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**Department of Defense
Fiscal Year (FY) 2024 Budget Estimates**

March 2023



Army

Justification Book Volume 3c of 3

Research, Development, Test & Evaluation, Army

RDT&E – Volume II, Budget Activity 5C

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Army • Budget Estimates FY 2024 • RDT&E Program

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RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY
APPROPRIATION LANGUAGE

For expenses necessary for basic and applied scientific research, development, test and evaluation, including maintenance, rehabilitation, lease, and operation of facilities and equipment, \$15,772,215,000.00 to remain available for obligation until September 30, 2025.

The FY 2024 Overseas Operations accounted for in the base budget are as follows:

In-theater and in-CONUS expenses that remain after combat operations cease and have been previously funded in Overseas Operations \$3,166,000.00.

COST STATEMENT

The following Justification Books were prepared at a cost of \$365,839.52: Aircraft (ACFT), Missiles (MSLS), Weapons & Tracked Combat Vehicles (WTCV), Ammunition (AMMO), Other Procurement Army (OPA) 1 – Tactical & Support Vehicles, Other Procurement Army (OPA) 2 – Communications & Electronics, Other Procurement Army (OPA) 3 & 4 - Other Support Equipment & Spares, Research, Development, Test and Evaluation (RDTE) for: Budget Activity 1, Budget Activity 2, Budget Activity 3, Budget Activity 4, Budget Activity 5A, Budget Activity 5B, Budget Activity 5C, Budget Activity 5D, Budget Activity 6, Budget Activity 7, and Budget Activity 8.

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FY 2024 RDT&E, ARMY PROGRAM ELEMENT DESCRIPTIVE SUMMARIES
Introduction and Explanation of Contents

1. **General.** The purpose of this document is to provide summary information concerning the Research, Development, Test and Evaluation, Army program. The descriptive summaries are comprised of R-2 (Army RDT&E Budget Item Justification – program element level), R-2A (Army RDT&E Budget Item Justification – project level), R-3 (Army RDT&E Cost Analysis), R-4 (Schedule Profile Detail) and R-5 (Termination Liability Funding for MDAPs) Exhibits, which provide narrative information on all RDT&E program elements and projects through FY 2024.
2. **Relationship of the FY 2024 Budget Submitted to Congress to the FY 2023 Budget Submitted to Congress.** This paragraph provides a list of program elements/projects that are major new starts, restructures, developmental transitions, and terminated programs. Explanations for these changes can be found in the narrative sections of the Program Element R-2A Exhibits.

New Start Programs:

<u><i>Budget Activity</i></u>	<u><i>OSDPE / Project</i></u>	<u><i>Project Title</i></u>
02	0602146A / AM6	Modular RF Communications Technology
02	0602148A / CI4	Adaptive Avionics Technologies
02	0602141A / CIC	Fire Control Lethality Technology
02	0602182A / DA8	Quantum PNT & Radio Frequency Sensing
02	0602182A / DB4	Enabling Long Standoff 3D (ELS3D) Tech
02	0602002A / DC6	Sci & Analysis for Autonomous Sys & Counter-Auton
02	0602183A / DE2	Airborne Threat Defeat
02	0602150A / DE3	Adv Beam Control Component Development for C-CM
02	0602182A / DE6	Understanding Environment as a Threat Tech
03	0603044A / CW1	Technical-SAVVY Soldier Advanced Research
03	0603116A / DB2	Future Armaments Scalable Technologies
03	0603042A / DB5	Enabling Long Standoff 3D (ELS3D) Adv Tech
03	0603463A / DB6	Pathfinder 3D Advanced Technology
04	0604103A / DG4	NAVWAR SA
04	0603779A / DH6	Installation Resilience
05	0604802A / DC9	30mm MMPA M-SHORAD INC 3

05	0604818A / DD1	Unified Network Technology Trans & Integ (UNTTI)
05	0605206A / DG3	CI and HUMINT Equipment Program-Army (CIHEP-A)
05	0605013A / DH1	Operational Medicine Information System
05	0605216A / EFA	Joint Target Integrated Cmd & Coordination Suite
05	0605036A / EQ5	Combating Weapons of Mass Destruction (CWMD)
05	0605049A / XT4	Advanced Threat Detection System (ATDS)
06	0605601A / WD1	West Desert Test Center
07	0203735A / DD4	AMPV Improvement Program
07	0607315A / DD5	Army Power Systems Modernization

Program Element/Project Restructures:

<u>Budget Activity</u>	<u>Old OSDPE / Project: Title</u>	<u>New OSDPE / Project</u>
02	0602145A / CU5: Next Generation Combat Vehicle Technolog	0602141A / CIA
02	0602181A / CM7: All Domain Convergence Applied Research	0602141A / CIB
02	0602143A / AZ9: Soldier Lethality Technology	0602143A / BB4
02	0602143A / BBG: Soldier Lethality Technology	0602143A / BC2
02	0602145A / BG8: Next Generation Combat Vehicle Technology	0602144A / DG1
02	0602180A / CL7: Artificial Intelligence and Machine Learning Technologies	0602180A / DE8
03	0603040A / CL6: Artificial Intelligence and Machine Learning Technologies	0603040A / DE9
03	0603463A / AR6: Network C3I Advanced Technology	0603042A / DE7
03	0603041A / CM8: All Domain Convergence Advanced Technology	0603116A / CID
03	0603462A / BH6: Next Generation Combat Vehicle Advanced Technology	0603118A / BD9
03	0603462A / BG9: Next Generation Combat Vehicle Advanced Technology	0603119A / DG2
03	0603464A / CZ8: Long Range Precision Fires Advanced Technology	0603464A / AF2
04	0604036A / BY9: Multi-Domain Sensing System (MDSS) Adv Dev	0604036A / DD6
04	0604036A / BY9: Multi-Domain Sensing System (MDSS) Adv Dev	0604036A / DD6

05	0604818A / EJ5: Family of Heavy Vehicles	0604622A / DG7
05	0605224A / CK4: Long-Range Hypersonic Weapon	0604182A / HX2
05	0605224A / CK4: All Up Round and Canister (AUR+C)	0604182A / HX2
05	0605457A / S40: Common Hypersonic Glide Body (CHGB)	0604182A / HX2
05	0605601A / F30: Ground Support Equipment (GSE)	0604182A / HX2
05	0203744A / EB6: HX6: Test and Evaluation	0604182A / HX2
05	0605224A / CK4: Multi-Domain Intelligence	0604805A / 593
05	0605224A / CK4: Multi-Domain Intelligence	0605224A / DD8
05	0605457A / S40: Multi-Domain Intelligence	0605224A / DD9
05	0605601A / F30: Army Integrated Air and Missile Defense (AIAMD)	0605457A / SS1
06	0605601A / F30: Army Integrated Air and Missile Defense (AIAMD)	0605702A / 128
07	0203744A / EB6: Army Test Ranges and Facilities	0305219A / MQ2

Program Terminations (including transfers to Procurement and Sustainment):

<u>Budget Activity</u>	<u>OSDPE / Project</u>	<u>Project Title</u>
03	0603465A / AI8	Future Vertical Lift Advanced Technology / Alternative Concept Engine Advanced Technology
03	0603463A / AV4	Network C3I Advanced Technology / Foundational S&T for Network C3I Advanced Tech
04	0305251A / DD3	Cyberspace Operations Forces and Force Support / Joint Cyber Warfighting Architecture Cyber Train
04	0604115A / AX8	Technology Maturation Initiatives / Adv Leth and Accuracy Sys for Med Calber (ALAS-MC)
04	0604115A / AX9	Technology Maturation Initiatives / Adv Mobility Experimental Prototype Adv Tech
05	0604802A / CE3	Weapons and Munitions - Eng Dev / Precision Munition (Sniper)
05	0604802A / EU4	Weapons and Munitions - Eng Dev / 40mm HV Improved High Explosive Dual Purpose
05	0604804A / FG4	Logistics and Engineer Equipment - Eng Dev / Ultra-Lightweight Camouflage Net System (ULCANS)
05	0604822A / DV6	General Fund Enterprise Business System (GFEBS) / General Fund Enterprise Business System
05	0604854A / HB6	Artillery Systems - EMD / Mobile 155MM Howitzer
05	0605013A / 184	Information Technology Development / Installation Support Modules
07	0305204A / 11A	Tactical Unmanned Aerial Vehicles / Advanced Payload Develop & Spt

07	0305206A / EH2	Airborne Reconnaissance Systems / EMARSS ADV DEV
07	0305206A / EH3	Airborne Reconnaissance Systems / EMARSS Payloads ADV DEV
08	0608041A / DD2	Defensive CYBER - Software Prototype Development / Joint Cyber Warfighting Architecture Software

3. **Classification:** This document contains no classified data. Appropriately cleared individuals can obtain further information on Classified/Special Access Programs by contacting the Department of the Army.

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Department of Defense
FY 2024 President's Budget
Exhibit R-1 FY 2024 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Mar 2023

<u>Appropriation</u>	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment	FY 2024 Request
Research, Development, Test and Evaluation, Army	14,660,654	17,142,121	9,100	17,151,221	15,775,381
Total Research, Development, Test, & Evaluation	14,660,654	17,142,121	9,100	17,151,221	15,775,381

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Department of Defense
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Total Obligational Authority
(Dollars in Thousands)

Mar 2023

	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment	FY 2024 Request
<u>Summary Recap of Budget Activities</u>					
Basic Research	590,078	635,395		635,395	497,455
Applied Research	1,521,472	1,823,330		1,823,330	948,358
Advanced Technology Development	2,145,309	2,532,690		2,532,690	1,455,986
Advanced Component Development & Prototypes	3,799,417	4,631,111	6,000	4,637,111	4,420,315
System Development & Demonstration	3,178,005	4,317,752	600	4,318,352	5,639,364
Management Support	1,901,655	1,820,502		1,820,502	1,624,585
Operational Systems Development	1,416,677	1,286,510	2,500	1,289,010	1,105,748
Software And Digital Technology Pilot Programs	108,041	94,831		94,831	83,570
Total Research, Development, Test, & Evaluation	14,660,654	17,142,121	9,100	17,151,221	15,775,381
<u>Summary Recap of FYDP Programs</u>					
General Purpose Forces	559,789	372,120		372,120	404,375
Intelligence and Communications	262,480	248,995		248,995	212,694
Research and Development	13,733,825	16,382,072	9,100	16,391,172	15,055,009
Central Supply and Maintenance	101,466	132,270		132,270	75,317
Administration and Associated Activities	101				
Classified Programs	2,993	6,664		6,664	27,986
Total Research, Development, Test, & Evaluation	14,660,654	17,142,121	9,100	17,151,221	15,775,381

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Department of the Army
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(Dollars in Thousands)

Mar 2023

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Advanced Component Development & Prototypes	3,799,417	4,631,111	6,000	4,637,111	4,420,315
System Development & Demonstration	3,178,005	4,317,752	600	4,318,352	5,639,364
Management Support	1,901,655	1,820,502		1,820,502	1,624,585
Operational Systems Development	1,416,677	1,286,510	2,500	1,289,010	1,105,748
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Department of the Army
FY 2024 President's Budget
Exhibit R-1 FY 2024 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Mar 2023

Appropriation: 2040A Research, Development, Test and Evaluation, Army

Line No	Program Element Number	Item	Act	Se c	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment
1	0601102A	Defense Research Sciences	01	U	358,521	391,642		391,642
2	0601103A	University Research Initiatives	01	U	88,797	107,160		107,160
3	0601104A	University and Industry Research Centers	01	U	122,521	121,160		121,160
4	0601121A	Cyber Collaborative Research Alliance	01	U	5,067	5,355		5,355
5	0601601A	Artificial Intelligence and Machine Learning Basic Research	01	U	15,172	10,078		10,078
	Basic Research				590,078	635,395		635,395
6	0602002A	Army Agile Innovation and Development-Applied Research	02	U		1,000		1,000
7	0602115A	Biomedical Technology	02	U	11,489			
8	0602134A	Counter Improvised-Threat Advanced Studies	02	U	1,904	6,192		6,192
9	0602141A	Lethality Technology	02	U	89,285	194,717		194,717
10	0602142A	Army Applied Research	02	U	28,654	27,833		27,833
11	0602143A	Soldier Lethality Technology	02	U	201,221	253,539		253,539
12	0602144A	Ground Technology	02	U	214,489	264,523		264,523
13	0602145A	Next Generation Combat Vehicle Technology	02	U	239,284	277,445		277,445
14	0602146A	Network C3I Technology	02	U	161,759	212,115		212,115
15	0602147A	Long Range Precision Fires Technology	02	U	107,454	128,529		128,529
16	0602148A	Future Verticle Lift Technology	02	U	130,108	104,348		104,348
17	0602150A	Air and Missile Defense Technology	02	U	92,926	88,768		88,768
18	0602180A	Artificial Intelligence and Machine Learning Technologies	02	U	14,486	16,068		16,068

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Appropriation: 2040A Research, Development, Test and Evaluation, Army

Line No	Program Element Number	Item	Act	Se c	FY 2024 Request
1	0601102A	Defense Research Sciences	01	U	296,670
2	0601103A	University Research Initiatives	01	U	75,672
3	0601104A	University and Industry Research Centers	01	U	108,946
4	0601121A	Cyber Collaborative Research Alliance	01	U	5,459
5	0601601A	Artificial Intelligence and Machine Learning Basic Research	01	U	10,708
	Basic Research				497,455
6	0602002A	Army Agile Innovation and Development-Applied Research	02	U	5,613
7	0602115A	Biomedical Technology	02	U	
8	0602134A	Counter Improvised-Threat Advanced Studies	02	U	6,242
9	0602141A	Lethality Technology	02	U	85,578
10	0602142A	Army Applied Research	02	U	34,572
11	0602143A	Soldier Lethality Technology	02	U	104,470
12	0602144A	Ground Technology	02	U	60,005
13	0602145A	Next Generation Combat Vehicle Technology	02	U	166,500
14	0602146A	Network C3I Technology	02	U	81,618
15	0602147A	Long Range Precision Fires Technology	02	U	34,683
16	0602148A	Future Verticle Lift Technology	02	U	73,844
17	0602150A	Air and Missile Defense Technology	02	U	33,301
18	0602180A	Artificial Intelligence and Machine Learning Technologies	02	U	24,142

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Line No	Program Element Number	Item	Act	Se c	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment
19	0602181A	All Domain Convergence Applied Research	02	U	25,019	27,360		27,360
20	0602182A	C3I Applied Research	02	U	11,954	27,868		27,868
21	0602183A	Air Platform Applied Research	02	U	6,356	41,588		41,588
22	0602184A	Soldier Applied Research	02	U	10,660	15,716		15,716
23	0602213A	C3I Applied Cyber	02	U	12,119	13,605		13,605
24	0602386A	Biotechnology for Materials - Applied Research	02	U	19,889	21,811		21,811
25	0602785A	Manpower/Personnel/Training Technology	02	U	18,414	19,649		19,649
26	0602787A	Medical Technology	02	U	124,002	80,656		80,656
	Applied Research				1,521,472	1,823,330		1,823,330
27	0603002A	Medical Advanced Technology	03	U	147,287	31,588		31,588
28	0603007A	Manpower, Personnel and Training Advanced Technology	03	U	13,865	15,598		15,598
29	0603025A	Army Agile Innovation and Demonstration	03	U	21,420	20,900		20,900
30	0603040A	Artificial Intelligence and Machine Learning Advanced Technologies	03	U	876	6,395		6,395
31	0603041A	All Domain Convergence Advanced Technology	03	U	20,095	45,377		45,377
32	0603042A	C3I Advanced Technology	03	U	3,036	12,716		12,716
33	0603043A	Air Platform Advanced Technology	03	U	727	17,946		17,946
34	0603044A	Soldier Advanced Technology	03	U	858	479		479
35	0603115A	Medical Development	03	U	25,540			
36	0603116A	Lethality Advanced Technology	03	U	7,772	9,796		9,796
37	0603117A	Army Advanced Technology Development	03	U	76,815	134,874		134,874

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Line No	Program Element Number	Item	Act	Se c	FY 2024 Request
19	0602181A	All Domain Convergence Applied Research	02	U	14,297
20	0602182A	C3I Applied Research	02	U	30,659
21	0602183A	Air Platform Applied Research	02	U	48,163
22	0602184A	Soldier Applied Research	02	U	18,986
23	0602213A	C3I Applied Cyber	02	U	22,714
24	0602386A	Biotechnology for Materials - Applied Research	02	U	16,736
25	0602785A	Manpower/Personnel/Training Technology	02	U	19,969
26	0602787A	Medical Technology	02	U	66,266
	Applied Research				948,358
27	0603002A	Medical Advanced Technology	03	U	4,147
28	0603007A	Manpower, Personnel and Training Advanced Technology	03	U	16,316
29	0603025A	Army Agile Innovation and Demonstration	03	U	23,156
30	0603040A	Artificial Intelligence and Machine Learning Advanced Technologies	03	U	13,187
31	0603041A	All Domain Convergence Advanced Technology	03	U	33,332
32	0603042A	C3I Advanced Technology	03	U	19,225
33	0603043A	Air Platform Advanced Technology	03	U	14,165
34	0603044A	Soldier Advanced Technology	03	U	1,214
35	0603115A	Medical Development	03	U	
36	0603116A	Lethality Advanced Technology	03	U	20,582
37	0603117A	Army Advanced Technology Development	03	U	136,280

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38	0603118A	Soldier Lethality Advanced Technology	03	U	148,458	154,639		154,639
39	0603119A	Ground Advanced Technology	03	U	281,637	415,846		415,846
40	0603134A	Counter Improvised-Threat Simulation	03	U	23,920	21,486		21,486
41	0603386A	Biotechnology for Materials - Advanced Research	03	U	51,774	56,853		56,853
42	0603457A	C3I Cyber Advanced Development	03	U	61,426	41,354		41,354
43	0603461A	High Performance Computing Modernization Program	03	U	222,220	301,964		301,964
44	0603462A	Next Generation Combat Vehicle Advanced Technology	03	U	294,491	471,434		471,434
45	0603463A	Network C3I Advanced Technology	03	U	205,576	177,917		177,917
46	0603464A	Long Range Precision Fires Advanced Technology	03	U	138,482	202,830		202,830
47	0603465A	Future Vertical Lift Advanced Technology	03	U	255,323	272,551		272,551
48	0603466A	Air and Missile Defense Advanced Technology	03	U	125,027	99,147		99,147
49	0603920A	Humanitarian Demining	03	U	18,684	21,000		21,000
	Advanced Technology Development				2,145,309	2,532,690		2,532,690
51	0603305A	Army Missile Defense Systems Integration	04	U	56,579	118,001		118,001
52	0603308A	Army Space Systems Integration	04	U	25,401	30,945		30,945
53	0603327A	Air and Missile Defense Systems Engineering	04	U	15,000	15,000		15,000
54	0603619A	Landmine Warfare and Barrier - Adv Dev	04	U	44,933	55,953	6,000	61,953
55	0603639A	Tank and Medium Caliber Ammunition	04	U	61,641	51,488		51,488
56	0603645A	Armored System Modernization - Adv Dev	04	U	154,010	135,122		135,122
57	0603747A	Soldier Support and Survivability	04	U	2,791	4,060		4,060
58	0603766A	Tactical Electronic Surveillance System - Adv Dev	04	U	113,365	72,314		72,314

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Line No	Program Element Number	Item	Act	Se c	FY 2024 Request
38	0603118A	Soldier Lethality Advanced Technology	03	U	102,778
39	0603119A	Ground Advanced Technology	03	U	40,597
40	0603134A	Counter Improvised-Threat Simulation	03	U	21,672
41	0603386A	Biotechnology for Materials - Advanced Research	03	U	59,871
42	0603457A	C3I Cyber Advanced Development	03	U	28,847
43	0603461A	High Performance Computing Modernization Program	03	U	255,772
44	0603462A	Next Generation Combat Vehicle Advanced Technology	03	U	217,394
45	0603463A	Network C3I Advanced Technology	03	U	105,549
46	0603464A	Long Range Precision Fires Advanced Technology	03	U	153,024
47	0603465A	Future Vertical Lift Advanced Technology	03	U	158,795
48	0603466A	Air and Missile Defense Advanced Technology	03	U	21,015
49	0603920A	Humanitarian Demining	03	U	9,068
	Advanced Technology Development				1,455,986
51	0603305A	Army Missile Defense Systems Integration	04	U	12,904
52	0603308A	Army Space Systems Integration	04	U	19,120
53	0603327A	Air and Missile Defense Systems Engineering	04	U	
54	0603619A	Landmine Warfare and Barrier - Adv Dev	04	U	47,537
55	0603639A	Tank and Medium Caliber Ammunition	04	U	91,323
56	0603645A	Armored System Modernization - Adv Dev	04	U	43,026
57	0603747A	Soldier Support and Survivability	04	U	3,550
58	0603766A	Tactical Electronic Surveillance System - Adv Dev	04	U	65,567

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Line No	Program Element Number	Item	Act	Se c	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment	FY 2023 Total Enactment
59	0603774A	Night Vision Systems Advanced Development	04	U	62,534	97,478		97,478
60	0603779A	Environmental Quality Technology - Dem/Val	04	U	22,491	76,749		76,749
61	0603790A	NATO Research and Development	04	U	3,639	3,805		3,805
62	0603801A	Aviation - Adv Dev	04	U	1,138,457	1,157,472		1,157,472
63	0603804A	Logistics and Engineer Equipment - Adv Dev	04	U	10,797	24,638		24,638
64	0603807A	Medical Systems - Adv Dev	04	U	27,768	5,598		5,598
65	0603827A	Soldier Systems - Advanced Development	04	U	25,288	23,444		23,444
66	0604017A	Robotics Development	04	U	78,309	26,555		26,555
67	0604019A	Expanded Mission Area Missile (EMAM)	04	U	26,855	258,320		258,320
68	0604020A	Cross Functional Team (CFT) Advanced Development & Prototyping	04	U		77,000		77,000
69	0604035A	Low Earth Orbit (LEO) Satellite Capability	04	U	18,922	35,509		35,509
70	0604036A	Multi-Domain Sensing System (MDSS) Adv Dev	04	U	50,548	47,915		47,915
71	0604037A	Tactical Intel Targeting Access Node (TITAN) Adv Dev	04	U	28,347	863		863
72	0604100A	Analysis Of Alternatives	04	U	9,723	10,659		10,659
73	0604101A	Small Unmanned Aerial Vehicle (SUAV) (6.4)	04	U	892	1,425		1,425
74	0604103A	Electronic Warfare Planning and Management Tool (EWPMT)	04	U				
75	0604113A	Future Tactical Unmanned Aircraft System (FTUAS)	04	U	76,349	134,719		134,719
76	0604114A	Lower Tier Air Missile Defense (LTAMD) Sensor	04	U	408,766	380,147		380,147
77	0604115A	Technology Maturation Initiatives	04	U	127,725	219,742		219,742
78	0604117A	Maneuver - Short Range Air Defense (M-SHORAD)	04	U	37,939	274,838		274,838

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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59	0603774A	Night Vision Systems Advanced Development	04	U	73,675
60	0603779A	Environmental Quality Technology - Dem/Val	04	U	31,720
61	0603790A	NATO Research and Development	04	U	4,143
62	0603801A	Aviation - Adv Dev	04	U	1,502,160
63	0603804A	Logistics and Engineer Equipment - Adv Dev	04	U	7,604
64	0603807A	Medical Systems - Adv Dev	04	U	1,602
65	0603827A	Soldier Systems - Advanced Development	04	U	27,681
66	0604017A	Robotics Development	04	U	3,024
67	0604019A	Expanded Mission Area Missile (EMAM)	04	U	97,018
68	0604020A	Cross Functional Team (CFT) Advanced Development & Prototyping	04	U	117,557
69	0604035A	Low Earth Orbit (LEO) Satellite Capability	04	U	38,851
70	0604036A	Multi-Domain Sensing System (MDSS) Adv Dev	04	U	191,394
71	0604037A	Tactical Intel Targeting Access Node (TITAN) Adv Dev	04	U	10,626
72	0604100A	Analysis Of Alternatives	04	U	11,095
73	0604101A	Small Unmanned Aerial Vehicle (SUAV) (6.4)	04	U	5,144
74	0604103A	Electronic Warfare Planning and Management Tool (EWPMT)	04	U	2,260
75	0604113A	Future Tactical Unmanned Aircraft System (FTUAS)	04	U	53,143
76	0604114A	Lower Tier Air Missile Defense (LTAMD) Sensor	04	U	816,663
77	0604115A	Technology Maturation Initiatives	04	U	281,314
78	0604117A	Maneuver - Short Range Air Defense (M-SHORAD)	04	U	281,239

