory (ARL), will provide cyber and electronic warfare threat representation, lethality estimates, and performance analyses to inform prototype technology developers, influence design, and mature ground, aviation, munitions, and Soldier technologies and reduce risk.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: Funding increase is an economic adjustment.</p>		16.192	17.022	17.024
<p>Title: Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) System Survivability Assessments</p> <p>Description: This effort produces assessments of the survivability of C4ISR systems in Electronic Warfare (EW) and cyber threat environments and conducts Electronic Attack (EA) and cyber analyses that reveal critical vulnerabilities in C4ISR systems. It also defines, demonstrates, and recommends mitigation options to proponents and evaluators of C4ISR. A cyber vulnerability database is maintained for the benefit of the community.</p> <p>FY 2024 Plans: Will develop and advance foundational cyber and electronic warfare analytical capabilities to conduct analyses and assessments of C4ISR technologies as specified by AFC/DEVCOM and AEC highest priority systems. Will provide data and analysis support</p>		17.552	18.235	18.240

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024		
Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605604A / <i>Survivability/Lethality Analysis</i>	Project (Number/Name) 675 / <i>Army Survivability Analysis & Evaluation Supp</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2023	FY 2024	FY 2025
<p>throughout AFC experimentation, including the Project Convergence Campaign of Learning and the Future Study Program. For DEVCOM Centers/ARL, will work with prototype technology developers to constructively influence design and provide performance data to mature C4ISR technologies and reduce risk.</p> <p>FY 2025 Plans: Will develop and advance foundational cyber and electronic warfare analytical capabilities to conduct analyses and assessments of C4ISR technology survivability as specified by AFC/DEVCOM and AEC highest priority systems including vulnerabilities related to Artificial Intelligence (AI) and CEMA. Will provide data and analysis support throughout AFC Persistent Experimentation events and the Future Study Program. For DEVCOM Centers/ARL, will provide cyber and electronic warfare threat representation and performance analyses to inform prototype technology developers, influence design, and mature C4ISR technologies and reduce risk.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement: Funding increase is an economic adjustment.</p>				
<p>Title: Survivability, Lethality, Vulnerability (SLV) Analyses for Developmental Air and Missile Defense Systems</p> <p>Description: Conduct integrated SLV analyses for developmental air and missile defense systems, pre-planned product improvements of current systems, and recently fielded systems.</p> <p>FY 2024 Plans: Will develop and advance foundational SLV capabilities to conduct analyses and assessments of developmental air and missile defense technologies as specified by AFC/DEVCOM and AEC highest priority systems. Will provide data and analysis support throughout AFC experimentation, including the Project Convergence Campaign of Learning and the Future Study Program. For DEVCOM Centers/ARL, will work with prototype technology developers to constructively influence design and provide performance data to mature developmental air and missile defense technologies and reduce risk.</p> <p>FY 2025 Plans: Will develop and advance foundational SLV analytical capabilities to conduct analyses and assessments of developmental air and missile defense technology survivability/lethality as specified by AFC/DEVCOM and AEC highest priority systems including vulnerabilities related to AI, human-agent teaming, and CEMA. Will provide data and analysis support throughout AFC Persistent Experimentation events and the Future Study Program. For DEVCOM Centers/ARL, will provide cyber and electronic warfare threat representation, lethality estimates, and performance analyses to inform prototype technology developers, influence design, and mature air and missile defense technologies and reduce risk.</p> <p>FY 2024 to FY 2025 Increase/Decrease Statement:</p>		2.006	2.261	2.340

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2025 Army		Date: March 2024
Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605604A / <i>Survivability/Lethality Analysis</i>	Project (Number/Name) 675 / <i>Army Survivability Analysis & Evaluation Supp</i>

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2023	FY 2024	FY 2025
Funding increase is an economic adjustment.			
Accomplishments/Planned Programs Subtotals	35.750	37.518	37.604

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

N/A

Remarks

D. Acquisition Strategy

N/A