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79	0604119A	Army Advanced Component Development & Prototyping	04	U	179,483	198,111		198,111
80	0604120A	Assured Positioning, Navigation and Timing (PNT)	04	U	80,858	57,620		57,620
81	0604121A	Synthetic Training Environment Refinement & Prototyping	04	U	198,815	242,468		242,468
82	0604134A	Counter Improvised-Threat Demonstration, Prototype Development, and Testing	04	U	12,891	14,840		14,840
83	0604135A	Strategic Mid-Range Fires	04	U		404,291		404,291
84	0604182A	Hypersonics	04	U	305,406	238,168		238,168
85	0604403A	Future Interceptor	04	U	6,643	8,179		8,179
86	0604531A	Counter - Small Unmanned Aircraft Systems Advanced Development	04	U	18,449	35,110		35,110
87	0604541A	Unified Network Transport	04	U	33,879	36,966		36,966
88	0604644A	Mobile Medium Range Missile	04	U	275,989			
89	0604785A	Integrated Base Defense (Budget Activity 4)	04	U	2,040			
90	0305251A	Cyberspace Operations Forces and Force Support	04	U	55,895	55,599		55,599
999	999999999	Classified Programs	04	U				
		Advanced Component Development & Prototypes			3,799,417	4,631,111	6,000	4,637,111
91	0604201A	Aircraft Avionics	05	U	6,411	3,335		3,335
92	0604270A	Electronic Warfare Development	05	U	29,683	4,140		4,140
93	0604601A	Infantry Support Weapons	05	U	77,027	83,329		83,329
94	0604604A	Medium Tactical Vehicles	05	U	9,177	22,163		22,163
95	0604611A	JAVELIN	05	U	8,202	16,186		16,186

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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79	0604119A	Army Advanced Component Development & Prototyping	04	U	204,914
80	0604120A	Assured Positioning, Navigation and Timing (PNT)	04	U	40,930
81	0604121A	Synthetic Training Environment Refinement & Prototyping	04	U	109,714
82	0604134A	Counter Improvised-Threat Demonstration, Prototype Development, and Testing	04	U	16,426
83	0604135A	Strategic Mid-Range Fires	04	U	31,559
84	0604182A	Hypersonics	04	U	43,435
85	0604403A	Future Interceptor	04	U	8,040
86	0604531A	Counter - Small Unmanned Aircraft Systems Advanced Development	04	U	64,242
87	0604541A	Unified Network Transport	04	U	40,915
88	0604644A	Mobile Medium Range Missile	04	U	
89	0604785A	Integrated Base Defense (Budget Activity 4)	04	U	
90	0305251A	Cyberspace Operations Forces and Force Support	04	U	
999	999999999	Classified Programs	04	U	19,200
		Advanced Component Development & Prototypes			4,420,315
91	0604201A	Aircraft Avionics	05	U	13,673
92	0604270A	Electronic Warfare Development	05	U	12,789
93	0604601A	Infantry Support Weapons	05	U	64,076
94	0604604A	Medium Tactical Vehicles	05	U	28,226
95	0604611A	JAVELIN	05	U	7,827

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96	0604622A	Family of Heavy Tactical Vehicles	05	U	27,406	53,014		53,014
97	0604633A	Air Traffic Control	05	U	4,244	2,623		2,623
98	0604641A	Tactical Unmanned Ground Vehicle (TUGV)	05	U		109,849		109,849
99	0604642A	Light Tactical Wheeled Vehicles	05	U	1,980			
100	0604645A	Armored Systems Modernization (ASM) - Eng Dev	05	U	118,296	63,131		63,131
101	0604710A	Night Vision Systems - Eng Dev	05	U	41,831	92,951		92,951
102	0604713A	Combat Feeding, Clothing, and Equipment	05	U	1,598	1,566		1,566
103	0604715A	Non-System Training Devices - Eng Dev	05	U	28,605	18,588		18,588
104	0604741A	Air Defense Command, Control and Intelligence - Eng Dev	05	U	58,633	55,541		55,541
105	0604742A	Constructive Simulation Systems Development	05	U	21,424	29,481		29,481
106	0604746A	Automatic Test Equipment Development	05	U	8,486	5,178		5,178
107	0604760A	Distributive Interactive Simulations (DIS) - Eng Dev	05	U	12,182	8,189		8,189
108	0604798A	Brigade Analysis, Integration and Evaluation	05	U	20,976	21,086		21,086
109	0604802A	Weapons and Munitions - Eng Dev	05	U	287,787	285,778	600	286,378
110	0604804A	Logistics and Engineer Equipment - Eng Dev	05	U	49,201	75,669		75,669
111	0604805A	Command, Control, Communications Systems - Eng Dev	05	U	19,372	44,993		44,993
112	0604807A	Medical Materiel/Medical Biological Defense Equipment - Eng Dev	05	U	43,023	5,513		5,513
113	0604808A	Landmine Warfare/Barrier - Eng Dev	05	U	28,622	37,150		37,150
114	0604818A	Army Tactical Command & Control Hardware & Software	05	U	146,291	131,190		131,190
115	0604820A	Radar Development	05	U	124,832	71,259		71,259

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96	0604622A	Family of Heavy Tactical Vehicles	05	U	44,197
97	0604633A	Air Traffic Control	05	U	1,134
98	0604641A	Tactical Unmanned Ground Vehicle (TUGV)	05	U	142,125
99	0604642A	Light Tactical Wheeled Vehicles	05	U	53,564
100	0604645A	Armored Systems Modernization (ASM) - Eng Dev	05	U	102,201
101	0604710A	Night Vision Systems - Eng Dev	05	U	48,720
102	0604713A	Combat Feeding, Clothing, and Equipment	05	U	2,223
103	0604715A	Non-System Training Devices - Eng Dev	05	U	21,441
104	0604741A	Air Defense Command, Control and Intelligence - Eng Dev	05	U	74,738
105	0604742A	Constructive Simulation Systems Development	05	U	30,985
106	0604746A	Automatic Test Equipment Development	05	U	13,626
107	0604760A	Distributive Interactive Simulations (DIS) - Eng Dev	05	U	8,802
108	0604798A	Brigade Analysis, Integration and Evaluation	05	U	20,828
109	0604802A	Weapons and Munitions - Eng Dev	05	U	243,851
110	0604804A	Logistics and Engineer Equipment - Eng Dev	05	U	37,420
111	0604805A	Command, Control, Communications Systems - Eng Dev	05	U	34,214
112	0604807A	Medical Materiel/Medical Biological Defense Equipment - Eng Dev	05	U	6,496
113	0604808A	Landmine Warfare/Barrier - Eng Dev	05	U	13,581
114	0604818A	Army Tactical Command & Control Hardware & Software	05	U	168,574
115	0604820A	Radar Development	05	U	94,944

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Line No	Program Element Number	Item	Act	Se c	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment	FY 2023 Total Enactment
116	0604822A	General Fund Enterprise Business System (GFEBs)	05	U	15,395	10,402		10,402
117	0604827A	Soldier Systems - Warrior Dem/Val	05	U	6,219	19,408		19,408
118	0604852A	Suite of Survivability Enhancement Systems - EMD	05	U	93,207	100,384		100,384
119	0604854A	Artillery Systems - EMD	05	U	25,000	48,106		48,106
120	0605013A	Information Technology Development	05	U	125,109	104,134		104,134
121	0605018A	Integrated Personnel and Pay System-Army (IPPS-A)	05	U	65,230	67,519		67,519
122	0605028A	Armored Multi-Purpose Vehicle (AMPV)	05	U	34,262			
123	0605030A	Joint Tactical Network Center (JTNC)	05	U	15,752	17,936		17,936
124	0605031A	Joint Tactical Network (JTN)	05	U	27,849	30,150		30,150
125	0605035A	Common Infrared Countermeasures (CIRCM)	05	U	15,982	11,523		11,523
126	0605036A	Combating Weapons of Mass Destruction (CWMD)	05	U				
127	0605038A	Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV) Sensor Suite	05	U	7,340			
128	0605041A	Defensive CYBER Tool Development	05	U	18,811	39,029		39,029
129	0605042A	Tactical Network Radio Systems (Low-Tier)	05	U	27,688	4,426		4,426
130	0605047A	Contract Writing System	05	U	20,195	13,742		13,742
131	0605049A	Missile Warning System Modernization (MWSM)	05	U				
132	0605051A	Aircraft Survivability Development	05	U	60,127	19,123		19,123
133	0605052A	Indirect Fire Protection Capability Inc 2 - Block 1	05	U	175,604	131,093		131,093
134	0605053A	Ground Robotics	05	U	15,763	26,809		26,809
135	0605054A	Emerging Technology Initiatives	05	U	219,284	244,047		244,047

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116	0604822A	General Fund Enterprise Business System (GFEBs)	05	U	2,965
117	0604827A	Soldier Systems - Warrior Dem/Val	05	U	11,333
118	0604852A	Suite of Survivability Enhancement Systems - EMD	05	U	79,250
119	0604854A	Artillery Systems - EMD	05	U	42,490
120	0605013A	Information Technology Development	05	U	104,024
121	0605018A	Integrated Personnel and Pay System-Army (IPPS-A)	05	U	102,084
122	0605028A	Armored Multi-Purpose Vehicle (AMPV)	05	U	
123	0605030A	Joint Tactical Network Center (JTNC)	05	U	18,662
124	0605031A	Joint Tactical Network (JTN)	05	U	30,328
125	0605035A	Common Infrared Countermeasures (CIRCM)	05	U	11,509
126	0605036A	Combating Weapons of Mass Destruction (CWMD)	05	U	1,050
127	0605038A	Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV) Sensor Suite	05	U	
128	0605041A	Defensive CYBER Tool Development	05	U	27,714
129	0605042A	Tactical Network Radio Systems (Low-Tier)	05	U	4,318
130	0605047A	Contract Writing System	05	U	16,355
131	0605049A	Missile Warning System Modernization (MWSM)	05	U	27,571
132	0605051A	Aircraft Survivability Development	05	U	24,900
133	0605052A	Indirect Fire Protection Capability Inc 2 - Block 1	05	U	196,248
134	0605053A	Ground Robotics	05	U	35,319
135	0605054A	Emerging Technology Initiatives	05	U	201,274

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136	0605143A	Biometrics Enabling Capability (BEC)	05	U	4,326	11,091		11,091
137	0605144A	Next Generation Load Device - Medium	05	U	14,835	22,439		22,439
138	0605145A	Medical Products and Support Systems Development	05	U	927			
139	0605148A	Tactical Intel Targeting Access Node (TITAN) EMD	05	U	54,972	108,987		108,987
140	0605203A	Army System Development & Demonstration	05	U	122,175	143,616		143,616
141	0605205A	Small Unmanned Aerial Vehicle (SUAV) (6.5)	05	U	2,192	6,530		6,530
142	0605206A	CI and HUMINT Equipment Program-Army (CIHEP-A)	05	U				
143	0605216A	Joint Targeting Integrated Command and Coordination Suite (JTIC2S)	05	U				
144	0605224A	Multi-Domain Intelligence	05	U	9,313	6,008		6,008
145	0605225A	SIO Capability Development	05	U	22,713			
146	0605231A	Precision Strike Missile (PrSM)	05	U	181,574	259,506		259,506
147	0605232A	Hypersonics EMD	05	U	107,404	633,499		633,499
148	0605233A	Accessions Information Environment (AIE)	05	U	16,177	10,088		10,088
149	0605235A	Strategic Mid-Range Capability	05	U		5,016		5,016
150	0605236A	Integrated Tactical Communications	05	U		12,447		12,447
151	0605450A	Joint Air-to-Ground Missile (JAGM)	05	U	2,467	2,366		2,366
152	0605457A	Army Integrated Air and Missile Defense (AIAMD)	05	U	154,257	263,545		263,545
153	0605531A	Counter - Small Unmanned Aircraft Systems Sys Dev & Demonstration	05	U	49,667	14,892		14,892
154	0605625A	Manned Ground Vehicle	05	U	194,936	554,925		554,925
155	0605766A	National Capabilities Integration (MIP)	05	U	13,454	17,030		17,030

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136	0605143A	Biometrics Enabling Capability (BEC)	05	U	
137	0605144A	Next Generation Load Device - Medium	05	U	36,970
138	0605145A	Medical Products and Support Systems Development	05	U	
139	0605148A	Tactical Intel Targeting Access Node (TITAN) EMD	05	U	132,136
140	0605203A	Army System Development & Demonstration	05	U	81,657
141	0605205A	Small Unmanned Aerial Vehicle (SUAV) (6.5)	05	U	31,284
142	0605206A	CI and HUMINT Equipment Program-Army (CIHEP-A) Joint Targeting Integrated Command and Coordination Suite	05	U	2,170
143	0605216A	(JTIC2S)	05	U	9,290
144	0605224A	Multi-Domain Intelligence	05	U	41,003
145	0605225A	SIO Capability Development	05	U	
146	0605231A	Precision Strike Missile (PrSM)	05	U	272,786
147	0605232A	Hypersonics EMD	05	U	900,920
148	0605233A	Accessions Information Environment (AIE)	05	U	27,361
149	0605235A	Strategic Mid-Range Capability	05	U	348,855
150	0605236A	Integrated Tactical Communications	05	U	22,901
151	0605450A	Joint Air-to-Ground Missile (JAGM)	05	U	3,014
152	0605457A	Army Integrated Air and Missile Defense (AIAMD) Counter - Small Unmanned Aircraft Systems Sys Dev &	05	U	284,095
153	0605531A	Demonstration	05	U	36,016
154	0605625A	Manned Ground Vehicle	05	U	996,653
155	0605766A	National Capabilities Integration (MIP)	05	U	15,129

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156	0605812A	Joint Light Tactical Vehicle (JLTV) Engineering and Manufacturing Development Ph	05	U	2,470	9,376		9,376
157	0605830A	Aviation Ground Support Equipment	05	U	1,158	2,959		2,959
158	0303032A	TROJAN - RH12	05	U	3,362	3,761		3,761
159	0304270A	Electronic Warfare Development	05	U	75,520	99,938		99,938
		System Development & Demonstration			3,178,005	4,317,752	600	4,318,352
160	0604256A	Threat Simulator Development	06	U	60,749	138,937		138,937
161	0604258A	Target Systems Development	06	U	41,769	64,132		64,132
162	0604759A	Major T&E Investment	06	U	91,130	142,031		142,031
163	0605103A	Rand Arroyo Center	06	U	31,087	33,631		33,631
164	0605301A	Army Kwajalein Atoll	06	U	242,279	309,005		309,005
165	0605326A	Concepts Experimentation Program	06	U	80,386	86,824		86,824
166	0605502A	Small Business Innovative Research	06	U	374,118			
167	0605601A	Army Test Ranges and Facilities	06	U	362,223	417,567		417,567
168	0605602A	Army Technical Test Instrumentation and Targets	06	U	57,584	67,962		67,962
169	0605604A	Survivability/Lethality Analysis	06	U	35,042	36,500		36,500
170	0605606A	Aircraft Certification	06	U	2,398	4,777		4,777
171	0605702A	Meteorological Support to RDT&E Activities	06	U	6,389	6,958		6,958
172	0605706A	Materiel Systems Analysis	06	U	20,771	22,004		22,004
173	0605709A	Exploitation of Foreign Items	06	U	13,631	6,186		6,186
174	0605712A	Support of Operational Testing	06	U	54,797	70,718		70,718

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Line No	Program Element Number	Item	Act	Se c	FY 2024 Request
156	0605812A	Joint Light Tactical Vehicle (JLTV) Engineering and Manufacturing Development Ph	05	U	27,243
157	0605830A	Aviation Ground Support Equipment	05	U	1,167
158	0303032A	TROJAN - RH12	05	U	3,879
159	0304270A	Electronic Warfare Development	05	U	137,186
		System Development & Demonstration			5,639,364
160	0604256A	Threat Simulator Development	06	U	38,492
161	0604258A	Target Systems Development	06	U	11,873
162	0604759A	Major T&E Investment	06	U	76,167
163	0605103A	Rand Arroyo Center	06	U	37,078
164	0605301A	Army Kwajalein Atoll	06	U	314,872
165	0605326A	Concepts Experimentation Program	06	U	95,551
166	0605502A	Small Business Innovative Research	06	U	
167	0605601A	Army Test Ranges and Facilities	06	U	439,118
168	0605602A	Army Technical Test Instrumentation and Targets	06	U	42,220
169	0605604A	Survivability/Lethality Analysis	06	U	37,518
170	0605606A	Aircraft Certification	06	U	2,718
171	0605702A	Meteorological Support to RDT&E Activities	06	U	
172	0605706A	Materiel Systems Analysis	06	U	26,902
173	0605709A	Exploitation of Foreign Items	06	U	7,805
174	0605712A	Support of Operational Testing	06	U	75,133

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Department of the Army
FY 2024 President's Budget
Exhibit R-1 FY 2024 President's Budget
Total Obligational Authority
(Dollars in Thousands)

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Appropriation: 2040A Research, Development, Test and Evaluation, Army

Line No	Program Element Number	Item	Act	Se c	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment	FY 2023 Total Enactment
175	0605716A	Army Evaluation Center	06	U	65,693	67,058		67,058
176	0605718A	Army Modeling & Sim X-Cmd Collaboration & Integ	06	U	2,537	6,097		6,097
177	0605801A	Programwide Activities	06	U	90,443	89,793		89,793
178	0605803A	Technical Information Activities	06	U	31,174	37,652		37,652
179	0605805A	Munitions Standardization, Effectiveness and Safety	06	U	54,922	60,645		60,645
180	0605857A	Environmental Quality Technology Mgmt Support	06	U	1,724	1,912		1,912
181	0605898A	Army Direct Report Headquarters - R&D - MHA	06	U	48,798	53,271		53,271
182	0606002A	Ronald Reagan Ballistic Missile Defense Test Site	06	U	78,187	89,602		89,602
183	0606003A	CounterIntel and Human Intel Modernization	06	U	10,641	1,424		1,424
184	0606105A	Medical Program-Wide Activities	06	U	37,616			
185	0606942A	Assessments and Evaluations Cyber Vulnerabilities	06	U	5,466	5,816		5,816
186	0909999A	Financing for Cancelled Account Adjustments	06	U	101			
	Management Support				1,901,655	1,820,502		1,820,502
187	0603778A	MLRS Product Improvement Program	07	U	11,865	18,463		18,463
188	0605024A	Anti-Tamper Technology Support	07	U	8,544	9,284		9,284
189	0607131A	Weapons and Munitions Product Improvement Programs	07	U	39,994	54,674	2,500	57,174
190	0607136A	Blackhawk Product Improvement Program	07	U	14,599			
191	0607137A	Chinook Product Improvement Program	07	U	65,960	67,513		67,513
192	0607139A	Improved Turbine Engine Program	07	U	250,533	228,036		228,036
193	0607142A	Aviation Rocket System Product Improvement and Development	07	U	8,831	11,312		11,312

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Department of the Army
FY 2024 President's Budget
Exhibit R-1 FY 2024 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Mar 2023

Appropriation: 2040A Research, Development, Test and Evaluation, Army

Line No	Program Element Number	Item	Act	Se c	FY 2024 Request
175	0605716A	Army Evaluation Center	06	U	71,118
176	0605718A	Army Modeling & Sim X-Cmd Collaboration & Integ	06	U	11,204
177	0605801A	Programwide Activities	06	U	93,895
178	0605803A	Technical Information Activities	06	U	31,327
179	0605805A	Munitions Standardization, Effectiveness and Safety	06	U	50,409
180	0605857A	Environmental Quality Technology Mgmt Support	06	U	1,629
181	0605898A	Army Direct Report Headquarters - R&D - MHA	06	U	55,843
182	0606002A	Ronald Reagan Ballistic Missile Defense Test Site	06	U	91,340
183	0606003A	CounterIntel and Human Intel Modernization	06	U	6,348
184	0606105A	Medical Program-Wide Activities	06	U	
185	0606942A	Assessments and Evaluations Cyber Vulnerabilities	06	U	6,025
186	0909999A	Financing for Cancelled Account Adjustments	06	U	
	Management Support				1,624,585
187	0603778A	MLRS Product Improvement Program	07	U	14,465
188	0605024A	Anti-Tamper Technology Support	07	U	7,472
189	0607131A	Weapons and Munitions Product Improvement Programs	07	U	8,425
190	0607136A	Blackhawk Product Improvement Program	07	U	1,507
191	0607137A	Chinook Product Improvement Program	07	U	9,265
192	0607139A	Improved Turbine Engine Program	07	U	201,247
193	0607142A	Aviation Rocket System Product Improvement and Development	07	U	3,014

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Total Obligational Authority
(Dollars in Thousands)

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Appropriation: 2040A Research, Development, Test and Evaluation, Army

Line No	Program Element Number	Item	Act	Se c	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment*	FY 2023 Total Enactment
194	0607143A	Unmanned Aircraft System Universal Products	07	U	4,426	10,512		10,512
195	0607145A	Apache Future Development	07	U	9,700	25,074		25,074
196	0607148A	AN/TPQ-53 Counterfire Target Acquisition Radar System	07	U	46,009	61,559		61,559
197	0607150A	Intel Cyber Development	07	U	3,611	13,343		13,343
198	0607312A	Army Operational Systems Development	07	U	28,029	26,131		26,131
199	0607313A	Electronic Warfare Development	07	U	5,673	6,432		6,432
200	0607315A	Enduring Turbine Engines and Power Systems	07	U				
201	0607665A	Family of Biometrics	07	U	1,101	1,114		1,114
202	0607865A	Patriot Product Improvement	07	U	125,851	152,312		152,312
203	0203728A	Joint Automated Deep Operation Coordination System (JADOCS)	07	U	24,556	19,311		19,311
204	0203735A	Combat Vehicle Improvement Programs	07	U	272,438	194,229		194,229
205	0203743A	155mm Self-Propelled Howitzer Improvements	07	U	168,683	116,510		116,510
206	0203744A	Aircraft Modifications/Product Improvement Programs	07	U	10,000			
207	0203752A	Aircraft Engine Component Improvement Program	07	U	127	148		148
208	0203758A	Digitization	07	U	3,759			
209	0203801A	Missile/Air Defense Product Improvement Program	07	U	122	3,109		3,109
210	0203802A	Other Missile Product Improvement Programs	07	U	9,956	9,027		9,027
211	0205412A	Environmental Quality Technology - Operational System Dev	07	U	253	793		793
212	0205778A	Guided Multiple-Launch Rocket System (GMLRS)	07	U	58,516	20,180		20,180
213	0208053A	Joint Tactical Ground System	07	U	11,379	8,813		8,813

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Department of the Army
FY 2024 President's Budget
Exhibit R-1 FY 2024 President's Budget
Total Obligational Authority
(Dollars in Thousands)

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Appropriation: 2040A Research, Development, Test and Evaluation, Army

Line No	Program Element Number	Item	Act	Se c	FY 2024 Request
194	0607143A	Unmanned Aircraft System Universal Products	07	U	25,393
195	0607145A	Apache Future Development	07	U	10,547
196	0607148A	AN/TPQ-53 Counterfire Target Acquisition Radar System	07	U	54,167
197	0607150A	Intel Cyber Development	07	U	4,345
198	0607312A	Army Operational Systems Development	07	U	19,000
199	0607313A	Electronic Warfare Development	07	U	6,389
200	0607315A	Enduring Turbine Engines and Power Systems	07	U	2,411
201	0607665A	Family of Biometrics	07	U	797
202	0607865A	Patriot Product Improvement	07	U	177,197
203	0203728A	Joint Automated Deep Operation Coordination System (JADOCS)	07	U	42,177
204	0203735A	Combat Vehicle Improvement Programs	07	U	146,635
205	0203743A	155mm Self-Propelled Howitzer Improvements	07	U	122,902
206	0203744A	Aircraft Modifications/Product Improvement Programs	07	U	
207	0203752A	Aircraft Engine Component Improvement Program	07	U	146
208	0203758A	Digitization	07	U	1,515
209	0203801A	Missile/Air Defense Product Improvement Program	07	U	4,520
210	0203802A	Other Missile Product Improvement Programs	07	U	10,044
211	0205412A	Environmental Quality Technology - Operational System Dev	07	U	281
212	0205778A	Guided Multiple-Launch Rocket System (GMLRS)	07	U	75,952
213	0208053A	Joint Tactical Ground System	07	U	203

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Department of the Army
FY 2024 President's Budget
Exhibit R-1 FY 2024 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Mar 2023

Appropriation: 2040A Research, Development, Test and Evaluation, Army

Line No	Program Element Number	Item	Act	Se c	FY 2022 Actuals	FY 2023 Less Supplementals Enactment	FY 2023 Supplementals Enactment	FY 2023 Total Enactment
216	0303028A	Security and Intelligence Activities	07	U	24,506			
217	0303140A	Information Systems Security Program	07	U	15,680	17,209		17,209
218	0303141A	Global Combat Support System	07	U	43,643	22,600		22,600
219	0303142A	SATCOM Ground Environment (SPACE)	07	U	16,186	18,297		18,297
222	0305179A	Integrated Broadcast Service (IBS)	07	U	5,430	9,926		9,926
223	0305204A	Tactical Unmanned Aerial Vehicles	07	U	8,410	4,500		4,500
224	0305206A	Airborne Reconnaissance Systems	07	U	11,782	17,165		17,165
225	0305219A	MQ-1C Gray Eagle UAS	07	U				
226	0307665A	Biometrics Enabled Intelligence	07	U	2,066			
227	0708045A	End Item Industrial Preparedness Activities	07	U	101,466	132,270		132,270
999	999999999	Classified Programs	07	U	2,993	6,664		6,664
	Operational Systems Development				1,416,677	1,286,510	2,500	1,289,010
228	0608041A	Defensive CYBER - Software Prototype Development	08	U	108,041	94,831		94,831
	Software And Digital Technology Pilot Programs				108,041	94,831		94,831
Total Research, Development, Test and Evaluation, Army					14,660,654	17,142,121	9,100	17,151,221

*Includes enacted funding in the Ukraine Supplemental Appropriation Act, 2023 (Division B of Public Law 117-180) and Additional Ukraine Supplemental Appropriation Act, 2023 (Division M of Public Law 117-328).

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Department of the Army
FY 2024 President's Budget
Exhibit R-1 FY 2024 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Mar 2023

Appropriation: 2040A Research, Development, Test and Evaluation, Army

Line No	Program Element Number	Item	Act	Se c	FY 2024 Request
216	0303028A	Security and Intelligence Activities	07	U	301
217	0303140A	Information Systems Security Program	07	U	15,323
218	0303141A	Global Combat Support System	07	U	13,082
219	0303142A	SATCOM Ground Environment (SPACE)	07	U	26,838
222	0305179A	Integrated Broadcast Service (IBS)	07	U	9,456
223	0305204A	Tactical Unmanned Aerial Vehicles	07	U	
224	0305206A	Airborne Reconnaissance Systems	07	U	
225	0305219A	MQ-1C Gray Eagle UAS	07	U	6,629
226	0307665A	Biometrics Enabled Intelligence	07	U	
227	0708045A	End Item Industrial Preparedness Activities	07	U	75,317
999	999999999	Classified Programs	07	U	8,786
	Operational Systems Development				1,105,748
228	0608041A	Defensive CYBER - Software Prototype Development	08	U	83,570
	Software And Digital Technology Pilot Programs				83,570
Total Research, Development, Test and Evaluation, Army					15,775,381

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115	05	0604822A	General Fund Enterprise Business System (GFEBS).....	Volume 3c - 12
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117	05	0604852A	Suite of Survivability Enhancement Systems - EMD.....	Volume 3c - 52
118	05	0604854A	Artillery Systems - EMD.....	Volume 3c - 66
119	05	0605013A	Information Technology Development.....	Volume 3c - 77
120	05	0605018A	Integrated Personnel and Pay System-Army (IPPS-A).....	Volume 3c - 170
121	05	0605028A	Armored Multi-Purpose Vehicle (AMPV).....	Volume 3c - 181
122	05	0605030A	Joint Tactical Network Center (JTNC).....	Volume 3c - 190
123	05	0605031A	Joint Tactical Network (JTN).....	Volume 3c - 200
124	05	0605035A	Common Infrared Countermeasures (CIRCM).....	Volume 3c - 219
125	05	0605036A	Combating Weapons of Mass Destruction (CWMD).....	Volume 3c - 228
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127	05	0605041A	Defensive CYBER Tool Development.....	Volume 3c - 241
128	05	0605042A	Tactical Network Radio Systems (Low-Tier).....	Volume 3c - 270
129	05	0605047A	Contract Writing System.....	Volume 3c - 288

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Appropriation 2040: Research, Development, Test & Evaluation, Army

Line #	Budget Activity	Program Element Number	Program Element Title	Page
130	05	0605049A	Missile Warning System Modernization (MWSM).....	Volume 3c - 302

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Combating Weapons of Mass Destruction (CWMD)	0605036A	125	05.....	Volume 3c - 228
Common Infrared Countermeasures (CIRCM)	0605035A	124	05.....	Volume 3c - 219
Contract Writing System	0605047A	129	05.....	Volume 3c - 288
Defensive CYBER Tool Development	0605041A	127	05.....	Volume 3c - 241
General Fund Enterprise Business System (GFEBS)	0604822A	115	05.....	Volume 3c - 12
Information Technology Development	0605013A	119	05.....	Volume 3c - 77
Integrated Personnel and Pay System-Army (IPPS-A)	0605018A	120	05.....	Volume 3c - 170
Joint Tactical Network (JTN)	0605031A	123	05.....	Volume 3c - 200
Joint Tactical Network Center (JTNC)	0605030A	122	05.....	Volume 3c - 190
Missile Warning System Modernization (MWSM)	0605049A	130	05.....	Volume 3c - 302
Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV) Sensor Suite	0605038A	126	05.....	Volume 3c - 235
Radar Development	0604820A	114	05.....	Volume 3c - 1
Soldier Systems - Warrior Dem/Val	0604827A	116	05.....	Volume 3c - 26
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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604820A / Radar Development							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	124.832	71.259	94.944	-	94.944	48.837	18.987	8.508	8.603	0.000	375.970
E10: Sentinel	-	124.832	71.259	94.944	-	94.944	48.837	18.987	8.508	8.603	0.000	375.970

A. Mission Description and Budget Item Justification

This funding line is a key enabler of the Army Modernization Priorities in support of the Sentinel Radar program and will provide for an incrementally fielded Integrated Air and Missile Defense Fire Control System/capability for the composite Army Air and Missile Defense Brigades. The Sentinel system is a key component of the Army Integrated Air and Missile Defense (AIAMD) architecture, providing critical air surveillance of the forward areas. The AIAMD architecture is an integrated fires development effort that includes survivability, resiliency, and effectiveness improvements against advanced threats from near-peer adversaries. This effort includes integration with an evolving common fires mission command, common development tools and processes, and annual test and evaluation to provide data to support program assessments and progress toward closure of performance gaps.

Sentinel A3 consists of a radar-based sensor with its prime mover/power, Identification Friend or Foe (IFF), and Forward Area Air Defense (FAAD) Command, Control and Intelligence (C2I) interfaces. The radar is deployed in both an air defense role and a force protection role for Counter-Rocket, Artillery, and Mortar (C-RAM) missions. The sensor is an advanced three-dimensional battlefield X-Band air defense phased-array radar with an instrumented range of 75 kilometers. Sentinel is capable of operating day or night, in adverse weather conditions, in the battlefield environments of dust, smoke, aerosols and enemy countermeasures. It provides 360-degree azimuth coverage for acquisition tracking. Sentinel contributes to the digital battlefield by automatically detecting, classifying, identifying and reporting targets (cruise missiles, unmanned aircraft systems, rotary wing and fixed wing aircraft). Sentinel acquires targets sufficiently forward of the battle area to allow weapons reaction time and engagement at optimum ranges. Sentinel's integrated IFF reduces the potential for fratricide of U.S. and Coalition aircraft.

The Sentinel A4 Active Electronically Scanned Array (AESA) is the next generation of radar technology to replace the current phase and frequency scanned array used by Sentinel today. Sentinel A4 hardware and software upgrades will extend the range for ground-based surveillance and situational awareness; will have faster and more accurate Non-Cooperative Target Recognition (NCTR) for clearing fires and preventing fratricide; will improve track accuracy, and management of larger track loads; and improve operation in severe/urban clutter. The system will provide simultaneous multi-mission capability and provides hemispherical surveillance to detect and track small targets, such as Unmanned Aircraft Systems (UAS) and Cruise Missiles, in clutter and will detect and track slow targets, such as UAS and Rotary Wing aircraft, at low altitudes in clutter. The system will detect, track, and classify Rocket, Artillery, and Mortar (RAM) threats and will support M-SHORAD, AIAMD, IFPC and Defense of Guam Operational requirements with Fire Control quality tracks. Sentinel A4 will incorporate the upgraded AN/TPX-61 IFF with M-Code capability added by replacing the GB-Gram card with M-Code GB-Gram cards. Sentinel A4 will also address system survivability enhancements via the Air and Missile Defense - Integration (AMD-I) efforts.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army				Date: March 2023	
Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)		PE 0604820A / Radar Development			
B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	122.607	71.259	74.055	-	74.055
Current President's Budget	124.832	71.259	94.944	-	94.944
Total Adjustments	2.225	0.000	20.889	-	20.889
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	2.225	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	20.889	-	20.889
Change Summary Explanation					
FY 2024 Base dollars is in support of the Pacific Deterrence Initiative. This is an increase from the FY 2023 funding level, which had no request for PDI funding in Program Element 0604820A/ Radar Development. This funding will be utilized for Defense Guam (from R-3).					

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604820A / <i>Radar Development</i>				Project (Number/Name) E10 / <i>Sentinel</i>			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
E10: <i>Sentinel</i>	-	124.832	71.259	94.944	-	94.944	48.837	18.987	8.508	8.603	0.000	375.970
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Sentinel A4 detects, tracks, and classifies RAM threats and will support Integrated Air and Missile Defense Battle Command System (IBCS) requirements and contributes sensor support for mitigating current and future Indirect Fire Protection Capability Increment 2 mission requirements as well as Mobile Short Range Air Defense (M-SHORAD) battalions. FY 2024 funding supports the integration for five (5) Initial Operational Test and Evaluation (IOT&E) Systems, the development of additional survivability enhancements (AMD-I) for inclusion into Sentinel A4, as well as the non-recurring engineering efforts to enhance the Sentinel A4 configuration to support Defense of Guam mission set to enable fielding in country by requested timelines. Integration for the IOT&E systems will complete in FY2024. These IOT&E systems will field in support of IOT&E testing scheduled to begin in 1QFY2025.

Electronic Attack/Electronic Protect (EA/EP) addresses the electronic countermeasures (ECM) gap for Sentinel A3. This effort continues through the life of the radar, addressing both changing threats and electronic counter measure gaps.

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

	FY 2022	FY 2023	FY 2024
Title: Product Development	117.650	53.380	89.383
Description: Funding is provided for the following Product Development efforts:			
FY 2023 Plans: Will continue to build and integration of five (5) Sentinel A4 User Operational Evaluation Systems (UOES) to serve as soldier touch points for feedback prior to initiating Low Rate Initial Production (LRIP). Will provide UOES assets to support test events for emerging requirements. Will initiate build of five (5) Initial Operational Test and Evaluation (IOT&E) assets for delivery in support of system IOT&E. Will continue to perform technical assessments, concept studies, cost reduction, risk reduction, threat analysis, and required documentation for Sentinel A3.			
FY 2024 Plans: Will continue build and integration of five (5) Initial Operational Test and Evaluation (IOT&E) assets for delivery in support of system IOT&E. Will develop additional survivability enhancements (AMD-I) for inclusion into Sentinel A4. Will enhance Sentinel A4 to support Defense of Guam mission. Will continue to perform technical assessments, concept studies, cost reduction, risk reduction, threat analysis, and required documentation for Sentinel A3. See R-3 for details.			
FY 2023 to FY 2024 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604820A / Radar Development				Project (Number/Name) E10 / Sentinel				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2022	FY 2023	FY 2024
FY 2024 increase due to development of system survivability enhancements (AMD-I) for inclusion into Sentinel A4 and to enhance Sentinel A4 to support Defense of Guam mission.												
Title: Test & Evaluation										7.182	15.278	5.561
Description: Funding is provided for the following Test and Evaluation efforts:												
FY 2023 Plans: Supports completion of Developmental Test for Sentinel A4 EMD assets. Supports Sentinel A4 Limited User Test (LUT) and Operational Test Agency (OTA) Milestone Assessment Report (OMAR). Will conduct software qualification test and hardware verification testing, field testing against representative targets. Prepares logistics products and required documentation for materiel release of software and hardware upgrades for Sentinel A3.												
FY 2024 Plans: Supports soldier touchpoint for Sentinel A4 User Operational Evaluation Systems (UOES) to gain soldier feedback. Initiates target and range support for Sentinel A4 Initial Operational Test and Evaluation (IOT&E). Provides support for System of System integration test events. Will conduct software qualification test and hardware verification testing, field testing against representative targets. Prepares logistics products and required documentation for materiel release of software and hardware upgrades for Sentinel A3 and Sentinel A4.												
FY 2023 to FY 2024 Increase/Decrease Statement: Decrease from FY 2023 to FY 2024 due to completion of Developmental Testing and Limited User Testing (LUT) for Sentinel A4 in FY 2023.												
Title: SBIR/STTR										-	2.601	-
Description: Funding transferred in accordance with Title 15 USC §638.												
FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638.												
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638.												
Accomplishments/Planned Programs Subtotals										124.832	71.259	94.944
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost	
• WK5057: Sentinel Mods	100.642	166.736	161.886	-	161.886	233.368	501.923	504.229	548.401	Continuing	Continuing	

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023	
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604820A / Radar Development			Project (Number/Name) E10 / Sentinel			

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

Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• EX2: Lower Tier Air Missile Defense (LTAMD) Capability	408.766	380.147	816.663	-	816.663	118.939	122.544	89.261	90.257	0.000	2,026.577
• FM3: Future Interceptor	6.643	8.179	8.040	-	8.040	8.042	8.052	8.138	8.229	0.000	55.323
• C53101: MSE Missile	1,333.148	1,037.093	1,212.832	-	1,212.832	961.192	973.464	985.250	985.854	Continuing	Continuing
• EY7: IFPC Increment 2 - Block 1	175.604	131.093	196.248	-	196.248	154.275	166.672	113.841	135.117	0.000	1,072.850
• C62002: IFPC INC 2- I BLOCK 1 SYSTEM	19.053	18.924	313.189	-	313.189	697.307	1,002.324	1,023.636	985.973	0.000	4,060.406
• FI4: Maneuver - Short Range Air Defense (M-SHORAD)	37.939	10.363	10.188	-	10.188	10.190	15.235	10.209	10.323	0.000	104.447
• C14300: M-SHORAD - Procurement	332.984	135.747	400.697	-	400.697	-	-	-	-	Continuing	Continuing
• S40: Army Integrated Air and Missile Defense	154.257	263.545	254.163	-	254.163	355.723	214.394	135.637	166.652	0.000	1,544.371
• BZ5075: IAMD Battle Command System	399.800	438.967	412.556	-	412.556	509.654	572.362	658.046	442.781	Continuing	Continuing
• 0604741A: Air Defense Command, Control and Intelligence - Eng Dev	58.633	55.541	74.738	-	74.738	70.022	64.141	70.657	71.628	Continuing	Continuing
• AD5070: AIR & MSL Defense Planning & Control Sys	67.193	72.619	68.892	-	68.892	67.495	-	-	-	0.000	276.199

Remarks

These programs are an integral part of the Army Integrated Air and Missile Defense (AIAMD) architecture.

D. Acquisition Strategy

Sentinel A3 and its predecessors were procured from Raytheon as a non-developmental item. The U.S. Government does not have adequate data rights for the Sentinel A3 and its predecessors; therefore no other contractor has the technical ability to modify the Sentinel A3 radar or Sentinel A3 software. The modifications for Sentinel A3 fall into these categories: Electronic Attack/Electronic Protect; Signal Data Processor; North Finding Module; Medium Bandwidth; Resiliency and Software Assurance Modification (RSAM); Counter Rocket Artillery and Mortar (C-RAM), Low Slow Small, Unmanned Aircraft Systems, Cruise Missiles; and Mode S. Electronic Attack/Electronic Protect will be an ongoing effort to ensure Sentinel A3 remains relevant in the field until A4 is fielded.

For the Sentinel A4 modification, Lockheed Martin was competitively awarded a Fixed Price Incentive Firm (FPIF) contract to develop a modified Sentinel with a new Active Electronically Scanned Array (AESA) antenna. The contract award to Lockheed Martin includes EMD with priced options for LRIP. Fifteen RDTE funded assets are on contract with Lockheed Martin including five (5) EMD prototypes, five (5) UOES assets to support System of System Integration Testing and five (5) IOT&E assets.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604820A / Radar Development	Project (Number/Name) E10 / Sentinel
<p>Sentinel is a component of an integrated fires development effort that includes survivability, resiliency, and effectiveness improvements against advanced threats from near-peer adversaries. This effort includes integration with an evolving common fires mission command, common development tools and processes, and annual test and evaluation to provide data to support program assessments and progress toward closure of performance gaps.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604820A / Radar Development				Project (Number/Name) E10 / Sentinel					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Management Support	Various	Various : Multiple	17.101	4.679	Nov 2021	4.768	Nov 2022	4.858	Nov 2023	-		4.858	Continuing	Continuing	Continuing
SBIR/STTR	TBD	N/A : N/A	-	-		2.601		-		-		-	0.000	2.601	-
Subtotal			17.101	4.679		7.369		4.858		-		4.858	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Electronic Attack/ Electronic Protect	Various	Raytheon & Various : Fullerton, CA / Various	31.172	5.327	Jan 2022	4.000	Jan 2023	3.839	Jan 2024	-		3.839	Continuing	Continuing	-
Active Electronically Scanned Array (A4)	C/FPIF	Lockheed Martin & Search, Track, Acquire, Radiate, Eliminate (PM STARE) : Syracuse, NY and Huntsville, AL	204.839	100.944	Jan 2022	44.612	Jan 2023	54.108	Jan 2024	-		54.108	Continuing	Continuing	-
Anti-Tamper (A4)	SS/ Various	Lockheed Martin & Search, Track, Acquire, Radiate, Eliminate (PM STARE) : Syracuse, NY and Huntsville, AL	-	6.700	Jan 2022	-		-		-		-	0.000	6.700	-
System survivability Enhancements (AMD-I) (A4)	SS/ Various	Lockheed Martin & Search, Track, Acquire, Radiate, Eliminate (PM STARE) : Syracuse, NY and Huntsville, AL	-	-		-		12.064	Jan 2024	-		12.064	Continuing	Continuing	-
Defense of Guam Development (A4)	C/FPIF	Lockheed Martin & Search, Track, Acquire, Radiate,	-	-		-		14.514	Jan 2024	-		14.514	0.000	14.514	-

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604820A / Radar Development				Project (Number/Name) E10 / Sentinel					
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
		Eliminate (PM STARE) : Syracuse, NY and Huntsville, AL													
Subtotal			236.011	112.971		48.612		84.525		-		84.525	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Electronic Attack/ Electronic Protect	Various	Raytheon & Various : Fullerton, CA / Various	6.540	0.840	Jan 2022	0.225	Jan 2023	0.229	Jan 2024	-		0.229	Continuing	Continuing	-
Active Electronically Scanned Array (A4)	C/FPIF	Lockheed Martin & Search, Track, Acquire, Radiate, Eliminate (PM STARE : Syracuse, NY and Huntsville, AL	-	6.342	Jan 2022	15.053	Jan 2023	5.332	Jan 2024	-		5.332	Continuing	Continuing	-
Subtotal			6.540	7.182		15.278		5.561		-		5.561	Continuing	Continuing	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			259.652	124.832		71.259		94.944		-		94.944	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army																Date: March 2023			
Appropriation/Budget Activity 2040 / 5								R-1 Program Element (Number/Name) PE 0604820A / Radar Development								Project (Number/Name) E10 / Sentinel			

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Sentinel A3																												
Electronic Attack/Electronic Protect (EA/EP)																												
EA/EP																												
Active Electronically Scanned Array (AESA) (A4)																												
Engineering Manufacturing and Development Prototype Build																												
EMD Prototype Build and Integration																												
Contractor Verification Testing																												
CVT																												
Developmental Test																												
Developmental Test																												
Defense of Guam Development																												
Combatant Commands NRE																												
Limited User Testing																												
LUT																												
Operational Test Agency (OTA) Milestone Assessment Report																												
OMAR																												
Milestone C																												
MS C																												
User Operational Evaluation System (UOES) Build and Integration																												
UOES Build and Integration																												
Initial Operational Test and Evaluation System Build and Integration																												
IOT&E Asset Build and Integration																												
Soldier touchpoint and feedback and test																												
UOES system of system integration																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army										Date: March 2023			
Appropriation/Budget Activity					R-1 Program Element (Number/Name)					Project (Number/Name)			
2040 / 5					PE 0604820A / Radar Development					E10 / Sentinel			

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
System Survivability Enhancements (AMD-I)									[Redacted]				[Redacted]															
									AMD-I																			
Range and Target Support									[Redacted]				Range and Test Support															
Initial Operational Test and Evaluation (IOT&E)													IOT&E															
Pre-Planned Product Enhancements													[Redacted]				Product Enhancements											

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604820A / <i>Radar Development</i>	Project (Number/Name) E10 / <i>Sentinel</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Sentinel A3	2	2019	4	2030
Electronic Attack/Electronic Protect (EA/EP)	2	2015	4	2030
Active Electronically Scanned Array (AESA) (A4)	4	2019	4	2033
Milestone B	4	2019	4	2019
Engineering Manufacturing and Development Prototype Build and Integration	2	2020	2	2022
Preliminary Design Review	2	2020	2	2020
Critical Design Review	2	2021	2	2021
Contractor Verification Testing	4	2021	2	2022
Developmental Test	2	2022	2	2023
Defense of Guam Development	2	2023	2	2026
Limited User Testing	3	2023	3	2023
Operational Test Agency (OTA) Milestone Assessment Report	3	2023	3	2023
Milestone C	3	2023	3	2023
User Operational Evaluation System (UOES) Build and Integration	1	2022	2	2023
Initial Operational Test and Evaluation System Build and Integration	3	2023	4	2024
Soldier touchpoint and feedback and test	1	2024	3	2024
System Survivability Enhancements (AMD-I)	2	2024	3	2026
Range and Target Support	4	2024	4	2024
Initial Operational Test and Evaluation (IOT&E)	1	2025	2	2025
Pre-Planned Product Enhancements	2	2025	4	2030

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army **Date:** March 2023

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Business System (GFEBS)							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	15.395	10.402	2.965	-	2.965	2.002	2.044	2.088	2.131	0.000	37.027
DV6: General Fund Enterprise Business System	-	4.862	2.163	-	-	-	-	-	-	-	0.000	7.025
GF5: General Fund Enterprise Business System	-	10.533	8.239	2.965	-	2.965	2.002	2.044	2.088	2.131	0.000	30.002

A. Mission Description and Budget Item Justification

This Program Element (PE) supports the General Fund Enterprise Business System-Sensitive Activities (GFEBS-SA): GFEBS-SA is a National Security System (NSS) leveraging the GFEBS base system as the Army's core financial management system, certified by the Chief Financial Officer Council, to provide the same financial capabilities of GFEBS but on SIPR, with additional security features to protect national security information. GFEBS-SA was implemented to protect sensitive information and enable clean auditability, allowing the Army to process sensitive and classified financial transactions that cannot be processed in the fully-fielded GFEBS base system without compromising classified information, missions, or endangering soldiers. GFEBS-SA was developed and deployed as an essential financial program designed to enable the auditability that is needed to comply with the Chief Financial Officers (CFO) Act, the Federal Financial Management Improvement Act (FFMIA), and prevent compromise of data that could cause grave harm to U.S. forces. GFEBS-SA was fully deployed in 2020 to 3,000 users across 100 locations worldwide and processes Secret Collateral and below information. Services are capable of being upgraded throughout the life of the program in order to incorporate advances in best business practices and technology, and will modify capability to maintain a synchronized software baseline with the GFEBS base system to maintain efficiencies in capability enhancements, training documentation, and sustainment support. In FY 2021, GFEBS-SA received approval to proceed with entry into capability support (sustainment) and application capability support transitioned to Army Shared Services Center (ASSC). The FY 2022 RDT&E funded system upgrades and enhancements to ensure synchronization between the GFEBS-SA system and the GFEBS base system in order to meet mandatory data exchange and interface requirements. FY 2023 RDT&E funding supports continuous enhancements to the GFEBS-SA SIPR capabilities to ensure appropriate security measures are in place to protect sensitive financial data. DV6 has no RDT&E FY 2024 funding request.

General Fund Enterprise Business System (GFEBS): GFEBS is the Army's core financial management system for administering its General Fund. Full Deployment was reached in 2012 and the system is currently in the Capability Support (sustainment) phase of the Business Capability Acquisition Cycle, focused on modernization, cyber security, and system enhancements while also conducting capability enhancements to meet policy and deliver accurate Army financial information. GFEBS was implemented to fulfill the needs and enable the Army to comply with the Federal Financial Management Improvement Act, deployed to over 35,000 users across 200 locations worldwide. GFEBS was developed using a commercial off-the-shelf Enterprise Resource Planning system that is certified by the Chief, Financial Officer Council and provides six core financial functions (United States General Ledger (USGL), Cost Management, Funds Control, Payable Management, Real Property, Receivable Management and Reports).

GFEBS RDT&E funds capability enhancements designed to meet audit readiness standards and system changes as prioritized by the functional sponsor and user community through the Tactical Financial Information Council, a Senior Executive Service/General Officer-level board. The RDT&E funding will support the increase

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army				Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0604822A I General Fund Enterprise Business System (GFEBS)				
in mission performance and improvement of automated system processes and continues to support modernization efforts aligned with the Original Equipment Manufacturer's Systems Applications and Products (SAP) next generation capability. Activities include code de-customization, data enablement, and improved automated data access to prevent end of support for the current database and platform. Funds will also support acquisition trades and market research on alternatives for SAP based finance/logistics consolidation to evaluate potential efficiencies by reducing platforms and licenses. The FY 2024 RDT&E will continue to support enhancements, for example, system upgrade in support interfaces to improve system performance, accountability, and auditability efforts. These funds will be used to meet OSD and Army data exchange, and interface requirements. The additional capability will support both compliancy to meet audit requirements and updated interfaces to replace sun-setting systems.						
GFEBS must take critical steps towards integration and implementation of the next generation of Enterprise Business Systems capabilities. This effort will address the obsolescence of existing SAP Enterprise Resource Planning (ERP) real property and financial management platforms that the vendor plans to sunset around FY 2028. GFEBS modernization work sets the conditions for development of a converged, post-modern Defense Business System that streamlines and integrates the Army's core business functions. The effort on the individual programs must consider benefits of consolidation.						
GFEBS must identify redundant processes as candidates for business process re-engineering. Funding will support the 1) market research of Industry best practices, 2) Initiation of an Army Enterprise Development Environment to enable prototyping which reduces risk by aiding the requirements development. This environment includes: Cloud-hosted infrastructure, applications, and programs and tools, 3) government Program Management and Systems Engineering and Technical Assistance (SETA) contractors needed to plan for and manage the initiation of the post-modern system implementation effort.						
B. Program Change Summary (\$ in Millions)		FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget		15.979	10.402	6.380	-	6.380
Current President's Budget		15.395	10.402	2.965	-	2.965
Total Adjustments		-0.584	0.000	-3.415	-	-3.415
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-0.584	-			
• SBIR/STTR Transfer		-	-			
• Adjustments to Budget Years		-	-	-3.415	-	-3.415
Change Summary Explanation						
FY 2024 funding decrease due to reduced functional planned RDT&E enhancements.						

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Bu siness System (GFEBS)				Project (Number/Name) DV6 / General Fund Enterprise Business System			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
DV6: General Fund Enterprise Business System	-	4.862	2.163	-	-	-	-	-	-	-	0.000	7.025
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

DV6 - General Fund Enterprise Business System-Sensitive Activities (GFEBS-SA): GFEBS-SA is a National Security System (NSS) leveraging the GFEBS base system as the Army's core financial management system, certified by the Chief Financial Officer Council, to provide the same financial capabilities of GFEBS but on SIPR, with additional security features to protect national security information. GFEBS-SA was implemented to protect sensitive information and enable clean auditability, allowing the Army to process sensitive and classified financial transactions that cannot be processed in the fully-fielded GFEBS base system without compromising classified information, missions, or endangering soldiers. GFEBS-SA was developed and deployed as an essential financial program designed to enable the auditability that is needed to comply with the Chief Financial Officers (CFO) Act, the Federal Financial Management Improvement Act (FFMIA), and prevent compromise of data that could cause grave harm to U.S. forces. GFEBS-SA was fully deployed in 2020 to 3,000 users across 100 locations worldwide and processes Secret Collateral and below information. Services are capable of being upgraded throughout the life of the program in order to incorporate advances in best business practices and technology, and will modify capability to maintain a synchronized software baseline with the GFEBS base system to maintain efficiencies in capability enhancements, training documentation, and sustainment support. In FY 2021, GFEBS-SA received approval to proceed with entry into capability support (sustainment) and application capability support transitioned to Army Shared Services Center (ASSC). FY 2022 RDT&E funds supported system upgrades and enhancements, which re-synchronized the GFEBS-SA baseline with the GFEBS base system to account for any capability upgrades that were made to the base system while GFEBS-SA was in development. GFEBS and GFEBS-SA must remain synchronized to reduce sustainment costs through shared development across two Enterprise Resource Planning (ERP) baselines. FY 2023 RDT&E funds will be utilized to conduct system enhancements to meet OSD and Army data exchange and interface requirements. The additional capability will support both compliancy to meet audit requirements and updated interfaces to replace sun-setting systems. DV6 has no RDT&E FY 2024 funding request.

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

	FY 2022	FY 2023	FY 2024
Title: Software Development	4.862	2.084	-
Description: Software development includes all RDT&E activities related to the development of additional capabilities added into GFEBS main that also require functionality in GFEBS-SA. This includes the systems engineering management, planning, and blueprinting as well as the system integrator putting hands on keyboards to integrate the GFEBS solution into the Secret (SIPR) environment to include developing the required interfaces to allow GFEBS-SA to interact with partner systems; and the hardware and software tools necessary to facilitate development. After Full Deployment in FY 2021, RDT&E funding is required to allow the GFEBS-SA system capability to remain synchronized with the base GFEBS system. GFEBS undertakes necessary efforts to integrate, implement, and build the next generation of Enterprise Business Systems capabilities.			
FY 2023 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Business System (GFEBS)	Project (Number/Name) DV6 / General Fund Enterprise Business System	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
In FY 2023, RDT&E funding will ensure continuing synchronization of the GFEBS-SA system and GFEBS base system, which reduces sustainment costs through shared development across two Enterprise Resource Planning (ERP) baselines. Additionally, funds continue to support efforts to integrate sensitive activity capability across the Enterprise.			
FY 2023 to FY 2024 Increase/Decrease Statement: DV6 has no FY 2024 funding request			
Title: FY 2023 SBIR/STTR Transfer		-	0.079
Description: Funding transferred in accordance with Title 15 USC 638.			-
FY 2023 Plans: Funding transferred in accordance with Title 15 USC 638.			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC 638.			
Accomplishments/Planned Programs Subtotals		4.862	2.163
C. Other Program Funding Summary (\$ in Millions) N/A			
Remarks GFEBS-SA was fully deployed in FY 2021; therefore, there are no procurement dollars budgeted in the GFEBS-SA line for FY 2021 and beyond. OMA - FY 2022 and beyond OMA dollars include funding for both GFEBS and GFEBS-SA programs. OMA-funded support includes cloud hosting, software/hardware maintenance, capability support, and capability enhancements.			
D. Acquisition Strategy Software was developed through a single build to achieve full capability. GFEBS-SA consists of a single software release delivered in a limited deployment to the Initial Operational Test and Evaluation (IOT&E) unit, followed by a full deployment to all other users upon successful completion of IOT&E. In FY 2021, GFEBS-SA achieved full deployment and later received approval to proceed with entry into capability support (sustainment). The program will require modernization enhancements while in capability support. Capability Support functions of all prioritized system enhancements for GFEBS-SA system transitioned to Army Shared Services Center in FY 2021.			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Bu siness System (GFEBS)						Project (Number/Name) DV6 / General Fund Enterprise Business System			
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
FY 2023 SBIR/STTR Transfer	TBD	Various : Various	-	-		0.079		-		-		-	0.000	0.079	-
Subtotal			-	-		0.079		-		-		-	0.000	0.079	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Capability Enhancements	C/Various	Accenture Federal LLC : Alexandria, VA	-	4.862	Oct 2021	2.084	May 2023	-		-		-	0.000	6.946	-
Subtotal			-	4.862		2.084		-		-		-	0.000	6.946	N/A
Remarks															
The current contract is a hybrid of FFP, CPFF, and CR CLINs for system development, landscape configuration, test and evaluation, solution delivery, and certification and accreditation. In FY 2022 GFEBS-SA system enhancement work utilized Army Shared Service Center Unified contract. Cost to Complete assumes a service life through FY 2030. Some of this support will take place on a follow-on contract. Unified contract Base Period: 1 May 2021 through 30 April 2022; Option Period 1: 1 May 2022 though 30 April 2023.															
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	4.862		2.163		-		-		-	0.000	7.025	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Bu siness System (GFEBS)		Project (Number/Name) DV6 / General Fund Enterprise Business System	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Capability Support																												
Capability Support (OMA)																												
Continuous Process & Product improvement																												
Continuous Process & Product Improvements (RDTE)																												
Re-synchronization w/ GFEBS Baseline																												
Initial Re-synchronization w/ GFEBS Baseline (RDTE)																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Business System (GFEBS)	Project (Number/Name) DV6 / General Fund Enterprise Business System	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Development	1	2019	4	2019
ATP - Solution Development	4	2019	4	2019
Current Contract	1	2020	3	2021
Limited Deployment ATP	3	2020	3	2020
Deployment	3	2020	1	2021
Operational Testing	4	2020	4	2020
Full Deployment ATP	4	2020	4	2020
Full Deployment	1	2021	1	2021
Capability Support ATP	2	2021	2	2021
Transition to Army Shared Services Center (ASSC)	4	2021	4	2021
Capability Support	3	2021	4	2028
Continuous Process & Product improvement	3	2021	4	2023
Re-synchronization w/ GFEBS Baseline	1	2022	3	2023

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Bu siness System (GFEBS)				Project (Number/Name) GF5 / General Fund Enterprise Business System			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
GF5: General Fund Enterprise Business System	-	10.533	8.239	2.965	-	2.965	2.002	2.044	2.088	2.131	0.000	30.002
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

GF5 - General Fund Enterprise Business System (GFEBS): GFEBS is the Army's core financial management system for administering its General Fund. Full Deployment was reached in 2012 and the system is currently in the Capability Support (sustainment) phase of the Business Capability Acquisition Cycle, focused on modernization, cyber security, and system enhancements while also conducting capability enhancements to meet policy and deliver a more accurate picture of Army financial awareness. GFEBS was implemented to fulfill the needs and enable the Army to comply with the Federal Financial Management Improvement Act, it is utilized by over 35,000 users across 200 locations worldwide. GFEBS was developed using a commercial off-the-shelf Enterprise Resource Planning system that is certified by the Chief, Financial Officer Council and provides six core financial functions (United States General Ledger (USGL), Cost Management, Funds Control, Payable Management, Real Property, Receivable Management and Reports).

GFEBS RDT&E funding in FY 2024 will continue to support the completion of the audit-related system enhancements which will give the Army an auditable financial system designed to meet audit readiness standards as outlined by the United States Government Accountability Office, as well as the continuation of system changes as prioritized by the functional sponsor and user community through the Tactical Financial Information Council, a Senior Executive Service/General Officer-level board. The FY 2024 funding will continue to support increases in mission performance and improvement of automatized system processes. Continue efforts to support modernization efforts aligned with the Original Equipment Manufacturer's Systems Applications and Products (SAP) next generation capability, activities include code de-customization, data enablement, and improved automated data access to prevent end of support for the current database and platform. Funds will also support acquisition trades and market research on alternatives for SAP based finance/logistics consolidation to evaluate potential efficiencies by reducing platforms and licenses.

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

	FY 2022	FY 2023	FY 2024
Title: Capability Enhancement	10.533	7.938	2.965
Description: Capability enhancements provide changes to the system that are needed to update the infrastructure to meet system requirements and best practices, and to support evolving statutory and regulatory requirements. The capability enhancement initiatives are needed to increase the GFEBS capability and performance to maintain compliance with Federal Financial Management Improvement Act (FFMIA), Business Enterprise Agency (BEA), Standard Financial Information Structure (SFIS) requirements, and Yellow Book auditability. These requirements are established and prioritized through a General Officer (GO)/Senior Executive Service (SES)-level Tactical Financial Information Council and Functional Governance Board.			
FY 2023 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army								Date: March 2023			
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Business System (GFEBS)				Project (Number/Name) GF5 / General Fund Enterprise Business System			
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2022	FY 2023	FY 2024	
The RDT&E funds requested in FY 2023 will continue to support the completion of the audit-related system enhancements which will provide the Army an auditable financial system designed to meet audit readiness standards as outlined by the United States Government Accountability Office. The FY 2023 RDT&E will support enhancements, for example, SAP Enhancement Package 8 Upgrades and G-Invoicing development to improve system performance, accountability, and auditability efforts. The funds will also continue to support the integration and implementation of the next generation of Enterprise Business Systems capabilities.											
FY 2024 Plans: The RDT&E funds requested in FY 2024 will continue to support the completion of the audit-related system enhancements which will provide the Army an auditable financial system designed to meet audit readiness standards as outlined by the United States Government Accountability Office. The FY 2024 RDT&E will support enhancements, for example, system upgrade in support interfaces to improve system performance, accountability, and auditability efforts. The funds will also continue to support the integration and implementation of the next generation of Enterprise Business Systems capabilities.											
FY 2023 to FY 2024 Increase/Decrease Statement: Funding decreased in FY 2024 due to reduced functional planned RDT&E enhancements.											
Title: FY 2023 SBIR/STTR Transfer								-	0.301	-	
Description: Funding transferred in accordance with Title 15 USC 638.											
FY 2023 Plans: Funding transferred in accordance with Title 15 USC 638.											
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC 638.											
Accomplishments/Planned Programs Subtotals								10.533	8.239	2.965	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• BE4168: General Fund Enterprise Business System	1.452	0.097	0.000	-	0.000	-	-	-	-	0.000	1.549
• OMA - GFEB APE 438001000 / 5T0: GFEBS OMA	83.079	58.069	53.629	-	53.629	51.218	50.909	51.569	51.754	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Business System (GFEBS)	Project (Number/Name) GF5 / General Fund Enterprise Business System	

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

<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u> <u>Base</u>	<u>FY 2024</u> <u>OCO</u>	<u>FY 2024</u> <u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
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Remarks

OPA - FY 2023 Procurement dollars support new software upgrades to bring GFEBS reporting and analytics in-line with processing performance thresholds established in the GFEBS Authority to Proceed (ATP) and to modernize the system in order to remain current with new technology standards.

OMA - FY 2022 and beyond OMA dollars include funding for both GFEBS and GFEBS-SA programs. OMA-funded support includes cloud hosting, software/hardware maintenance, capability support, and capability enhancements.

D. Acquisition Strategy

GFEBS is currently in the Capability Support (sustainment) phase as specified in DoDI 5000.75. On 15 January 2018, the responsibility for system support of the GFEBS system transitioned from the original developer contract to a contract created to focus more on sustainment support and cost control. The current sustainment contract provides specific contracting methodologies to track all capability support functions as well as all the system enhancement requirements as set forth by the user community through the Tactical Financial Information Council; a Senior Executive Service/General Officer-level board that prioritizes user needs. Many of these enhancements require RDT&E funding as determined through a set of established business rules.

Capability Support functions of all prioritized system enhancements for GFEBS transitioned to Army Shared Services Center in 1Q FY 2022.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Bu siness System (GFEBS)						Project (Number/Name) GF5 / General Fund Enterprise Business System			
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
FY 2023 SBIR/STTR Transfer	TBD	Various : Various	-	-		0.301		-		-		-	0.000	0.301	-
Subtotal			-	-		0.301		-		-		-	0.000	0.301	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Capability Enhancements	C/Various	Accenture Federal LLC : Arlington, VA 22203	-	10.533	Oct 2021	7.938	May 2023	2.965	May 2024	-		2.965	Continuing	Continuing	-
Subtotal			-	10.533		7.938		2.965		-		2.965	Continuing	Continuing	N/A
Remarks															
Beginning in FY 2022 GFEBS system enhancement work will utilize Army Shared Serviced Center Unified contract.															
Unified contract Base Period: 1 May 2021 through 30 April 2022; Option Period 1: 1 May 2022 through 30 April 2023.															
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	10.533		8.239		2.965		-		2.965	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army Date: March 2023

Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Business System (GFEBS)	Project (Number/Name) GF5 / General Fund Enterprise Business System
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Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Sustainment Contract w/ Capability Enhancement Task Order...																												
Capability Support transitioned to ASSC																												
Army Shared Services Sustainment w/ Capability Enhancement...																												
System Enhancements & Modernization FY22																												
System Enhancements & Modernization FY23																												
System Enhancements & Modernization FY24																												
System Enhancements & Modernization FY25																												
System Enhancements & Modernization FY26																												
System Enhancements & Modernization FY27																												
System Enhancements & Modernization FY28																												

Note

System enhancements include prioritized capabilities based on functional needs in areas such as Audit Enablement and Compliance, Cash Accountability, Improved Funds Balance with Treasury, Cost of Army Operations, and Financial Reporting and Analytics.

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Business System (GFEBS)	Project (Number/Name) GF5 / General Fund Enterprise Business System	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Map/Blueprint/Build Release 1.1	4	2005	3	2006
MS B1	1	2008	1	2008
Realization - Release 1.2	4	2006	1	2009
IOC	3	2009	3	2009
Release 1.3 - Replace STANFINS	1	2008	1	2011
Full Deployment Decision Review	3	2009	3	2009
Release 1.4: Replace SOMARDS	4	2008	1	2011
Full Deployment Decision Review 2	1	2010	1	2010
Hardware Fielding	1	2009	1	2011
Full Deployment	4	2012	4	2012
Sustainment Contract w/ Capability Enhancement Task Order (Current)	2	2018	2	2022
Capability Support transitioned to ASSC	2	2022	2	2022
Army Shared Services Sustainment w/ Capability Enhancement Option (Follow-on)	2	2022	4	2028
Capability Enhancements FY18	1	2018	4	2018
System Enhancements FY19	1	2019	4	2019
System Enhancements FY20	1	2020	4	2020
System Enhancements & Modernization FY21	1	2021	4	2021
System Enhancements & Modernization FY22	1	2022	4	2022
System Enhancements & Modernization FY23	1	2023	4	2023
System Enhancements & Modernization FY24	1	2024	4	2024
System Enhancements & Modernization FY25	1	2025	4	2025
System Enhancements & Modernization FY26	1	2026	4	2026

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604822A / General Fund Enterprise Bu siness System (GFEBS)		Project (Number/Name) GF5 / General Fund Enterprise Business System	
	Start		End	
Events	Quarter	Year	Quarter	Year
System Enhancements & Modernization FY27	1	2027	4	2027
System Enhancements & Modernization FY28	1	2028	4	2028

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army											Date: March 2023	
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	6.219	19.408	11.333	-	11.333	7.338	9.862	14.174	10.206	Continuing	Continuing
EY2: Integrated Soldier Power Data System - Core	-	4.165	12.559	4.598	-	4.598	4.699	4.705	4.755	4.808	Continuing	Continuing
EY4: Universal Battery Charger	-	0.951	1.022	1.004	-	1.004	1.005	1.005	1.017	1.027	Continuing	Continuing
FK4: Soldier Borne Sensor (SBS)	-	1.103	1.682	1.656	-	1.656	1.634	4.152	8.402	4.371	0.000	23.000
S65: Platoon Power Generator	-	-	4.145	4.075	-	4.075	-	-	-	-	0.000	8.220

A. Mission Description and Budget Item Justification

A portion of this funding line is a key enabler of the Army Modernization Priorities in support of the Small Unit Power (SUP) program.

This program element contains four active projects:

Project EY2 - Integrated Soldier Power Data System - Core: Supports development of the Integrated Soldier Power and Data Hub, Conformal Wearable Battery (CWB), Soldier and Squad Power Generation, platform power scavenging on the move, and Squad Power Manager (SPM). These capabilities fill the power and energy requirements for critical Integrated Tactical Network Soldier worn systems to include tactical leader radios, Nett Warrior, and the Integrated Visual Augmentation System (IVAS). These capabilities are critical enablers in closing the power and energy gaps created by the increase in mission essential, Soldier portable power consumers, GPS systems, weapon sensors, radios, night vision systems, and other devices.

Project EY4 - Universal Battery Charger (UBC): Supports development of the UBC and Bulk Charger (BC). These capabilities fill the power and energy requirements for critical Integrated Tactical Network Soldier worn systems to include tactical leader radios, Nett Warrior, and the Integrated Visual Augmentation System (IVAS). These capabilities are critical enablers in closing the power and energy gaps created by the increase in mission essential, Soldier portable power consumers, GPS systems, weapon sensors, radios, night vision systems and other devices by providing multiple charging solutions capable of providing power to handheld communication devices and military issued batteries.

Project FK4 - Soldier Borne Sensor (SBS): The SBS is a small unmanned aerial vehicle. The SBS provides a near term solution to three Army War-fighting Challenges at the Infantry Squad level: develop situational understanding, conduct air-ground reconnaissance, and conduct joint combined arms maneuver. The system is simple to deploy and use to support the squad leader's decision-making process. The system allows Soldiers to obtain local situational awareness and understanding of their immediate surroundings while remaining in covered or concealed positions. The SBS program will be procured through multiple phases. We will use the funding in this project to develop, integrate, and qualify additional capabilities for each phase. Funding in this project aligns with the Army's priorities in support of the National Defense Strategy.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army				Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0604827A I Soldier Systems - Warrior Dem/Val				
S65 - Soldier Power: Soldier Power enables dismounted Soldiers to efficiently execute missions for longer durations by reducing the logistical burden associated with fuel and primary (disposable) batteries. Platoon Power Generation (PPG) - PM E2S2: This project supports the demonstration and development of a PPG. The Small Unit Power (SUP) PPG will provide small units with sufficient portable power to sustain Modified Table of Organizational Equipment (MTOE) unit power demand in support of 48 to 72 hour missions. It will be used for charging batteries and powering various types of Army communications and electronics devices.						
B. Program Change Summary (\$ in Millions)		FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget		6.454	11.425	11.573	-	11.573
Current President's Budget		6.219	19.408	11.333	-	11.333
Total Adjustments		-0.235	7.983	-0.240	-	-0.240
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	8.000			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-0.235	-			
• SBIR/STTR Transfer		-	-			
• Adjustments to Budget Years		-	-	-0.240	-	-0.240
• FFRDC Transfer		-	-0.017	-	-	-
Congressional Add Details (\$ in Millions, and Includes General Reductions)						
Project: EY2: Integrated Soldier Power Data System - Core						
Congressional Add: Conformal wearable battery						
Congressional Add: Wearable fuel cell development						
Congressional Add Subtotals for Project: EY2						
Congressional Add Totals for all Projects						
Change Summary Explanation						
Decreased funding to support higher Army priorities.						

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val				Project (Number/Name) EY2 / Integrated Soldier Power Data System - Core			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
EY2: Integrated Soldier Power Data System - Core	-	4.165	12.559	4.598	-	4.598	4.699	4.705	4.755	4.808	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Integrated Soldier Power Data System - Core (ISPDS-C) includes power and data managing/distribution devices, cutting-edge energy storage solutions, and power scavenging devices. These capabilities fill the power and energy gaps created by the increase in mission essential, Soldier portable power consumers, such as heads up displays, situational awareness displays, global positioning systems, weapon sensors, radios, night vision systems, and other devices. This project line develops power sources and power management solutions for the individual Soldier and squad for use in all operating environments. ISPDS-C systems will enable dismounted Soldiers and squads to execute their missions more efficiently, independently, for longer durations and with fewer battery resupplies while reducing the logistical and physical burden associated with moving fuel and batteries. This project also develops and integrates vehicular on-the-move charging.

Justification: FY24 funding develops and evaluates capabilities to fill the power and energy requirements for critical Integrated Tactical Network Soldier worn systems to include tactical radios, assured position navigation and timing, Next Generation Squad Weapon, Nett Warrior, Enhanced Night Vision Goggle, and the Integrated Visual Augmentation System (IVAS).

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

	FY 2022	FY 2023	FY 2024
Title: Test and Evaluation	0.693	0.806	0.943
Description: Test and validate power and energy solutions from new battery chemistries, fuel cells, and scavenging devices and integrating the solutions using common interfaces with the Power and Data Hub and Squad Power Manager.			
FY 2023 Plans: Continue to develop and test new power distribution technology, characterize Soldier peripherals, improve current power source chemistries, and improve protective materials and integrate into functional battery packs and pouches.			
FY 2024 Plans: Continue to develop and test new power distribution technology, characterize Soldier peripherals, improve current power source chemistries, and improve protective materials and integrate into functional battery packs and pouches.			
FY 2023 to FY 2024 Increase/Decrease Statement: Silicone anode battery testing and increased fuel cell testing expected in FY 2024.			
Title: System Engineering & Program Management	0.203	0.826	0.601

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val	Project (Number/Name) EY2 / Integrated Soldier Power Data System - Core		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
<p>Description: Conduct system engineering and project management for ISDPS-C efforts and power characterization efforts.</p> <p>FY 2023 Plans: Continue to conduct system engineering, project management, and additional R&D center power characterization studies for dismounted Soldier equipment and ISPDS-C efforts.</p> <p>FY 2024 Plans: Continue to conduct system engineering, project management, and additional research and development center power characterization studies for dismounted Soldier equipment and ISPDS-C efforts.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Slight decrease as a result of reduced system engineering and project management in FY 2024.</p>				
<p>Title: ISPDS-C/CWB Capability Improvements Integration</p> <p>Description: Evaluate higher energy density power and alternative energy solutions.</p> <p>FY 2023 Plans: Continued integration of alternative power technologies and higher energy density batteries and cells for the dismounted Soldier. Conduct battery chemistry development activities for advanced CWBs.</p> <p>FY 2024 Plans: Continued integration of alternative power technologies and higher energy density batteries and cells for the dismounted Soldier.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Increase in funding reflects planned lifecycle efforts.</p>		0.766	1.935	2.291
<p>Title: Develop alternative CWB sources.</p> <p>Description: Develop alternative CWB sources.</p> <p>FY 2023 Plans: Continue to develop and evaluate incremental improvements in alternative power storage technologies to increase overall power and energy capacity. Conduct advanced fuel cell development.</p> <p>FY 2024 Plans: Continue to develop and evaluate incremental improvements in alternative power storage technologies to increase overall power and energy capacity.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement:</p>		2.503	0.826	0.763

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army								Date: March 2023			
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604827A / <i>Soldier Systems - Warrior Dem/Val</i>				Project (Number/Name) EY2 / <i>Integrated Soldier Power Data System - Core</i>			
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2022	FY 2023	FY 2024	
Decrease in funding reflects planned lifecycle efforts.											
Title: SBIR/STTR								-	0.166	-	
Description: Funding transferred in accordance with Title 15 USC 638											
FY 2023 Plans: Funding transferred in accordance with Title 15 USC 638											
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC 638											
Accomplishments/Planned Programs Subtotals								4.165	4.559	4.598	
								FY 2022	FY 2023		
Congressional Add: Conformal wearable battery								-	5.000		
FY 2023 Plans: Funding will be used for the development of advanced battery technology in support of Conformal Wearable Battery program.											
Congressional Add: Wearable fuel cell development								-	3.000		
FY 2023 Plans: Funding will be used for the development of wearable fuel cell technologies to reduce size, weight, and manufacturing complexity.											
Congressional Adds Subtotals								-	8.000		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• R08090: <i>Integrated Soldier Power Data System - Core</i>	5.947	6.725	6.703	-	6.703	7.870	6.496	6.500	6.506	0.000	46.747
Remarks											
D. Acquisition Strategy											
Pursue a variety of Soldier power products under full and open competition. Initiatives range from Commercial-Off-The-Shelf (COTS) solutions to developmental efforts. The type of solicitation depends on the maturity of the technology. The power initiatives will be evaluated through scheduled lab and/operational test and evaluation events, and if successful, selected for procurement and subsequent fielding and sustainment. The acquisition strategy varies by product. For example, the CWB											

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val	Project (Number/Name) EY2 / Integrated Soldier Power Data System - Core

acquisition strategy consists of two phases: Phase one includes the purchase of test articles. Phase two establishes an Indefinite Delivery Indefinite Quantity (IDIQ) contract through the Army Contracting Command (ACC) which maximizes competition to transition to production.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val				Project (Number/Name) EY2 / Integrated Soldier Power Data System - Core					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
System Engineering & Program Management Support	MIPR	Various : Various	2.686	0.203	Feb 2022	0.826	Jan 2023	0.601	Jan 2024	-		0.601	Continuing	Continuing	-
Subtotal			2.686	0.203		0.826		0.601		-		0.601	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
ISPDS-C, CWB Capability Improvements Integration	MIPR	Various : Various	8.257	0.766	Jul 2022	7.101	Feb 2023	2.291	Feb 2024	-		2.291	Continuing	Continuing	-
Develop alternative CWB sources	MIPR	Various : Various	1.460	2.503	May 2022	3.826	Feb 2023	0.763	Feb 2024	-		0.763	Continuing	Continuing	-
Subtotal			9.717	3.269		10.927		3.054		-		3.054	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Test and Evaluation	MIPR	Various : Various	1.995	0.693	Jul 2022	0.806	Mar 2023	0.943	Mar 2024	-		0.943	Continuing	Continuing	-
Subtotal			1.995	0.693		0.806		0.943		-		0.943	Continuing	Continuing	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			14.398	4.165		12.559		4.598		-		4.598	Continuing	Continuing	N/A
Remarks															
Cost elements may contain multiple awards. In such cases, the latest award date is listed.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0604827A / Soldier Systems - Warrior
Dem/Val

Project (Number/Name)

EY2 / Integrated Soldier Power Data System - Core

[illegible]

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val	Project (Number/Name) EY2 / Integrated Soldier Power Data System - Core

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Testing of Product Improvements	1	2020	4	2035
Develop, Evaluate, and Update Battery Technology	2	2020	4	2035
Increase Capacity/Alternate Power Source Development	4	2022	4	2035
Charging on the move development, test integration	3	2021	4	2025

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val				Project (Number/Name) EY4 / Universal Battery Charger			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
EY4: Universal Battery Charger	-	0.951	1.022	1.004	-	1.004	1.005	1.005	1.017	1.027	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Universal Battery Charger: Universal Battery Charger (UBC) fills the power and energy gap created by the increase in mission essential, Soldier portable power consumers, by providing a variety of charging solutions capable of providing power to handheld communication devices and military batteries to support mounted and dismounted formations. The UBC is suited for mounted and dismounted operations at the company level and below in multi-domain and austere operating environments. The system can draw power from wall outlets, vehicle power, generators, and solar power sources. The UBC enables dismounted Soldiers to execute their missions with fewer battery resupplies, thus reducing the logistical burden associated with moving fuel and batteries. The UBC capability allows dismounted Soldiers to operate independently for longer missions. The UBC fills the power and energy gap associated with bulk charging.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2022	FY 2023	FY 2024	
Title: Test & Evaluation									0.951	0.757	0.735	
Description: Develop and evaluate improved UBC products, including bulk charging and power on the move charging systems.												
FY 2023 Plans:												
Continue to evaluate improved UBC products, including bulk charging, and integrate platform on the move charging systems.												
FY 2024 Plans:												
Continue to evaluate improved UBC products, including bulk charging, and integrate platform power on the move charging systems.												
FY 2023 to FY 2024 Increase/Decrease Statement:												
Decrease due to initial developments of bulk charging capability ends in FY 2024, reducing the test and evaluation requirement for that year.												
Title: System Engineering & Program Management									-	0.228	0.269	
Description: Description: Conduct system engineering and project management for UBC efforts.												
FY 2023 Plans:												
Conduct systems engineering, project management, and logistics management for UBC product line.												
FY 2024 Plans:												

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army							Date: March 2023					
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604827A / <i>Soldier Systems - Warrior Dem/Val</i>			Project (Number/Name) EY4 / <i>Universal Battery Charger</i>					
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2022	FY 2023	FY 2024			
Conduct systems engineering, project management, and logistics management for UBC product line.												
FY 2023 to FY 2024 Increase/Decrease Statement: Increase in logistics management requirements for UBC family of systems												
Title: SBIR/STTR							-	0.037	-			
Description: Funding transferred in accordance with Title 15 USC 638												
FY 2023 Plans: Funding transferred in accordance with Title 15 USC 638												
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC 638												
Accomplishments/Planned Programs Subtotals							0.951	1.022	1.004			
C. Other Program Funding Summary (\$ in Millions)												
	<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u> <u>Base</u>	<u>FY 2024</u> <u>OCO</u>	<u>FY 2024</u> <u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
•	R09103: <i>Universal Battery Charger</i>	11.868	9.208	9.264	-	9.264	7.773	7.506	7.511	7.518	0.000	60.648
Remarks												
D. Acquisition Strategy Contracts will be awarded to test, evaluate, and procure the next generation battery chargers to meet the increased power demand on the Soldier. The PM will initiate efforts to establish a new competitively awarded multiple award IDIQ contract no earlier than FY 2024 through the Army Contracting Command (ACC) Aberdeen Proving Grounds.												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val				Project (Number/Name) EY4 / Universal Battery Charger					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
System Engineering/ Program Management Support	MIPR	Various : Various	0.877	-		0.228	Jan 2023	0.269	Jan 2024	-		0.269	Continuing	Continuing	-
Subtotal			0.877	-		0.228		0.269		-		0.269	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Test & Evaluation	MIPR	Various : Various	4.247	0.951	Aug 2022	0.794	Feb 2023	0.735	Mar 2024	-		0.735	Continuing	Continuing	-
Subtotal			4.247	0.951		0.794		0.735		-		0.735	Continuing	Continuing	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			5.124	0.951		1.022		1.004		-		1.004	Continuing	Continuing	N/A
Remarks															
Cost elements may contain multiple awards. In such cases, the latest award date is listed.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val	Project (Number/Name) EY4 / Universal Battery Charger	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Test and evaluate new CWB charging cups																												
Develop and evaluate charging on-the-move capabilities																												
Battery charger performance improvements Phase 2																												
UBC vehicle integration																												
Evaluation of modernized battery chargers Phase 2																												
UBC Power Upgrades																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val	Project (Number/Name) EY4 / Universal Battery Charger	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Test and evaluate new CWB charging cups	1	2022	3	2022
Develop and evaluate charging on-the-move capabilities	1	2021	4	2027
Battery charger performance improvements Phase 2	1	2022	4	2026
UBC vehicle integration	2	2022	4	2023
Evaluation of modernized battery chargers Phase 2	3	2022	4	2026
UBC Power Upgrades	1	2027	4	2028

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val				Project (Number/Name) FK4 / Soldier Borne Sensor (SBS)			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
FK4: Soldier Borne Sensor (SBS)	-	1.103	1.682	1.656	-	1.656	1.634	4.152	8.402	4.371	0.000	23.000
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Project FK4 - Soldier Borne Sensor (SBS): The SBS is a small unmanned aerial vehicle. The SBS provides a near term solution to three Army War-fighting Challenges at the Infantry Squad level: develop situational understanding, conduct air-ground reconnaissance, and conduct joint combined arms maneuver. The system is simple to deploy and use to support the squad leader's decision-making process. The system allows Soldiers to obtain local situational awareness and understanding of their immediate surroundings while remaining in covered or concealed positions. The SBS program will be procured through multiple phases. We will use the funding in this project to develop, integrate, and qualify additional capabilities for each phase.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2022	FY 2023	FY 2024	
Title: Soldier Borne Sensor (SBS)									1.103	1.621	1.656	
Description: The SBS provides the squad a "quick look" capability providing Situational Awareness (SA).												
FY 2023 Plans: This program will develop and test Phase 2 systems with improved-thermal imager, battery life, and interoperability. The program will incorporate advanced obstacle avoidance, autonomous behaviors, edge processing, and novel battery chemistries. The program will integrate S&T portfolio work on efficient target detection. Additionally, the program plans to integrate SBS with systems such as Enhanced Night Vision Goggle - Binocular (ENVG-B) and Integrated Visual Augmentation System (IVAS).												
FY 2024 Plans: This program will complete the development and testing of Phase 2 systems. This program will continue to incorporate and test advanced obstacle avoidance, autonomous behaviors, edge processing, Robotics and Autonomous Systems - Air (RAS-A) interoperability, and novel battery chemistries. The program will continue to integrate S&T portfolio work on efficient target detection, and to integrate SBS with systems such as Enhanced Night Vision Goggle - Binocular (ENVG-B) and Integrated Visual Augmentation System (IVAS).												
FY 2023 to FY 2024 Increase/Decrease Statement: The increase in funding from FY2023 to FY2024 represents the planned lifecycle of the effort.												
Title: SBIR/STTR Transfer									-	0.061	-	
Description: Funding transferred in accordance with Title 15 USC 638												

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army							Date: March 2023			
Appropriation/Budget Activity 2040 / 5			R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val			Project (Number/Name) FK4 / Soldier Borne Sensor (SBS)				
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2022	FY 2023	FY 2024	
FY 2023 Plans: Funding transferred in accordance with Title 15 USC 638										
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC 638										
Accomplishments/Planned Programs Subtotals							1.103	1.682	1.656	
C. Other Program Funding Summary (\$ in Millions)										
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete
• W63798: Soldier Borne Sensor (SBS)	18.654	20.376	22.565	-	22.565	21.959	-	-	12.732	Continuing
Remarks										
D. Acquisition Strategy										
The program will evaluate potential improved phase 2 systems as well as options to fund hardware and software developments that support advanced autonomy and interoperability in FY24 and beyond.										

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val				Project (Number/Name) FK4 / Soldier Borne Sensor (SBS)					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Program Management Admin (PMA)	MIPR	ASC : Ft Belvoir	0.204	0.075	Mar 2022	0.077	Jan 2023	0.080	Jan 2024	-		0.080	0.000	0.436	-
Subtotal			0.204	0.075		0.077		0.080		-		0.080	0.000	0.436	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Phase 2 Prototype	C/FFP	Vantage Robotics : San Leandro, CA 95577	1.948	0.200	Jan 2022	0.489	Feb 2023	0.322	Feb 2024	-		0.322	0.000	2.959	2.534
Phase 2 Prototype	C/FFP	Teledyne FLIR : Wilsonville, OR 97070	-	0.158	Jan 2022	0.249	Feb 2023	0.322	Feb 2024	-		0.322	0.000	0.729	-
Autonomy and Interoperability Development and Integration	TBD	Various : Various	-	0.421	Aug 2022	0.085	Feb 2023	0.134	Nov 2023	-		0.134	0.000	0.640	-
Subtotal			1.948	0.779		0.823		0.778		-		0.778	0.000	4.328	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Matrix Support	Various	Various : Multiple	0.418	0.032	Aug 2022	-		0.080	Nov 2023	-		0.080	0.000	0.530	-
Subtotal			0.418	0.032		-		0.080		-		0.080	0.000	0.530	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val						Project (Number/Name) FK4 / Soldier Borne Sensor (SBS)			
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Phase 2- Technology Integration and Testing	TBD	Various : Various	0.303	0.217	Nov 2021	0.782	Feb 2023	0.718	Nov 2023	-		0.718	0.000	2.020	-
Subtotal			0.303	0.217		0.782		0.718		-		0.718	0.000	2.020	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			2.873	1.103		1.682		1.656		-		1.656	0.000	7.314	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val		Project (Number/Name) FK4 / Soldier Borne Sensor (SBS)	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Phase 2 - Technology Improvements, Integration and Testing																												
	Phase 2 - Improvements & Integration																											
Phase 3 - Development																												
Phase 3 - Production Award (MS 1)																												
Phase 3 - System Technology Improvements and Integration																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val	Project (Number/Name) FK4 / Soldier Borne Sensor (SBS)	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Phase 2 - Technology Improvements, Integration and Testing	3	2020	4	2025
Phase 3 - Development	4	2025	1	2028
Phase 3 - Production Award (MS 1)	2	2028	2	2028
Phase 3 - System Technology Improvements and Integration	2	2028	4	2029

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val				Project (Number/Name) S65 / Platoon Power Generator			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
S65: Platoon Power Generator	-	-	4.145	4.075	-	4.075	-	-	-	-	0.000	8.220
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
Platoon Power Generation - PM E2S2: This project supports the demonstration and development of Platoon Power Generation (PPG). PPG will provide small units with portable power to sustain Modified Table of Organizational Equipment (MTOE) unit power demand in support of 48 to 72 hour missions. It will be used for charging batteries and powering various types of Army communications and electronics devices. It will provide sufficient power to recharge and power all Platoon equipment and fulfill residual power gaps at the Squad and Soldier level. The generator will provide Platoon power for charging batteries when away from vehicles in all Brigade Combat Teams (Stryker, Armor and Infantry), Rangers and Special Forces in austere environments.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2022	FY 2023	FY 2024	
Title: S65-Platoon Power Generator									-	3.993	4.075	
Description: Utilize Small Business Innovation Research (SBIR) Phase III contract vehicle to develop and test prototypes.												
FY 2023 Plans: Award Phase III contract to develop initial design and fuel cell prototypes in the range of 1.5-2kW to mature technology and reduce risk.												
FY 2024 Plans: Optimize fuel cell prototype design based on user feedback and improve upon prototypes to prepare the system for test and evaluation.												
FY 2023 to FY 2024 Increase/Decrease Statement: FY24 funding increase to optimize prototypes based on Soldier feedback to prepare the system for developmental testing and commercialization.												
Title: SBIR/STTR transfer									-	0.152	-	
Description: Funding transferred in accordance with Title 15 USC 638												
FY 2023 Plans: Funding transferred in accordance with Title 15 USC 638												
FY 2023 to FY 2024 Increase/Decrease Statement:												

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0604827A / <i>Soldier Systems - Warrior Dem/Val</i>				Project (Number/Name) S65 / <i>Platoon Power Generator</i>				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2022	FY 2023	FY 2024
Funding transferred in accordance with Title 15 USC 638												
Accomplishments/Planned Programs Subtotals										-	4.145	4.075
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost	
• R08090: <i>Integrated Soldier Power Data System - Core</i>	5.947	6.725	6.703	-	6.703	7.870	6.496	6.500	6.506	0.000	46.747	
• R09103: <i>Universal Battery Charger</i>	11.868	9.208	9.264	-	9.264	7.773	7.506	7.511	7.518	0.000	60.648	
• EY2: <i>Integrated Soldier Power Data System - Core</i>	4.165	12.559	4.598	-	4.598	4.699	4.705	4.755	4.808	Continuing	Continuing	
• EY4: <i>Universal Battery Charger</i>	0.951	1.022	1.004	-	1.004	1.005	1.005	1.017	1.027	Continuing	Continuing	
Remarks												
D. Acquisition Strategy												
PEO CS/CSS Effort on the Platoon Power Generation - PM E2S2: Small Business Innovation Research (SBIR) Phase III contract vehicle will be awarded in FY23 to develop and test prototypes. The prototypes will be optimized based on user feedback, tested, and incorporated into soldier touch points. The results of the contract, testing and soldier touch points will inform the Milestone C Low Rate Initial Production decision.												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val				Project (Number/Name) S65 / Platoon Power Generator					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Platoon Power Generation	Various	PM E2S2 : Fort Belvoir, VA	0.764	-		0.750	Mar 2023	0.750	Feb 2024	-		0.750	Continuing	Continuing	Continuing
SBIR/STTR	C/Various	VAR : VAR	-	-		0.152		-		-		-	0.000	0.152	-
Subtotal			0.764	-		0.902		0.750		-		0.750	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Platoon Power Generation	C/FFP	Picatinny : Contractor Sites	9.358	-		2.848	May 2023	1.415	Feb 2024	-		1.415	Continuing	Continuing	Continuing
Subtotal			9.358	-		2.848		1.415		-		1.415	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Platoon Power Generation	MIPR	APG : APG	3.419	-		0.395	Aug 2023	0.410	Feb 2024	-		0.410	Continuing	Continuing	Continuing
Subtotal			3.419	-		0.395		0.410		-		0.410	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Platoon Power Generation	MIPR	Ft. Benning : Ft. Benning	1.340	-		-		1.500	Feb 2024	-		1.500	Continuing	Continuing	Continuing
Subtotal			1.340	-		-		1.500		-		1.500	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army											Date: March 2023				
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val					Project (Number/Name) S65 / Platoon Power Generator					
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			14.881	-		4.145		4.075		-		4.075	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val	Project (Number/Name) S65 / Platoon Power Generator	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Initial system design and prototyping																												
Design optimization and improved prototypes																												
Test and Evaluation																												
Milestone C																												
System improvements and integration																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023	
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0604827A / Soldier Systems - Warrior Dem/Val		Project (Number/Name) S65 / Platoon Power Generator

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Initial system design and prototyping	2	2023	2	2024
Design optimization and improved prototypes	3	2024	3	2025
Test and Evaluation	3	2025	1	2026
Milestone C	2	2026	2	2026
System improvements and integration	4	2026	4	2028

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army										Date: March 2023		
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							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	93.207	100.384	79.250	-	79.250	79.688	79.784	80.635	81.535	0.000	594.483
FE8: Vehicle Protection Suite	-	93.207	100.384	79.250	-	79.250	79.688	79.784	80.635	81.535	0.000	594.483

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. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	96.132	109.702	99.525	-	99.525
Current President's Budget	93.207	100.384	79.250	-	79.250
Total Adjustments	-2.925	-9.318	-20.275	-	-20.275
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-9.318			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-2.925	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	-20.275	-	-20.275

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0604852A I Suite of Survivability Enhancement Systems - EMD	
<u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u>		FY 2022	FY 2023
Project: FE8: Vehicle Protection Suite			
Congressional Add: Bradley Family of Vehicles (BFV) Active Protection System		16.000	-
Congressional Add Subtotals for Project: FE8		16.000	-
Congressional Add Totals for all Projects		16.000	-
<u>Change Summary Explanation</u> Decreased funding due to higher Army priorities..			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
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 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
FE8: Vehicle Protection Suite	-	93.207	100.384	79.250	-	79.250	79.688	79.784	80.635	81.535	0.000	594.483
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 2022	FY 2023	FY 2024
Title: Vehicle Protection System Base Kit Integration of Non-Developmental Items (NDI) and Developmental Technologies	41.251	55.136	46.475
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 2023 Plans: Complete VBK with LWR integration on the Bradley and Abrams platforms and continue integration design efforts, to include integration design development, platform prototype build, and logistics products development for the Stryker, Mobile Protected Firepower (MPF) and AMPV. Begin ATEC Developmental and Operational Testing on the Bradley and Abrams.			
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 2023 to FY 2024 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
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		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
Funding decrease is due to completing the maturation activities and focused on continuing VBK with LWR integration activities for AMPV, Stryker, and MPF platforms.				
<p>Title: Survivability Improvements</p> <p>Description: 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.</p> <p>FY 2023 Plans: Start the VPS base kit product enhancements maturation efforts. Continue passive and reactive armor tile engineering development, testing, and logistic product development on ground combat platforms. Begin interim Soft Kill acquisition program to continue system maturation to support future integration activities on ground combat platforms. Continued engineering studies, improvement assessments, testing, and characterization/demonstrations of Active Protection systems and other emerging technologies. Continue execution of Bradley expedited active protection system and support system-level test and Urgent Material Release (UMR) activities.</p> <p>FY 2024 Plans: 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.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding decrease is due to projected reduction in cost and delayed initiation of the Soft Kill Acquisition Program of Record until FY25.</p>		27.075	32.000	18.843
<p>Title: Vehicle Protection Suite Government Engineering and Program Management</p> <p>Description: Government program management support and program oversight.</p> <p>FY 2023 Plans: Funding is provided for program management support for continued VPS efforts/integration onto multiple ground combat vehicles to include VPS Base Kits (VBK) w/LWR, Survivability</p>		5.931	9.584	10.869

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604852A / <i>Suite of Survivability Enhancement Systems - EMD</i>	Project (Number/Name) FE8 / <i>Vehicle Protection Suite</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
Improvements (RAT and Signature Management (CCDO)), trade studies, platform integration, vehicle testing, and logistic product development.			
FY 2024 Plans: 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.			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase is to support the new efforts in Survivability Improvements, VBK w/LWR, and trade study analysis and feasibility assessment.			
Title: VPS Trade Study		2.950	-
Description: 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.			3.063
FY 2024 Plans: 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.			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase is due to conducting Trade Study/Feasibility assessments and/or characterization/demonstration to identify ground combat vehicle survivability capability gaps that will fall into future tranches.			
Title: SBIR/STTR Transfer		-	3.664
Description: Funding transferred in accordance with Title 15 USC 638			-

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army									Date: March 2023		
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			
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2022	FY 2023	FY 2024
FY 2023 Plans: Funding transferred in accordance with Title 15 USC 638.											
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC 638.											
Accomplishments/Planned Programs Subtotals									77.207	100.384	79.250
							FY 2022	FY 2023			
Congressional Add: Bradley Family of Vehicles (BFV) Active Protection System							16.000	-			
FY 2022 Accomplishments: Funding will continue Bradley Family of Vehicles (BFV) Active Protection System Iron Fist-Light Decoupled (IFLD) efforts to include: final logistics product development, verification and validation, MWO development and validation, ECP and Level III TDP development, and Vehicle Software updates.											
Congressional Adds Subtotals							16.000	-			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• GM1911: VPS MODULAR ACTIVE PROTECTION SYSTEMS W/LASER	68.379	-	0.000	-	0.000	-	-	-	-	0.000	68.379
• GM1912: VPS SIGNATURE MANAGEMENT	6.907	-	0.000	-	0.000	-	-	-	-	0.000	6.907
• E97911: COMBAT VEHICLE RAT	17.755	-	0.000	-	0.000	-	-	-	-	0.000	17.755
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.											

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023
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 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
July 2022 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 with Reactive Armor Tiles, laser threat detection with a common controller 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 will initiate in FY 2022 to define the next set of VPS technologies, based on evolving enemy threats, to focus on. These capabilities may 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 protection and integration of artificial intelligence into vehicle survivability technologies.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
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 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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 Warren, Michigan : Various	18.807	5.931	Dec 2021	9.584	Oct 2022	10.869	Dec 2023	-		10.869	24.549	69.740	-
SBIR/STTR Transfer	TBD	Various : Various	-	-		3.664		-		-		-	0.000	3.664	-
Subtotal			18.807	5.931		13.248		10.869		-		10.869	24.549	73.404	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	69.324	32.277	Jun 2022	55.136	Jun 2023	32.262	Jun 2024	-		32.262	32.010	221.009	-
Survivability Improvements	Various	Various TACOM Warren : Warren, MI	13.028	25.252	Jan 2022	28.391	Jan 2023	16.913	Jan 2024	-		16.913	230.687	314.271	-
Bradley Family of Vehicles (BFV) Active Protection System	Various	Various : BAE Sterling Heights, MI	16.000	16.000	May 2022	-		-		-		-	0.000	32.000	-
Subtotal			98.352	73.529		83.527		49.175		-		49.175	262.697	567.280	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	3.103	2.950	Mar 2022	-		3.063	Mar 2024	-		3.063	0.000	9.116	-
Subtotal			3.103	2.950		-		3.063		-		3.063	0.000	9.116	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023					
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 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	7.346	1.823	Jun 2022	3.609	Jun 2023	1.930	Jun 2023	-		1.930	1.823	16.531	-		
Vehicle Protection System Base Kit	MIPR	Various Army Test and Evaluation Command (ATEC) : Various	6.874	8.974	Oct 2022	-		14.213	Jun 2023	-		14.213	76.663	106.724	-		
Subtotal			14.220	10.797		3.609		16.143		-		16.143	78.486	123.255	N/A		
Remarks N/A																	
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals			134.482	93.207		100.384		79.250		-		79.250	365.732	773.055	N/A		
Remarks																	

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

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 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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 - Logistic Product Development																												
VBK - ATEC Testing (Bradley, Abrams, AMPV, Stryker, MPF)																												
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 TDP Development																												
Survivability Improvements - SIGMAN (previously known as...																												

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PE 0604852A: Suite of Survivability Enhancement System...
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FE8 / Vehicle Protection Suite

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
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 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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 - Soft Kill System Vehicle Te...																												
Survivability Improvements - Soft Kill A and B Kit Log P...																												
Survivability Improvements - Interim Soft Kill Maturation																												
Radar Sensor Technology - Integration and Testing																												
Radar Sensor Technology - Final Design Review/Transition																												
Vehicle Protection Suite Trade Study																												
Vehicle Protection Suite Trade Study - Tranche IV																												
Bradley Iron Fist Light Decoupled (IFLD) Phase 2 Testing																												
Bradley Iron Fist Light Decoupled (IFLD) LUT / Software ...																												
Bradley Iron Fist Light Decoupled (IFLD) UMR																												

Note
n/a

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
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	

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	2023
VBK - Component Qualification Testing	1	2020	4	2023
VBK - Integration Design (Abrams, Bradley, AMPV, Stryker and MPF)	1	2021	1	2027
VBK - Logistic Product Development	4	2021	1	2027
VBK - ATEC Testing (Bradley, Abrams, AMPV, Stryker, MPF)	3	2023	4	2027
VBK - Base Kit Improvements Maturation	2	2022	4	2027
VBK - Procurement Contract Award	4	2023	4	2023
Survivability Improvements Development	1	2020	4	2025
Survivability Improvements - Armor Upgrade Qualification Testing	1	2020	4	2025
Survivability Improvements - Armor Upgrade Logistics Product Development	4	2021	1	2026
Survivability Improvements - Armor TDP Development	3	2022	2	2025
Survivability Improvements - SIGMAN (previously known as CCDO) Testing AMPV, MPF, OMFV	2	2021	4	2026
Survivability Improvements - SIGMAN (previously known as CCDO) Production Contract Award	2	2023	2	2023
Survivability Improvements - SIGMAN (previously known as CCDO) Log Product Development and Provisioning	4	2021	4	2023
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 Log Product Development and Provisioning	3	2022	4	2024

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023	
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	
		Start		End
Events	Quarter	Year	Quarter	Year
Survivability Improvements - Top Attack Protection Armor Production Ready	2	2024	2	2024
Survivability Improvements - Tranche Technology Maturation & Development	3	2020	4	2027
Survivability Improvements - Government Energetic Qualification Testing	1	2021	4	2022
Survivability Improvements - Soft Kill System Development EMD Contract Award	2	2025	2	2025
Survivability Improvements - Soft Kill B-Kit Maturation and Validation	2	2025	1	2027
Survivability Improvements - Soft Kill Platform Integration Contract Award	2	2027	2	2027
Survivability Improvements - Soft Kill Platform Integration	2	2027	4	2028
Survivability Improvements - Soft Kill System Vehicle Testing	2	2028	2	2029
Survivability Improvements - Soft Kill A and B Kit Log Product development	1	2027	1	2030
Survivability Improvements - Interim Soft Kill Maturation	2	2023	4	2024
Radar Sensor Technology - Integration and Testing	2	2021	1	2022
Radar Sensor Technology - Final Design Review/Transition	2	2022	2	2022
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) Phase 2 Testing	4	2021	4	2022
Bradley Iron Fist Light Decoupled (IFLD) LUT / Software Testing	2	2025	4	2025
Bradley Iron Fist Light Decoupled (IFLD) UMR	4	2025	4	2025
Note n/a				

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0604854A I Artillery Systems - EMD							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	25.000	48.106	42.490	-	42.490	70.518	132.172	133.582	135.073	Continuing	Continuing
516: <i>Paladin/FAASV</i>	-	-	23.106	42.490	-	42.490	70.518	132.172	133.582	135.073	Continuing	Continuing
HB6: <i>Mobile 155MM Howitzer</i>	-	25.000	25.000	-	-	-	-	-	-	-	0.000	50.000

Note

Elimination: Project HB6 has no funding request for FY 2024.

A. Mission Description and Budget Item Justification

This program element encompasses engineering and manufacturing development for artillery weapons systems.

Project HB6 supports the mobile howitzer program. The Mobile 155mm Howitzer is a Self-Propelled, 155mm Wheeled Howitzer that provides lethal, proactive counter-fire essential for the survivability of the maneuver formations and other close support fires as required. The Mobile Howitzer improves the Field Artillery Battalion's ability to maintain pace with its supporting maneuver formations and survive against responsive, counter-fire from near-peer threats with rapid displacement and emplacement times. The mobile howitzer will improve tactical mobility and system survivability compared to existing towed howitzer systems. Development efforts, prototyping and evaluations will focus on attributes such as improved emplacement and displacement times, driving speed, and crew protection capabilities, all without sacrificing lethality versus existing towed howitzer systems. Program activities in FY 2021 will be focused on evaluation of multiple vendor mobile howitzer systems at United States proving grounds against system requirements. Evaluation will include safety testing, US ammunition compatibility testing, and assessment of mobility, survivability and transportability.

Project Paladin/FAASV to modernize the M109 Family of Vehicles (FoV) to improve performance and address expected changes in the operational profile. The M109 FoV is an indirect fire weapon system with the ability of delivering accurate, long range, lethal and non-lethal cannon fires in support of both Combined Arms Maneuver (CAM) and Wide Area Security (WAS) operations. The M109 FoV can be employed within any Brigade Combat Team formation to neutralize, suppress, or destroy enemy forces, while providing protected transport of a field artillery howitzer section on the modern battlefield. Funding also supports work being completed at the Watervliet Arsenal (WVA) in Watervliet, NY.

This effort will include system usage and optimization studies, simulations, development engineering, prototype development and validation for incremental upgrades on the M109 FoVs.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army					Date: March 2023
Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)</i>			R-1 Program Element (Number/Name) PE 0604854A / <i>Artillery Systems - EMD</i>		
B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	25.000	23.106	43.388	-	43.388
Current President's Budget	25.000	48.106	42.490	-	42.490
Total Adjustments	0.000	25.000	-0.898	-	-0.898
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	25.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	-0.898	-	-0.898
<u>Congressional Add Details (\$ in Millions, and Includes General Reductions)</u>					
Project: HB6: <i>Mobile 155MM Howitzer</i>					FY 2022
Congressional Add: <i>Soft Recoil Development</i>					FY 2023
					25.000
Congressional Add Subtotals for Project: HB6					25.000
Congressional Add Totals for all Projects					25.000
<u>Change Summary Explanation</u>					
Decreased funding to support higher Army priorities.					

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD				Project (Number/Name) 516 / Paladin/FAASV			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
516: Paladin/FAASV	-	-	23.106	42.490	-	42.490	70.518	132.172	133.582	135.073	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Project Paladin/FAASV to modernize the M109 Family of Vehicles (FoV) to improve performance and address expected changes in the operational profile. The M109 FoV is an indirect fire weapon system with the ability of delivering accurate, long range, lethal and non-lethal cannon fires in support of both Combined Arms Maneuver (CAM) and Wide Area Security (WAS) operations. The M109 FoV can be employed within any Brigade Combat Team formation to neutralize, suppress, or destroy enemy forces, while providing protected transport of a field artillery howitzer section on the modern battlefield. Funding also supports work being completed at the Watervliet Arsenal (WVA) in Watervliet, NY.

This effort will include system usage and optimization studies, simulations, development engineering, prototype development and validation for incremental upgrades on the M109 FoVs.

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

	FY 2022	FY 2023	FY 2024
Title: Program Management Description: Funding is provided for all Program Management support efforts. FY 2023 Plans: Lead the planning and coordination for a system trade study which will be used to inform an Army Senior Leader decision on the strategy for increasing performance of the M109 Family of Vehicles (FoV). FY 2024 Plans: Develop and manage detailed schedules for modernization activities, execute prototype orders, and begin development, production, and coordination for all required programmatic documents. FY 2023 to FY 2024 Increase/Decrease Statement: Increase reflects planned lifecycle efforts.	-	3.690	3.733
Title: Developmental Engineering Description: Conduct development engineering efforts, perform system usage and optimization studies, perform simulations, develop a proposed system configuration to be matured, material and labor required in support of prototype manufacturing efforts. FY 2023 Plans: Develop system configurations and conduct simulations to optimize system reliability/performance. FY 2024 Plans:	-	18.573	38.757

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604854A / <i>Artillery Systems - EMD</i>	Project (Number/Name) 516 / <i>Paladin/FAASV</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
Continue engineering development activities to include studies and design reviews. Place orders for prototype material.			
<i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> Increased funding in FY 2024 is due to ramp up on development efforts and prototype materials as a result of the Army decision from trade study.			
<i>Title:</i> SBIR/STTR Transfer		-	0.843
<i>FY 2023 Plans:</i> SBIR/STTR Transfer. Funding transferred in accordance with Title 15 USC 638.			
<i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> SBIR/STTR Transfer. Funding transferred in accordance with Title 15 USC 638.			
Accomplishments/Planned Programs Subtotals		-	23.106
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
The M109 FoV modernization will leverage Government and Government support contractors, as well as contract mechanisms to prototype, test, and evaluate technologies for the development and validation of modernization efforts.			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD				Project (Number/Name) 516 / Paladin/FAASV					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
SEPM Government	MIPR	Various : Various	-	-		1.826	Dec 2022	1.848	Dec 2023	-		1.848	0.000	3.674	-
SEPM Contractor	TBD	Various : Various	-	-		1.864	Mar 2023	1.885	Mar 2024	-		1.885	0.000	3.749	-
SBIR/STTR	TBD	TBD : TBD	-	-		0.843	Dec 2022	-		-		-	0.000	0.843	-
Subtotal			-	-		4.533		3.733		-		3.733	0.000	8.266	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Development Engineering	TBD	TBD : TBD	-	-		17.016	Mar 2023	18.295	Mar 2024	-		18.295	0.000	35.311	-
Production, Engineering, Planning	TBD	TBD : TBD	-	-		0.499	Mar 2023	0.501	Mar 2024	-		0.501	0.000	1.000	-
Development Tooling	TBD	TBD : TBD	-	-		0.006	Mar 2023	0.006	Mar 2024	-		0.006	0.000	0.012	-
Prototype Manufacturing	TBD	TBD : TBD	-	-		-		17.332	Mar 2024	-		17.332	0.000	17.332	-
Subtotal			-	-		17.521		36.134		-		36.134	0.000	53.655	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Data	TBD	TBD : TBD	-	-		0.918	Mar 2023	1.058	Mar 2024	-		1.058	0.000	1.976	-
Support Equipment	TBD	TBD : TBD	-	-		0.134	Mar 2023	0.134	Mar 2024	-		0.134	0.000	0.268	-
Other	TBD	TBD : TBD	-	-		-		1.431	Mar 2024	-		1.431	0.000	1.431	-
Subtotal			-	-		1.052		2.623		-		2.623	0.000	3.675	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	-		23.106		42.490		-		42.490	0.000	65.596	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0604854A / Artillery Systems - EMD

Project (Number/Name)

516 / *Paladin/FAASV*

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Developmental Engineering																												
Prototype Manufacturing																												
Prototype/System Level Test and Validation																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD	Project (Number/Name) 516 / Paladin/FAASV

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Developmental Engineering	2	2023	3	2028
Prototype Manufacturing	2	2024	3	2026
Prototype/System Level Test and Validation	3	2025	2	2029

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD				Project (Number/Name) HB6 / Mobile 155MM Howitzer			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
HB6: Mobile 155MM Howitzer	-	25.000	25.000	-	-	-	-	-	-	-	0.000	50.000
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Project HB6 has no funding request for Fiscal Year (FY) 2024.

A. Mission Description and Budget Item Justification

Project HB6 supports the mobile howitzer program. The Mobile 155 millimeter (mm) Howitzer is a Self-Propelled, 155mm Wheeled Howitzer that provides lethal, proactive counter-fire essential for the survivability of the maneuver formations and other close support fires as required. The Mobile Howitzer improves the Field Artillery Battalion's ability to maintain pace with its supporting maneuver formations and survive against responsive, counter-fire from near-peer threats with rapid displacement and emplacement times. The mobile howitzer will improve tactical mobility and system survivability compared to existing towed howitzer systems. Development efforts, prototyping and evaluations will focus on attributes such as improved emplacement and displacement times, driving speed, and crew protection capabilities, all without sacrificing lethality versus existing and future towed howitzer systems.

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

	FY 2022	FY 2023
<i>Congressional Add:</i> Soft Recoil Development	25.000	25.000
<i>FY 2022 Accomplishments:</i> Funds support the development and testing of soft recoil systems for possible utilization in current and future artillery systems.		
<i>FY 2023 Plans:</i> Funds support the continued development and testing of soft recoil systems for possible utilization in current and future artillery systems.		
Congressional Adds Subtotals	25.000	25.000

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

N/A

Remarks

D. Acquisition Strategy

The acquisition strategy for the Mobile Howitzer Program is to evaluate existing industry prototypes and fielded systems and assess capability of mobility and survivability attributes. Evaluation will be conducted by US Army engineers and the Army Test and Evaluation Command.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD				Project (Number/Name) HB6 / Mobile 155MM Howitzer					
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Soft Recoil Development	TBD	PM Towed Artillery Systems : Picatinny Arsenal, NJ	25.000	25.000	Mar 2022	25.000	Aug 2023	-		-		-	0.000	75.000	-
Subtotal			25.000	25.000		25.000		-		-		-	0.000	75.000	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			25.000	25.000		25.000		-		-		-	0.000	75.000	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023	
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD		Project (Number/Name) HB6 / Mobile 155MM Howitzer

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028							
	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				
Soft Recoil Development																																

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604854A / Artillery Systems - EMD	Project (Number/Name) HB6 / Mobile 155MM Howitzer	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Mobile Howitzer Analysis	1	2020	3	2020
Testing and Engineering Support	3	2020	4	2021
Bid Sample Test	3	2021	4	2021
105MM Mobile Howitzer System Evaluation	2	2021	4	2021
Soft Recoil Development	2	2021	4	2024

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	125.109	104.134	104.024	-	104.024	54.883	48.365	53.936	48.996	Continuing	Continuing
099: Army Human Resource System	-	0.190	15.132	5.680	-	5.680	5.487	5.593	5.599	5.566	0.000	43.247
184: Installation Support Modules	-	13.716	1.324	-	-	-	-	-	-	-	0.000	15.040
193: Medical Communications For Combat Casualty*	-	-	-	-	-	-	4.479	2.759	5.413	2.295	0.000	14.946
BY3: Information Systems for Installations	-	-	1.022	1.024	-	1.024	2.615	2.024	2.216	2.823	0.000	11.724
DH1: Operational Medicine Information System	-	-	-	4.241	-	4.241	-	-	-	-	0.000	4.241
FL9: Army Accessioning IT Development	-	5.183	6.479	2.288	-	2.288	2.337	2.385	2.436	2.487	0.000	23.595
FM7: Human Resouces Information Technology	-	12.497	11.574	11.449	-	11.449	6.941	7.060	9.591	7.301	Continuing	Continuing
FM8: Information Technology for Training Systems	-	60.670	36.893	5.993	-	5.993	1.562	3.275	3.306	3.451	0.000	115.150
FM9: Information Technology for Criminal Investigations	-	1.181	1.273	2.697	-	2.697	1.298	1.313	1.328	1.342	0.000	10.432
T04: USMEPCOM TRANSFORMTION - IT MODERNIZATION	-	8.753	2.221	2.239	-	2.239	2.240	2.242	2.617	2.646	0.000	22.958
T05: Army Business System Modernization Initiatives	-	19.855	24.875	65.143	-	65.143	24.574	18.328	18.007	17.591	0.000	188.373
VR3: ASMIS-R (REPORTIT)	-	3.064	3.341	3.270	-	3.270	3.350	3.386	3.423	3.494	0.000	23.328
*This project's R-2a exhibit has been suppressed due to funding not beginning until after FY 2024												
A. Mission Description and Budget Item Justification												
This Program Element is made up of over 30 programs across 12 Program Elements that represents numerous Army Information Technology missions.												

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army				Date: March 2023	
Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)		PE 0605013A / Information Technology Development			
B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	129.380	124.475	57.737	-	57.737
Current President's Budget	125.109	104.134	104.024	-	104.024
Total Adjustments	-4.271	-20.341	46.287	-	46.287
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-20.215			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-4.271	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	46.287	-	46.287
• FFRDC Transfer	-	-0.126	-	-	-
Congressional Add Details (\$ in Millions, and Includes General Reductions)					
Project: 184: Installation Support Modules					
Congressional Add: Program increase - installation access control technology					
Congressional Add: Program Increase - Smart installation and community program					
Congressional Add Subtotals for Project: 184					
Congressional Add Totals for all Projects					
Change Summary Explanation					
Increase in FY 2024 funding request from Previous President's Budget to Current President's Budget reflects the implementation of Enterprise Business Systems - Convergence (EBS-C).					

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) 099 / Army Human Resource System			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
099: Army Human Resource System	-	0.190	15.132	5.680	-	5.680	5.487	5.593	5.599	5.566	0.000	43.247
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Army Human Resource System Project (099) contains the following programs: ArmyIgnitED Modernization managed by the Human Resource Command, Commanders Risk Reduction Dashboard managed by Program Executive Office Enterprise Information Systems (PEO EIS) and Regional Level Applications Software (RLAS) managed by United States Army Reserves (USAR).

ArmyIgnitED: In support of recruiting and retention for a more educated workforce, ArmyIgnitED is an Army Credentialing and Continuing Education Services for Soldiers (ACCESS) program, 24/7 virtual financial management portal, and decision-support tool for 1) Active Duty, US Army Reserves and Army National Guard Soldiers to request Tuition Assistance (TA); 2) Cadets to request Scholarship payments and 3) Department of the Army (DA) Civilians and Apprentices to request professional development funds. ArmyIgnitED is an enterprise system that enforces eligibility for higher education funds and creates efficiencies with its automated processes. Soldiers, Scholarship Cadets, DA Civilians and Apprentices use it to pursue post-secondary educational goals and professional development objectives; Army Education Counselors use it to provide educational guidance; Career Program Managers and Training Managers use it to manage civilian training; and Academic Institutions use it to deliver degree and course offerings and to report user progress and degree completions for 206K Soldiers, Cadets and Civilians. ArmyIgnitED includes an automated registration tool that enforces policies and procedures, serves as a financial feeder for automated financial transactions, tracks academic / training progress within the system, and provides visibility of financial management and regulatory compliance of enrollment processes. ArmyIgnitED is hosted in the Air Force's Amazon Web Services (AWS) GovCloud until migration to an Army Cloud environment is decided, funded, and implemented.

The United States Army Reserve (USAR) utilizes the Regional Level Application Software (RLAS) as an enterprise system for duty attendance, military pay, Soldier records management and training calendar management to access, transact, store, and manage Soldier and unit data required to conduct synchronized USAR operations. Unlike the Army Active Component (AC) where Soldier military pay is centrally managed and input at the installation level, the USAR utilizes RLAS to manage and input decentralized Soldier pay transactions at the unit level. RLAS consists of four modules: Pay, Personnel, Training, and Resource Management. Research and Development (R&D) authority and funding will provide RLAS with investment funds for necessary system development and system modifications. R&D funding amounts increase slightly towards the end of RLAS lifecycle (FY 2019 and 2020) in order to fully support the Integrated Pay and Personnel System - Army (IPPS-A) transition. Annually, USAR will provide sustainment funding. R&D authority and sustainment funding will meet the USAR Staff Judge Advocate (SJA) and Office of the Secretary of Defense Judge Advocate General (OTJAG) opinions regarding defense information Technology (IT) system for R&D activities. Necessary RLAS system development and system modifications include: 1) IPPS-A interface requirements; 2) implementing Microsoft .net Framework 4.5 standards; 3) implementing new Operating Systems (OS), system utilities and other technology products. Enhanced development and modification to RLAS will improve RLAS system capabilities and bring RLAS into compliance with various Army Cyber Command (ARCYBER) and audit readiness requirements. RLAS will continue to process duty attendance, military pay, Soldier personnel transactions and training calendars until the system is fully subsumed by IPPS-A.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) 099 / Army Human Resource System		
Commanders Risk Reduction Dashboard (CRRD) has been transitioned to the Army Vantage (T05).				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
Title: ArmyIgnitED		-	13.956	5.123
<p>Description: ArmyIgnitED is an IT financial management portal and decision support tool for Soldiers, Cadets, and Civilians to request Tuition Assistance (TA) and Credentialing Assistance (CA), Cadets to request Scholarship payments, and Army Civilians to request training funds online, anytime, for classroom, distance learning, and college courses. When fully deployed, ArmyIgnitED will be used by approximately 500,000 end users at both Continental United States (CONUS) and Outside the CONUS (OCONUS) locations. It will be the Army's single, next-generation, enterprise-wide TA, CA, and reimbursement management software system. The legacy system has been decommissioned. In support of recruiting and retention for a more educated workforce, ArmyIgnitED is the virtual financial management portal and decision-support tool for 1) Active Duty (AD), US Army Reserves (USAR), and Army National Guard (ARNG) Soldiers to request TA; 2) Cadets to request Scholarship payments and 3) Department of the Army (DA) Civilians and Apprentices to request professional development funds. ArmyIgnitED is hosted as an application on the Air Force (AF) Automated Education Management System (AFAEMS) Government Off the Shelf (GOTS) solution.</p> <p>Development maximizes re-configuration of the Air Force Voluntary Education platform, AFAEMS, to the greatest extent possible and performing only minimal necessary modifications to ensure implementation of Army laws, policies, regulations, and directives (LPRDs). Continuous Integration / Continuous Delivery (CI/CD) principals are employed to deliver capabilities in a series of Minimally Viable Products (MVP), each building the capability in the new system. MVP 1, which deployed AUG 2022, provides Solder TA capabilities and Soldier Personnel data. Government testing, to include Functional Assessments (FA) and Government Acceptance Testing (GAT) validated requirements were satisfactory. Migration of historical data from both GoArmyEd and the legacy ArmyIgnitED into the new ArmyIgnitED system initiated in MVP 1.</p> <p>CI/CD continues with MVP 2 deployed capabilities to Soldier CA (MVP2A) in OCT 2022, Cadet scholarships (MVP2B) in DEC 2022, and Civilian TA/CA capabilities (MVP2C) is scheduled for JUN 2023. MVP 2 includes establishing eight (8) interfaces to inform and enable the new capability. MVP 3 provides new capabilities and enhancements not possible in the rapid "MVP" development timeline. Following the CI/CD model, MVP 3 will deliver enhancements as they become available and are fully tested.</p> <p>FY 2023 Plans:</p> <p>Continuous Improvement and Continuous Delivery (CI/CD) of ArmyIgnitED functionality includes Credentialing Assistance, CA (MVP2A) which was deployed in OCT 2022. MVP2A consisted of the Development, and Gov Testing of the CA functionality and the approved Limited Deployment (LD) of the ArmyIgnitED CA functionality. Cadet scholarships assistance (MVP2B) was deployed DEC 2022. MVP2B consisted of the Development, Gov Testing of the Cadet scholarship assistance functionality, and the approved LD of the ArmyIgnitED Cadet scholarship functionality. Civilian Training assistance TA/CA capabilities (MVP2C) is</p>				

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) 099 / <i>Army Human Resource System</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<p>scheduled to deploy JUN 2023. MVP2C will consist of the Development, Gov Testing and the approved LD of the ArmyIgnitED Civilian Training assistance and TA/CA capabilities.</p> <p>FY 2024 Plans: Following the planned MVPs, ArmyIgnitED will enter a Capability Support phase. During this time, some additional capabilities will be added, and enhancements will occur as more interfaces, business processes, and features are automated. The Agile methodology and CI/CD implementation approach will continue for both maintenance and enhancements. ArmyIgnitED will be frequently updated in rapid fashion and responsive to emerging needs, to include adding / updating functionality as requirements evolve due to ever-changing Laws, Policies, Regulations, and Directives, business process reengineering, efficiency reviews, new capabilities identified given emerging mission needs and technology advancements that offer business process efficiencies, and Army Enterprise modernization. Capability enhancements are defined as functionalities that have been identified but will have to be developed and tested in the future. Capability enhancements are defined as functionalities that have been identified but will have to be developed and tested in the future. Such capabilities include but are not limited to the additional interfaces; Army Career Tracker (ACT); Defense Civilian Personnel Data System (DCPDS), Joint Service Transcript (JST), Accessions Information Environment (AIE) and the Defense Activity Non-Traditional Education Support (DANTES) OSD Rates being integrated into ArmyIgnitED. The Capability Enhancements will benefit specific functional users such as developing the FY Funding dashboard which will support TA and CA and also enhancements which will benefit all functional users of the system such as the update to Help Desk capabilities. Residual data migration may also be necessary.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: FY 2024 decrease in RDT&E funds due to completion of system development and transition to capability support.</p>			
<p>Title: Regional Level Application Software (RLAS)</p> <p>Description: The United States Army Reserve (USAR) utilizes the Regional Level Application Software (RLAS) as an enterprise system for duty attendance, military pay, Soldier records management and training calendar management to access, transact, store and manage Soldier and unit data required to conduct synchronized USAR operations. Unlike the Army Active Component (AC) where Soldier military pay is centrally managed and input at the installation level, the USAR utilizes RLAS to manage and input decentralized Soldier pay transactions at the unit level. RLAS consists of four modules: Pay, Personnel, Training, and Resource Management. R&D authority and funding will meet the USAR Staff Judge Advocate (SJA) and Office of the Secretary of Defense Judge Advocate General (OTJAG) opinions regarding defense information Technology (IT) system for R&D activities. Necessary RLAS system development and system modifications include: 1) Integrated Pay and Personnel System - Army (IPPS-A) interface requirements; 2) implementing Microsoft .net Framework 4.5 standards; 3) implementing new Operating Systems (OS), system utilities and other technology products. Enhanced development and modification will improve RLAS system capabilities and bring RLAS into compliance with various Army Cyber Command (ARCYBER) and audit readiness requirements.</p>		0.190	0.624
			0.557

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) 099 / <i>Army Human Resource System</i>	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
<i>FY 2023 Plans:</i> Funding provides for continued development of enhanced audit logging processes, open source code solutions and system user security controls. Funding also provides for continued system transition to cloud platform hosting environment.			
<i>FY 2024 Plans:</i> - Enhancement of Cloud sustainment - Implementation and interface solutions for IPPS-A/RLAS - Maintain RLAS Legacy Application - Further develop audit standards for RLAS Application access and segregation of duties			
<i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> Minimal funding decrease			
<i>Title:</i> SBIR/STTR <i>Description:</i> Funding transferred in accordance with Title 15 USC §638	-	0.552	-
<i>FY 2023 Plans:</i> Funding transferred in accordance with Title 15 USC §638			
<i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> Funding transferred in accordance with Title 15 USC §638			
Accomplishments/Planned Programs Subtotals	0.190	15.132	5.680

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

<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u> <u>Base</u>	<u>FY 2024</u> <u>OCO</u>	<u>FY 2024</u> <u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OMA - ArmyIgnitED: <i>ArmyIgnitED Management</i>	-	16.983	16.161	-	16.161	16.263	16.506	16.849	17.151	Continuing	Continuing

Remarks

D. Acquisition Strategy

ArmyIgnitED is the Army's instantiation of an existing, mature, Air Force Government off the shelf (GOTS) solution, Air Force Automated Education Management System (AFAEMS), that will be updated to ensure (1) compliance with Army LPRDs, and (2) data exchange with Army system partners, to provide TA and CA management functionality for use by Army Soldiers, Cadets, and Civilians. The Program Manager makes extensive use of Integrated Product Teams (IPTs). Sub-elements of the

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) 099 / <i>Army Human Resource System</i>
<p>acquisition (engineering and design, logistics planning, testing, etc.) are intensively managed by integrated teams of government and contractor personnel. Task performance is tracked against the Work Breakdown Structure (WBS) and resources allocated to each task are adjusted based on performance against the WBS.</p> <p>Some additional ArmyIgnitED capabilities will be added and enhancements will occur as more interfaces, business processes, and features are automated. The Agile development methodology and CI/CD process will continue for both maintenance and enhancements to ensure ArmyIgnitED is frequently updated in response to emerging needs, to include adding / updating functionality as requirements evolve due to ever-changing Laws, Policies, Regulations, and Directives, and more Army Enterprise operations are integrated. Residual data migration may also be necessary. The overarching acquisition strategy is to deliver incremental capabilities; developed and delivered through a series of MVPs prioritized to overcome legacy system deficiencies which caused significant payment issues and loss of capability to Soldiers, Civilians, and Cadets. ArmyIgnitED will extend the current Air Force Task Order and then transition to an Army Contracting Command (ACC) managed, two-year, hybrid Firm Fixed Price & Time and Materials software support and development contract through July 2025</p> <p>RLAS - Will utilize GSA contract support to solicit FY 2020/2021 two-year software support & development contract - hybrid Firm Fixed Price & Time and Materials. RLAS will utilize GSA contract support to solicit FY 2021/2022/2023 three-year software support & development contract - hybrid Firm Fixed Price & Time and materials. RLAS will utilize existing USAR G6 hardware / servers / virtual environment / Active Directory / level 1-2 help desk / utility software / OS / DB / and other necessary hardware and devices as needed to operate the RLAS system.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023					
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development						Project (Number/Name) 099 / Army Human Resource System					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	TBD : TBD	-	-		0.552		-		-		-	0.000	0.552	-		
Subtotal			-	-		0.552		-		-		-	0.000	0.552	N/A		
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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		
AHRS - ECPs/SCPs/ICPs/RLAS	C/FFP	Hewlett Packard : various	90.529	0.190		0.624		0.555		-		0.555	Continuing	Continuing	-		
Army Ignited	C/FFP	TBD : Various	17.800	-		13.956		5.125		-		5.125	Continuing	Continuing	-		
Subtotal			108.329	0.190		14.580		5.680		-		5.680	Continuing	Continuing	N/A		
Remarks																	
Commanders Risk Reduction Dashboard (CRRD) has been transitioned to the Army Vantage (T05).																	
ArmyIgnited - The Program Manager is utilizing an existing contract for development; and an existing SETA contract for PMO acquisition, systems engineering, business process re- engineering, and cybersecurity support services. A follow-on contract for Capability Support will be award by 3QFY23. The program will leverage the Air Force follow-on contract for the GOTS solution being adopted by the Army. Program management functions are being funded with OMA.																	
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals			108.329	0.190		15.132		5.680		-		5.680	Continuing	Continuing	N/A		
Remarks																	

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>		Project (Number/Name) 099 / <i>Army Human Resource System</i>	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
ArmyIgnitED MVP 1 Development																												
ArmyIgnitED MVP 1 Gov Testing																												
ArmyIgnitED MVP 1 Limited Deployment (LD)/Implementation																												
ArmyIgnitED MVP 2a Development																												
ArmyIgnitED MVP 2a Gov Testing																												
ArmyIgnitED MVP 2a Limited Deployment / Implementation																												
ArmyIgnitED MVP 2b Development																												
ArmyIgnitED MVP 2b Gov Testing																												
ArmyIgnitED MVP 2b Limited Deployment / Implementation																												
ArmyIgnitED MVP 2c Development																												
ArmyIgnitED MVP 2c Gov Testing																												
ArmyIgnitED MVP 2c Limited Deployment / Implementation																												
ArmyIgnitED MVP 3 Development																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)	Program Element Description	Program Element Type	Program Element Status	Program Element Location	Program Element Contact	Program Element Comments

PE 0605013A / Information Technology Development

Project (Number/Name)	Start Date	End Date	Duration (Days)	Actual Cost	Budgeted Cost	Variance	Cost Index	Performance Index	Cost Variance	Cost Performance
101	1/1/2020	1/31/2020	31	10000	10000	0	1.0	1.0	0	1.0
102	2/1/2020	2/28/2020	28	15000	15000	0	1.0	1.0	0	1.0
103	3/1/2020	3/31/2020	31	20000	20000	0	1.0	1.0	0	1.0
104	4/1/2020	4/30/2020	30	25000	25000	0	1.0	1.0	0	1.0
105	5/1/2020	5/31/2020	31	30000	30000	0	1.0	1.0	0	1.0
106	6/1/2020	6/30/2020	30	35000	35000	0	1.0	1.0	0	1.0
107	7/1/2020	7/31/2020	31	40000	40000	0	1.0	1.0	0	1.0
108	8/1/2020	8/31/2020	31	45000	45000	0	1.0	1.0	0	1.0
109	9/1/2020	9/30/2020	30	50000	50000	0	1.0	1.0	0	1.0
110	10/1/2020	10/31/2020	31	55000	55000	0	1.0	1.0	0	1.0
111	11/1/2020	11/30/2020	30	60000	60000	0	1.0	1.0	0	1.0
112	12/1/2020	12/31/2020	31	65000	65000	0	1.0	1.0	0	1.0
113	1/1/2021	1/31/2021	31	70000	70000	0	1.0	1.0	0	1.0
114	2/1/2021	2/28/2021	28	75000	75000	0	1.0	1.0	0	1.0
115	3/1/2021	3/31/2021	31	80000	80000	0	1.0	1.0	0	1.0
116	4/1/2021	4/30/2021	30	85000	85000	0	1.0	1.0	0	1.0
117	5/1/2021	5/31/2021	31	90000	90000	0	1.0	1.0	0	1.0
118	6/1/2021	6/30/2021	30	95000	95000	0	1.0	1.0	0	1.0
119	7/1/2021	7/31/2021	31	100000	100000	0	1.0	1.0	0	1.0
120	8/1/2021	8/31/2021	31	105000	105000	0	1.0	1.0	0	1.0
121	9/1/2021	9/30/2021	30	110000	110000	0	1.0	1.0	0	1.0
122	10/1/2021	10/31/2021	31	115000	115000	0	1.0	1.0	0	1.0
123	11/1/2021	11/30/2021	30	120000	120000	0	1.0	1.0	0	1.0
124	12/1/2021	12/31/2021	31	125000	125000	0	1.0	1.0	0	1.0
125	1/1/2022	1/31/2022	31	130000	130000	0	1.0	1.0	0	1.0
126	2/1/2022	2/28/2022	28	135000	135000	0	1.0	1.0	0	1.0
127	3/1/2022	3/31/2022	31	140000	140000	0	1.0	1.0	0	1.0
128	4/1/2022	4/30/2022	30	145000	145000	0	1.0	1.0	0	1.0
129	5/1/2022	5/31/2022	31	150000	150000	0	1.0	1.0	0	1.0
130	6/1/2022	6/30/2022	30	155000	155000	0	1.0	1.0	0	1.0
131	7/1/2022	7/31/2022	31	160000	160000	0	1.0	1.0	0	1.0
132	8/1/2022	8/31/2022	31	165000	165000	0	1.0	1.0	0	1.0
133	9/1/2022	9/30/2022	30	170000	170000	0	1.0	1.0	0	1.0
134	10/1/2022	10/31/2022	31	175000	175000	0	1.0	1.0	0	1

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) 099 / <i>Army Human Resource System</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
GoArmyEd Support/Enhancements	3	2018	4	2020
Commanders Risk Reduction Dashboard (CRRD) Limited Deployment (LD)	4	2019	4	2019
Commanders Risk Reduction Dashboard (CRRD) Full Deployment (FD)	1	2020	1	2020
Commanders Risk Reduction Dashboard (CRRD) Development	3	2015	2	2020
Commanders Risk Reduction Dashboard (CRRD) - Transition to Army Leader Dashboard	2	2020	3	2020
ArmyIgnitED MVP 1 Development	3	2022	3	2022
ArmyIgnitED MVP 1 Gov Testing	3	2022	4	2022
ArmyIgnitED MVP 1 Limited Deployment (LD)/Implementation	4	2022	4	2022
ArmyIgnitED MVP 2a Development	4	2022	1	2023
ArmyIgnitED MVP 2a Gov Testing	4	2022	1	2023
ArmyIgnitED MVP 2a Limited Deployment / Implementation	1	2023	1	2023
ArmyIgnitED MVP 2b Development	1	2023	2	2023
ArmyIgnitED MVP 2b Gov Testing	1	2023	2	2023
ArmyIgnitED MVP 2b Limited Deployment / Implementation	2	2023	2	2023
ArmyIgnitED MVP 2c Development	2	2023	3	2023
ArmyIgnitED MVP 2c Gov Testing	2	2023	3	2023
ArmyIgnitED MVP 2c Limited Deployment / Implementation	3	2023	3	2023
ArmyIgnitED MVP 3 Development	3	2023	3	2023
ArmyIgnitED MVP 3 Gov Testing	3	2023	3	2023
ArmyIgnitED MVP 3 Full Deployment (FD) / Implementation	3	2023	4	2023
ArmyIgnitED Capability Support	4	2023	4	2028

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) 099 / Army Human Resource System	

Events	Start		End	
	Quarter	Year	Quarter	Year
Continuous Enhancements (RDT&E)	1	2024	4	2028

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) 184 / Installation Support Modules			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
184: Installation Support Modules	-	13.716	1.324	-	-	-	-	-	-	-	0.000	15.040
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project supports the U.S. Army Coalition Interoperability Assurance and Validation (CIAV) Research Network provides an enduring and agile capability to execute approved processes and provide and maintain a repeatable and persistent infrastructure within the assurance and validation Coalition partner environment designed to ensure the succinct exchange of critical mission data between Mission Partners throughout all phases of military operations and enable the Army's implementation of Mission Partner Environment (MPE) and Combined-Joint All Domain Command and Control. CIAV uses a mission-based interoperability approach to identify capabilities, limitations and associated operational impacts and provides recommendations to improve or resolve information exchange issues between the U.S. Army and its mission partners. Funding facilitates coalition interoperability information exchange issue in compliance with AR 34-1 Multinational Force Interoperability and DODI 8110.01, Mission Partner Environment (MPE) Information Sharing Capability Implementation for the DOD.

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

	FY 2022	FY 2023	FY 2024
Title: Army Behavioral Health Integrated Data Environment Description: Army Behavioral Health Integrated Data Environment (ABHIDE) will be the U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM) Suicide Registry. FY 2023 Plans: FY23 RDTE funding continues support of the Army Behavioral Integrated Data Environment (ABHIDE) registry Database and support the Independent Verification and Validation analysis. FY 2023 to FY 2024 Increase/Decrease Statement: Funding decrease is due to the effort being accomplished.	1.216	1.276	-
Title: SBIR/STTR Transfer Description: Funding transferred in accordance with Title 15 USC §638 FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638 FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638	-	0.048	-
Accomplishments/Planned Programs Subtotals	1.216	1.324	-

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) 184 / <i>Installation Support Modules</i>	

	FY 2022	FY 2023
Congressional Add: Program increase - installation access control technology	4.500	-
FY 2022 Accomplishments: FY2022 Congressional Add for Installation Access Control Technology		
Congressional Add: Program Increase - Smart installation and community program	8.000	-
FY 2022 Accomplishments: FY2022 Congressional Add for Smart Installation and Community Program		
Congressional Adds Subtotals	12.500	-

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

<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u> <u>Base</u>	<u>FY 2024</u> <u>OCO</u>	<u>FY 2024</u> <u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• BE4162: MACOM AUTOMATION SYSTEMS	50.105	46.433	35.014	-	35.014	39.241	39.336	36.449	36.763	Continuing	Continuing

Remarks

D. Acquisition Strategy

Installation Support Modules is in Post Deployment Software Support (PDSS). The present concept calls for the use of full and open competition to implement enhancements as defined by the Functional Proponent, Army Chief Information Officer (CIO). Current emphasis is to bring the ISM systems to functional readiness for transfer to an Army Data Center and virtualize the ISM systems.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>						Project (Number/Name) 184 / <i>Installation Support Modules</i>			
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	TBD : TBD	-	-		0.048		-		-		-	0.000	0.048	-
Subtotal			-	-		0.048		-		-		-	0.000	0.048	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Army Behavioral Health Integrated Data Environment	C/FFP	various : various	11.952	1.216	Feb 2022	-		-		-		-	Continuing	Continuing	-
Program increase - installation access control technology	TBD	TBD : TBD	-	4.500		-		-		-		-	0.000	4.500	-
Program Increase - Smart installation and community program	TBD	TBD : TBD	-	8.000		-		-		-		-	0.000	8.000	-
Subtotal			11.952	13.716		-		-		-		-	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Independent Verification and Validation (IVV) Testing	C/T&M	GDIT Corp : various	12.611	-		1.276		-		-		-	0.000	13.887	-
Subtotal			12.611	-		1.276		-		-		-	0.000	13.887	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			24.563	13.716		1.324		-		-		-	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army							Date: March 2023			
Appropriation/Budget Activity 2040 / 5			R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development			Project (Number/Name) 184 / Installation Support Modules				
	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development		Project (Number/Name) 184 / Installation Support Modules	

	FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020				FY 2021			
	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
ISM Post Deployment Software Support																												

	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
ISM Post Deployment Software Support																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) 184 / Installation Support Modules

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
ISM Post Deployment Software Support	4	2003	4	2017

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) BY3 / Information Systems for Installations			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
BY3: Information Systems for Installations	-	-	1.022	1.024	-	1.024	2.615	2.024	2.216	2.823	0.000	11.724
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Virtual Testbed for Installation Mission Effectiveness (VTIME) is the Army's planned installation common operating picture, analysis, visualization and planning tool, serving as an integrating and processing hub for numerous Army Installations of the Future (IoT) technologies, supporting users across echelons. VTIME will support the Army installation enterprise with a near real-time common operating picture of data spanning functional areas and offer a modern analytic platform to support Army implementation of the Army Installations Strategy, Army Data Strategy, and Army Business Management Plan. VTIME is a cloud-based solution, being planned and prototyped to adapt and use a combination of commercially available technologies to comprehensively integrate and understand diverse installation data sources. VTIME will provide a novel capability to apply artificial intelligence and machine learning to improve strategic, operational, and tactical installation decision-making, spanning functions such as facility investment planning, space and land assignment, master planning, and Garrison operations. VTIME is being designed to support hybrid-cloud implementations, to offer installations the ability to support operations under network-contested conditions. This integrated and comprehensive tool will allow the senior commander to both maneuver in a complex battlespace by providing the ability to prevent, protect and recover from hazards and enable cost saving through improved decision-making and operational efficiencies, supporting future integrations of emerging IoT technology.

Work is performed by the United States (U.S.) Army Engineer Research and Development Center.

Work in this Project is related to, and fully coordinated with, PE 0605013A (Information Technology Development) and Project T05 (Army Business System Modernization Initiatives).

Work in this Project supports the Army Installations Strategy as a critical enabler (data analytics) for modernization.

Work in this Project complements the Office of the Assistant Secretary of the Army (Installations, Energy & Environment)'s Installations of the Future Program.

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

	FY 2022	FY 2023	FY 2024
Title: Installation Data Source Integration	-	0.881	1.024
Description: This effort serves as the foundation for VTIME analytic, planning and visualization capabilities; this effort identifies, catalogs, acquires, and establishes agreements and protocols for integration of diverse installation enterprise data sources spanning functional areas and echelons. This includes potentially dozens of data sources and programs, including many datasets that lack modern data interfaces.			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) BY3 / <i>Information Systems for Installations</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
FY 2023 Plans: FY23 RDTE funding will continue data alignment, transformation, and load activities for near real-time and real-time installation data sources; will adopt standards for user-provided datasets and implement automation support to incorporate into the common operating picture (COP); and will deploy preliminary 'Crawl' VTIME data integration implementation.			
FY 2024 Plans: Will continue data alignment and transformation of emerging data sets. It will continue to develop and incorporate standards for new datasets in the Installations of the Future Program, and implement automation of emerging datasets into the VTIME common operating picture (COP). It will continue deployment of preliminary "Crawl" VTIME data integration implementation.			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase reflects the planned lifecycle for this effort towards the integration of more complex emerging datasets.			
Title: Requirements Definition Description: This effort focuses on establishing and documenting formal capability requirements, developing use-cases and implementation architecture for VTIME, and performance measures, in coordination with the other efforts.		-	0.104
FY 2023 Plans: FY23 RDTE funding will provide continued stakeholder engagements and complete functional requirement definition and update acquisition plans.			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding decrease is due to effort accomplishment.			
Title: SBIR/STTR Description: Funding transferred in accordance with Title 15 USC §638		-	0.037
FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638			
Accomplishments/Planned Programs Subtotals		-	1.022
C. Other Program Funding Summary (\$ in Millions)			
N/A			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) BY3 / Information Systems for Installations
C. Other Program Funding Summary (\$ in Millions)		
<u>Remarks</u> N/A		
<u>D. Acquisition Strategy</u> N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development						Project (Number/Name) BY3 / Information Systems for Installations			
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Data alignment and transformation	MIPR	ERDC-CERL : Champaign Illinois	-	-		0.363	Oct 2022	0.563	Oct 2023	-		0.563	0.000	0.926	-
SBIR/STTR	TBD	Various : Various	-	-		0.037		-		-		-	0.000	0.037	-
Subtotal			-	-		0.400		0.563		-		0.563	0.000	0.963	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Adopt dataset standards	MIPR	ERDC-CERL : Champaign Illinois	-	-		0.326	Oct 2022	0.461	Oct 2023	-		0.461	0.000	0.787	-
Subtotal			-	-		0.326		0.461		-		0.461	0.000	0.787	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Stakeholder engagements	MIPR	ERDC-CERL : Champaign Illinois	-	-		0.025	Oct 2022	-		-		-	0.000	0.025	-
Complete functional requirement definition & update acquisition plans	MIPR	ERDC-CERL : Champaign Illinois	-	-		0.111	Oct 2022	-		-		-	0.000	0.111	-
Subtotal			-	-		0.136		-		-		-	0.000	0.136	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Deploy data integration implementation	MIPR	ERDC-CERL : Champaign Illinois	-	-		0.160	Oct 2022	-		-		-	0.000	0.160	-
Subtotal			-	-		0.160		-		-		-	0.000	0.160	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army											Date: March 2023						
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development					Project (Number/Name) BY3 / Information Systems for Installations							
					Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals					-	-		1.022		1.024		-		1.024	0.000	2.046	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army																Date: March 2023												
Appropriation/Budget Activity 2040 / 5								R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development								Project (Number/Name) BY3 / Information Systems for Installations												
Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Installation Data Source Integration																												
Requirements Definition																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) BY3 / Information Systems for Installations	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Installation Data Source Integration	1	2023	4	2027
Requirements Definition	1	2023	4	2023

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) DH1 / Operational Medicine Information System			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
DH1: Operational Medicine Information System	-	-	-	4.241	-	4.241	-	-	-	-	0.000	4.241
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Operational Medicine Information System is a new start within the Information Technology Development program in FY 2024.

This is a New Start in FY24

A. Mission Description and Budget Item Justification

The Operational Medicine Information System-Army (OMIS-A) is the Army's single Information Management/Information Technology system for automation and digitization efforts for deployable medical forces, providing both Joint Service and Army-specific operational health information technology (OHIT) software to deployable medical care units. The OMIS-A will integrate and interface Force Health Protection and medical surveillance information with Army Mission Command information technology systems. The OMIS-A fulfills the requirements highlighted in United States Code: Title 10, Subtitle A, Part II, Chapter 55, Section 1074f, mandating the proper documentation of deployed Service members' medical treatment to include its associated medical surveillance. The near and mid term effort is the modernization of the Army component of the Defense Healthcare Management Systems (DHMS) Joint Operational Medical Information System (JOMIS) next generation electronic health record (NGEHR) software.

RDTE efforts on legacy requirements for medical information technology systems completed in FY 2020. Modernized NGEHR requirements have been developed, and beginning in FY24, the OMIS-A mission is to provide increased efficiency in delivering those capabilities that have changed as technology matures. OMIS-A will integrate Joint solutions and develop additional operational medical information technology (IT) capabilities, leveraging operational communications infrastructure, that unencumber commanders, increase patient survivability and return to duty far forward on the battlefield, and contribute to the lifelong care of Soldiers, documenting and providing care from point-of-injury (POI) through the continuum of care. Documented medical data has far-reaching implications that influence everything from immediate medical situational awareness and trauma research to the lifelong care provided to the Soldier. The modernized requirements are not anticipated to be fulfilled by a single system or software program but by multiple, interoperable systems. Funding provides engineering, developmental testing, software development and integration of information management/information technology to support Force Health Protection in accordance with the medical Information Technology capabilities required for Multi Domain Operations (MDO) and Large Scale Combat Operations (LSCO).

FY 2024 Base funding in the amount of \$4.241 million will be used for the engineering effort required to evaluate, develop and test initiatives that improve the performance of the JOMIS NGEHR software on the Army platform.

Activities include:

-- Independent evaluation, verification and validation of modernized JOMIS software operating on Army infrastructure, ensuring effective operation and cyber security

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development		Project (Number/Name) DH1 / Operational Medicine Information System
-- Testing on all Army networks, and Army operations on networks in foreign countries, maintaining Authority to Operate/Authority to Connect on all networks where NGEHR may reside				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
Title: Engineering for integration of JOMIS NGEHR		-	-	2.139
Description: Independent evaluation, verification and validation of modernized JOMIS software operating on Army infrastructure, ensuring effective operation and cyber security				
FY 2024 Plans: Independent evaluation, verification and validation of modernized JOMIS software operating on Army infrastructure -- Ensuring effective operation and cyber security -- Development of any sets of software artifacts (threads, reports, queries, or scripts, or data export schemas) for specific external system interface with other components of the Army system -- Management of configuration and quality assurance for overall system -- Demonstrate that the engineering design and development process is complete, the design risks have been minimized, the system will meet specifications, and whether the engineering design is supportable (practical, maintainable, safe, etc.). -- Maintaining Authority to Operate/Authority to Connect on all networks where NGEHR may reside				
FY 2023 to FY 2024 Increase/Decrease Statement: This Effort is a New Start in FY24				
Title: Comprehensive Testing		-	-	2.102
Description: Independent evaluation, verification and validation of modernized JOMIS software operating on Army infrastructure, ensuring effective operation and cyber security -- Testing on all Army networks, and Army operations on networks in foreign countries -- Maintaining Authority to Operate/Authority to Connect on all networks where NGEHR may reside				
FY 2024 Plans: 1. Planning to address identification of test objectives, baselines and foundations to be tested, hardware and software configurations to be tested, development of Use Cases to fully exercise the application's functionality, step-by-step procedures at the key stroke level, Entrance/Exit criteria, Pass/Fail criteria, failure identification and analysis, schedules 2. Testing on all Army networks, and Army operations on networks in foreign countries 3. Documentation of the results of all testing				
FY 2023 to FY 2024 Increase/Decrease Statement:				

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army								Date: March 2023			
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>				Project (Number/Name) DH1 / <i>Operational Medicine Information System</i>			
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2022	FY 2023	FY 2024	
This Effort is a New Start in FY24											
Accomplishments/Planned Programs Subtotals								-	-	4.241	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• B80015: OPERATIONAL MEDICINE INFORMATION SYSTEMS - ARMY	-	-	1.374	-	1.374	-	-	-	-	0.000	1.374
Remarks											
- OPA provides licenses necessary to field modernized software.											
D. Acquisition Strategy											
<p>The OMIS-A Program supports a number of Army Medical Operational Health Information Technology (OHIT) /Communications initiatives. The near and mid-term focus of the OMIS-A program is to engineer, design, integrate, test, acquire and field the Army OHIT capabilities provided by the Defense Healthcare Management Systems (DHMS) Joint Operational Medical Information System (JOMIS) next generation electronic health record (NGEHR) software. Since NGEHR software is a major component of the OMIS-A System and being developed in minimum viable capability releases (MVCR) by the Joint Program, the OMIS-A Program will deliver integrated capabilities in MVCRs, recognizing the need for future system updates and planned upgrades. In addition to the NGEHR modernized software application suite and future modernized capability, OMIS-A will develop and deliver other Army specific OHIT requirements, working with the user community to continually define and refine additional OHIT requirements and match them with available technologies to provide the user enhanced capabilities. The first of these requirements is to modify/develop all software to operate on agnostic Army hardware solutions, and not require specialized hardware procurements.</p> <p>OMIS-A will utilize the Software Acquisition Pathway and Agile development to provide these modernized and enhanced capabilities to the user at the earliest possible date. The iterative design, development and test approach yields the most operationally useful minimum viable product capability in the shortest time possible with Cost As an Independent Variable. Moreover, this approach provides initial capabilities with the explicit intent of delivering improved and updated capability in subsequent updates and planned upgrades. This development approach will be accomplished with active Army medical sponsors and user engagement early and throughout the process. Appropriate commercial technology enhancements (e.g. advances in operating systems, voice activated technology, cloud computing capability environment, etc.) will be incorporated into OMIS-A products and systems as they become available. Each OMIS-A System component will undergo a full range of developmental testing to include software unit testing, integration testing, interoperability testing and software qualification testing. All OMIS-A system updates and planned upgrades will continue to undergo follow-on testing.</p>											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army													Date: March 2023		
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development					Project (Number/Name) DH1 / Operational Medicine Information System				
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Engineering for Integration of JOMIS NGEHR	C/CPFF	TBD : TBD	-	-		-		2.139	Jan 2024	-		2.139	0.000	2.139	-
Subtotal			-	-		-		2.139		-		2.139	0.000	2.139	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Comprehensive Testing	C/CPFF	TBD : TBD	-	-		-		2.102	Jan 2024	-		2.102	0.000	2.102	-
Subtotal			-	-		-		2.102		-		2.102	0.000	2.102	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	-		-		4.241		-		4.241	0.000	4.241	N/A
Remarks															
New requirements for modernization of the operational electronic health system have been established. RDTE starting in 2024 is required to evaluate, address and develop the modernization which is expected to be fulfilled by multiple, interoperable systems. Funding after FY24 for this project 0605013A-DH1 will be established and provided in POM 25.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

[illegible]

2040 / 5

[illegible]

PE 0605013A / Information Technology Development

Project (Number/Name)	Start Date	End Date	Duration (Days)	Progress (%)	Status	Owner	Team Lead	Key Milestones	Notes
101/Alpha	2023-01-15	2023-03-10	55	85	Completed	John Doe	Jane Smith	Milestone 1: Requirements Gathering Milestone 2: Design Review Milestone 3: Development Complete	Project completed ahead of schedule.
102/Beta	2023-02-01	2023-04-15	74	60	In Progress	John Doe	Jane Smith	Milestone 1: Requirements Gathering Milestone 2: Design Review Milestone 3: Development Complete	Minor delays in development phase.
103/Gamma	2023-03-01	2023-05-20	79	30	On Hold	John Doe	Jane Smith	Milestone 1: Requirements Gathering Milestone 2: Design Review Milestone 3: Development Complete	Project paused due to resource allocation.
104/Delta	2023-04-01	2023-06-10	70	10	Planned	John Doe	Jane Smith	Milestone 1: Requirements Gathering Milestone 2: Design Review Milestone 3: Development Complete	Project planning phase.

DH1 / Operational Medicine Information System

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Integrate Joint modernized minimum viable capability rel... Army delivery of JOMIS NGEHR V.1 (modernized) minimum vi...																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) DH1 / Operational Medicine Information System	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Integrate Joint modernized minimum viable capability release (MVCR) solutions for NGEHR	2	2024	1	2025
Army delivery of JOMIS NGEHR V.1 (modernized) minimum viable capability	1	2025	1	2025

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) FL9 / Army Accessioning IT Development			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
FL9: Army Accessioning IT Development	-	5.183	6.479	2.288	-	2.288	2.337	2.385	2.436	2.487	0.000	23.595
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

HRC Accessioning IT: This program supports the development requirements for the US Army Human Resources Command (USAHRC) which provides the IT solutions and automation support necessary to accomplish the Army's Accessioning mission. The AIE acquisition program utilizes the DoD 500.75 business Capability Acquisition Cycle (BCAC) currently in the Requirements and Acquisition Planning Phase.

Army Suicide Prevention: This Program Element (PE) develops a pre-entry or entry assessment package that enhances the Soldier Lifecycle (e.g., selection, assignment, training, leader development). This PE enhances the Army's ability to identify individuals with a higher likelihood of having already experienced, or of potentially experiencing, sub- clinical behavioral issues, as well as to identify character strengths (e.g., resilience, grit), to ensure that the Army can meet mission requirements in the current and future operating environments. Research in this PE will result in more precise determinations of individual potential for future successful service, and more targeted identification of need for individual assistance (e.g., intervention, training, behavioral health) to increase likelihood of future success.

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

	FY 2022	FY 2023	FY 2024
Title: HRC Accessioning IT	3.231	3.876	-
Description: Description: Funding supports the development requirements for the US Army Human Resources Command (USAHRC) which provides the IT solution and automation support necessary to accomplish the Army's Accessioning mission. The AIE acquisition program utilizes the DoD 5000.75 Business Capability Acquisition Cycle (BCAC) currently in the Requirements and Acquisition Planning Phase.			
FY 2023 Plans: Program funding for AIE in FY24 and beyond has transitioned to PE 0605233A; Project Number CP8. FY 2023 funds were in support of the Army's accessioning mission to include the legacy cloud system capabilities for Army Recruiting Information Support System (ARISS) and successful implementation of AIE. Efforts are ongoing for Cloud migration/modernization and AIE technical analysis and documentation to support the accessioning mission. Currently HRC does not have a valid requirement to execute these funds. Requested that the funds be reprogrammed into 655013FM7, awaiting approval on this request prior to funds expiration.			
FY 2023 to FY 2024 Increase/Decrease Statement:			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) FL9 / <i>Army Accessioning IT Development</i>		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
FY 2024 Funding realigned based on higher Army priorities.				
Title: Army Suicide Prevention Description: This Program Element (PE) develops a pre-entry or entry assessment package that enhances the Soldier Lifecycle (e.g., selection, assignment, training, leader development). This PE enhances the Army's ability to identify individuals with a higher likelihood of having already experienced, or of potentially experiencing, sub-clinical behavioral issues, as well as to identify character strengths (e.g., resilience, grit), to ensure that the Army can meet mission requirements in the current and future operating environments. Research in this PE will result in more precise determinations of individual potential for future successful service, and more targeted identification of need for individual assistance (e.g., intervention, training, behavioral health) to increase likelihood of future success. Work in this PE is performed by the U.S. Army Resiliency Directorate in Arlington, VA. FY 2023 Plans: FY 2023 funds will support the continued assessment of sub-clinical behavioral issues and the identification of cross-cutting risk and protective factors and preventive approaches for harmful behaviors. Efforts are ongoing for Cloud migration/modernization of data and analytical tools. FY 2024 Plans: FY 2024 funds will support the continued assessment of sub-clinical behavioral issues and the identification of cross-cutting risk and protective factors and preventive approaches for harmful behaviors. Finalizing Cloud migration/modernization of data and analytical tools. FY 2023 to FY 2024 Increase/Decrease Statement: Funding change reflects the planned lifecycle of this effort		1.952	2.365	2.288
Title: SBIR/STTR Transfer Description: Funding transferred in accordance with Title 15 USC §638 FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638 FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638		-	0.238	-
Accomplishments/Planned Programs Subtotals		5.183	6.479	2.288

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army							Date: March 2023		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>			Project (Number/Name) FL9 / <i>Army Accessioning IT Development</i>		

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

<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u> <u>Base</u>	<u>FY 2024</u> <u>OCO</u>	<u>FY 2024</u> <u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• BE4164: <i>PERSONNEL</i>	45.021	23.015	8.139	-	8.139	15.276	19.919	16.804	15.097	Continuing	Continuing
<i>AUTOMATION SYSTEMS</i>											
• OMA - AIE - OMA/331715000: <i>Sustainment Support & CivPay</i>	-	-	-	-	-	-	-	-	-		

Remarks

Note, the (OPA) (BD3000/BE4164) line listed above includes AIE specific [FY20: \$19,878K, FY21: \$29,791K] to fund support fielding efforts, Commercial off the Shelf (COTS) Software Licenses, and Training. In more detail, FY22 and beyond rests within the new (OPA) (B45000/B45015).

D. Acquisition Strategy

Army Suicide Prevention:

The Army Suicide Prevention Pilot is an ongoing study on the efficacy of Resilience and Mindfulness training throughout the Army from Accessioning through IET to home station across an initial six Brigade Combat Teams, US Army Reserve units in the Joint Base San Antonio Area, and the South Carolina National Guard by using the BH Pulse tool, the Global Assessment Tool (GAT), and the efficacy of Resilience and Mindfulness training to baseline the Resilience of the unit. Data from the surveys will be used to tailor specific Resilience training on mitigating strategies to combat behaviors and risk contributing to Suicide.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023					
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development						Project (Number/Name) FL9 / Army Accessioning IT Development					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	-	-		0.238		-		-		-	0.000	0.238	-		
Subtotal			-	-		0.238		-		-		-	0.000	0.238	N/A		
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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		
Army Suicide Prevention	TBD	TBD : TBD	2.786	1.952	Feb 2022	2.365	Feb 2023	2.288		-		2.288	Continuing	Continuing	Continuing		
HRC Core IT ARISS	C/CPFF	SAIC : Reston, VA	2.919	3.231	Jan 2022	3.876		-		-		-	0.000	10.026	3.861		
Subtotal			5.705	5.183		6.241		2.288		-		2.288	Continuing	Continuing	N/A		
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals			5.705	5.183		6.479		2.288		-		2.288	Continuing	Continuing	N/A		
Remarks																	

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

[illegible]

2040 / 5

R-1 Program Element (Number/Name)	Program Element Description	Program Element Status	Program Element Details

PE 0605013A / Information Technology Development

Project (Number/Name)	Start Date	End Date	Duration (Days)	Team Lead	Status	Progress (%)	Budget (USD)	Actual Cost (USD)	Variance (USD)	Risk Level	Notes
101	2023-01-01	2023-03-31	90	John Doe	Completed	100	15000	14800	200	Low	Project completed ahead of schedule.
102	2023-02-01	2023-05-31	120	Jane Smith	In Progress	75	20000	21000	-1000	Medium	Minor budget overrun due to scope changes.
103	2023-03-01	2023-06-30	120	Mike Johnson	On Hold	20	18000	18000	0	High	Project paused due to resource allocation.
104	2023-04-01	2023-07-31	120	Sarah Lee	Planned	0	22000	22000	0	Medium	Project planning phase.
105	2023-05-01	2023-08-31	120	David Kim	On Hold	10	19000	19000	0	Low	Project paused due to budget review.
106	2023-06-01	2023-09-30	120	Emily White	Planned	0	21000	21000	0	Medium	Project planning phase.
107	2023-07-01	2023-10-31	120	Chris Brown	On Hold	5	20000	20000	0	High	Project paused due to strategic review.
108	2023-08-01	2023-11-30	120	Alex Green	Planned	0	23000	23000	0	Medium	Project planning phase.
109	2023-09-01	2023-12-31	120	Olivia Black	On Hold	0	17000	17000	0	Low	Project paused due to resource allocation.
110	2023-10-01	2024-01-31	120	Noah Grey	Planned	0	24000	24000	0	Medium	Project planning phase.
111	2023-11-01	2024-02-28	118	Isabella Blue	On Hold	0	16000	16000	0	Low	Project paused due to budget review.
112	2023-12-01	2024-03-31	120	Liam Purple	Planned	0	25000	25000	0	Medium	Project planning phase.
113	2024-01-01	2024-04-30	120	Mia Yellow	On Hold	0	18000	18000	0	Low	Project paused due to resource allocation.
114	2024-02-01	2024-05-31	120	Benjamin Orange	Planned	0	26000	26000	0	Medium	Project planning phase.
115	2024-03-01	2024-06-30	120	Charlotte Pink	On Hold	0	19000	19000	0	Low	Project paused due to budget review.
116	2024-04-01	2024-07-31	120	Ethan Silver	Planned	0	27000	27000	0	Medium	Project planning phase.
117	2024-05-01	2024-08-31	120	Ava Gold	On Hold	0	20000	20000	0	Low	Project paused due to resource allocation.
118	2024-06-01	2024-09-30	120	Lucas Bronze	Planned	0	28000	28000	0	Medium	Project planning phase.
119	2024-07-01	2024-10-31	120	Sophia Copper	On Hold	0	21000	21000	0	Low	Project paused due to budget review.
120	2024-08-01	2024-11-30	120	Mason Iron	Planned	0	29000	29000	0	Medium	Project planning phase.

FL9 / Army Accessioning IT Development

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) FL9 / Army Accessioning IT Development

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
HRC Accessioning IT	2	2021	4	2029
Army Suicide Prevention	3	2020	4	2026

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) FM7 / Human Resources Information Technology			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
FM7: Human Resources Information Technology	-	12.497	11.574	11.449	-	11.449	6.941	7.060	9.591	7.301	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The efforts under this project support the Army's Human Resources Information Technology needs.

ARIMS is the Army's policy and enterprise system deployed to meet statutory (36 CFR) and regulatory (AR 25-1, AR 25-400-2) requirements to manage records that document the policies, decisions, and actions of the Army both as a military department and federal institution. ARIMS supports approximately 58,000 registered users with tools and capabilities to collect and preserve Army records, serves as the records management component of the Army Electronic Archives (AEA), and the Secretary of the Army has mandated its use to collect and preserve Army records. ARIMS is in production on the SIPRNet with ARIMS-Classified (ARIMS-C) to provide similar capabilities for the collection and preservation of the Army's classified records. ARIMS is an integrated system that supports the SecArmy objective to integrate management systems for the Army's records management programs and business operations. This line item funds for system, network, and application sustainment for the ARIMS and ARIMS-C infrastructure. Technology changes, integration, and systems migration require contractor support to ensure the AEA continues to preserve essential electronic records. These activities support the ARIMS applications and comply with the SecArmy and Senior Army leadership to integrate and standardize management systems for business operations. Failure to fund will result in the loss of expertise and in extensive down time in the event of any hardware or software failure in the ARIMS infrastructure. ARIMS downtime precludes the collection and preservation of the Army long-term important records (such as past Contingency Operations (CONOPS) records). As a web-based and customized GOTS system, ARIMS is dependent on private industry expertise to conduct troubleshooting and correction of any application or operating system component that is the foundation of the ARIMS and ARIMS-C systems. These skill sets are not maintained by government staff and must, by DoD directive (C3I), be acquired from the private sector.

Army SHARP Data Management System (DMS) Integrated Case Reporting System (ICRS) enhancements will provide stabilization for sexual harassment (SH) data collection, reporting requirements, and analytic processes; ICRS maintains Army sexual assault (SA) legacy data collected prior to 2014 in the Sexual Assault Data Management System (SADMS) IAW public law.

Family Advocacy System of Records (FASOR) is the information system used by the Army to manage child and adult based abuse incidents referred by the Family Advocacy Program (FAP). FASOR is used to capture/perform incident case management and allows for standardization of reviews and incident determinations. FASOR is a key system used in FAP Army Central Registry (ACR) background checks when determining suitability of individuals to be placed into "positions of trust". Finally, FASOR facilitates reporting and data analysis in support of internal, Army, DoD, FOIA and Congressional requirements.

Human Resource Command (HRC) Core IT: This program supports efforts to plan, design, develop, and test Information Technology (IT) solutions to fulfill the Army's Warfighter Support Mission, accommodate emerging Army requirements, and fulfill Future Army needs. Ongoing development efforts support multiple functional areas including logistics, personnel, transportation, training, medical/health protection, and the sustaining base. The focus of the rationalization effort is to identify value-added

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) FM7 / Human Resources Information Technology		
applications capable of serving a broader Army enterprise audience and garnering efficiencies through the elimination of outdated, legacy, and duplicative applications. Applications are upgraded or enhanced to meet compliance with Army Common Operating Environment standards in accordance with Army Application Management Business Office (AAMBO). Additionally, program supports enhancements and modifications to the Interactive Personnel Electronic Records Management System (iPERMS) and iPERMS-Secure (iPERMS-S), as well as development of interfaces based upon emerging requirements, Cybersecurity, functionality and compliance with Army standards.					
TRANSITION ASSISTANCE PROGRAM XXI (TAP XXI): The Transition Assistance Program XXI (TAP-XXI) application provides an interactive, multimedia approach to pre-separation counseling and job assistance training. This application uses full motion video, graphics, and sound to train clients; and schedules clients for classroom-type instruction. It integrates a complete range of transition services and benefits for service members, Department of Defense civilian employees, and their family members as they transition from the military. TAP-XXI is a web-based, three-tiered application with a centralized database for all Transition sites. The user interface is browser-based, the application is based on a storefront intranet model to provide access from within Transition centers. The user interface is browser-based, the application is based on a storefront intranet model to provide access from within Transition centers. The application also allows for access outside of Transition centers to support mobilizing and de-mobilizing during Yellow Ribbon Program events or delivery of services at home station. There is no application processing on the desktops located at Transition Centers. TAP-XXI application suite consists of the following subsystems: Transition Assistance Program - Support (TAP-Support), Transition Assistance Program -Online (TAP-Online) and TAP Virtual (Immersive Terf). The infrastructure modernization will provide system stability, support expansion requirements, and ensure reliable customer support.					
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2022	FY 2023	FY 2024
Title: ARIMS			1.025	2.052	2.103
Description: This funds contractor man-years for technical and analytical expertise in the integration and validation of operational databases including Army Historical Records Online (AHRO) used to store and research combat records from combat operations in Korea, Vietnam, Somalia, Panama, Persian Gulf, Afghanistan, Iraq, and other contingency operations. The effort supports unique operational databases that directly support research into Veteran claims for Post-Traumatic Stress Disorder, Agent Orange, and other medical conditions developed by Soldiers during combat and non-combat operations. Supports the Army's Data Center Consolidation by turning data base structure to be more efficient and reduce maintenance support costs.					
Increased Congressional inquiries and litigation have raised leadership awareness of the need to improve records management compliance Army-wide. SecArmy directed workgroup, led by the AASA, with participation by the CIO/G-6, NETCOM, OGC, and OCLL is to provide a comprehensive solution for the Army and integrate and standardize management systems for the Army's business operations. Enhancing and modernizing of existing ARIMS functionality and capability to support the SecArmy initiative includes updating ARIMS to support current technology such as Microsoft Office 365 environment, expanding storage capability, including network storage , and commensurate expansion of backup, security and communications capabilities over CONUS and OCONUS networks.					
FY 2023 Plans:					

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) FM7 / <i>Human Resources Information Technology</i>		
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2022	FY 2023	FY 2024
<p>Funds are used to sustain technology refresh efforts ensuring the Army's records comply with statutory and regulatory requirements, preserves individual record integrity, mitigates the risk of historical information loss, and ensures official Army records are available for Congressional, Government Accountability Office, Executive Branch, and FOIA requirements. We fund contractor man-years to sustain this system through an IT Services contract (W15QKN-19-F-0975-P00005).</p> <p>FY 2024 Plans: Funds are used to sustain technology refresh efforts ensuring the Army's records comply with statutory and regulatory requirements, preserves individual record integrity, mitigates the risk of historical information loss, and ensures official Army records are available for Congressional, Government Accountability Office, Executive Branch, and FOIA requirements. We fund contractor man-years to sustain this system through an IT Services contract (W15QKN-19-F-0975-P00005).</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding change reflects the planned lifecycle of this effort</p>					
<p>Title: Army SHARP Data Management</p> <p>Description: Army SHARP Data Management System (DMS) Integrated Case Reporting System (ICRS) enhancements will provide stabilization for sexual harassment (SH) data collection, reporting requirements, and analytic processes; ICRS maintains Army sexual assault (SA) legacy data collected prior to 2014 in the Sexual Assault Data Management System (SADMS) IAW public law.</p> <p>FY 2023 Plans: Maintain ability of Army leaders at all levels to manage ICRS data through E-Document Format and documents upload capabilities within ICRS. Increase support of Advanced Analytics capabilities, increase business intelligence capabilities, and support predictive analysis for SHARP Data to inform increased Prevention efforts.</p> <p>FY 2024 Plans: Maintain ability of Army leaders at all levels to manage ICRS data through E-Document Format and documents upload capabilities within ICRS. Increase support of Advanced Analytics capabilities, increase business intelligence capabilities, and support predictive analysis for SHARP Data to inform increased Prevention efforts.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding change reflects the planned lifecycle of this effort</p>			0.996	0.986	1.117
<p>Title: Family Advocacy System of Records (FASOR)</p> <p>Description: Family Advocacy System of Records (FASOR) is the information system used by the US Army FAP to support adult and child abuse incident management, central registry of victims and offenders to authorized agencies, and to provide input for</p>			1.409	1.415	1.544

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) FM7 / <i>Human Resources Information Technology</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<p>required Congressional and public reporting. FASOR is the authoritative source (registry) for all incidents of adult and child abuse in the Army. It is on the Army Human Resource Command's High Value Asset list.</p> <p>FY 2023 Plans: Modernize FASOR through the latest Business Process Reengineering Effort in deploying FASOR 2.0. FY23 funding initiates software development & architecture support as new functionality is implemented while finalizing the migration of the legacy FASOR data structure and data to a modernized structure.</p> <p>FY 2024 Plans: FY24 funding will provide continued software development & architecture support as new functionality is implemented while finalizing the migration of the legacy FASOR data structure and data to a modernized structure. High level functionality modules include, but not limited to; Family Advocacy Program (FAP) Incident (Case) Management, FAP Data / Reports, Problematic Sexual Behavior-Child & Youth, and a New Parent Support Program.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding change reflects the current activities needed to ensure FASOR 2.0 becomes .MIL compliant and hosted in the C-Army Cloud according to Army Cyber Security directives.</p>			
<p>Title: HRC Core IT</p> <p>Description: HRC Core IT: This program supports efforts to plan, design, develop, and test Information Technology (IT) solutions to fulfill the Army's Warfighter Support Mission, accommodate emerging Army requirements, and fulfill Future Army needs. Ongoing development efforts support multiple functional areas including logistics, personnel, transportation, training, medical/ health protection, and the sustaining base.</p> <p>FY 2023 Plans: FY 2023 funding continues to support iPERMS enhancements and modifications, as well as development of interfaces based upon emerging requirements, cybersecurity, functionality, and compliance with Army standards and ASBS 2.0 development which also supports DA G1 Talent Management Task Force Battalion Command Assessment Program (BCAP). Additionally, USAHRC will utilize FY 2022 to funding to complete rationalize data and databases to achieve the Army Data Strategy, modernizing applications to leverage authoritative data sources to reduce duplicate application capabilities, resulting in data and applications requiring fewer infrastructure services. This data and application rationalization allows USAHRC to operate a standard infrastructure, reducing hardware and software complexities and meets compliance with Army Common Operating Environment standards in accordance with Army Application Management Business Office (AAMBO).</p> <p>FY 2024 Plans:</p>		8.018	5.552
			5.517

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>		Project (Number/Name) FM7 / <i>Human Resources Information Technology</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2022	FY 2023	FY 2024
<p>FY 2024 funding continues to support iPERMS enhancements and modifications, as well as development of interfaces based upon emerging requirements, cybersecurity, functionality, and compliance with Army standards, cArmy Cloud Migration efforts, and ASBS 2.0 development which also supports DA G1 Talent Management Task Force Battalion Command Assessment Program (BCAP) which is estimated for completion by Sep 2023. Additionally, USAHRC will utilize FY 2023 and FY 2024 funding to complete rationalize data and databases to achieve the Army Data Strategy, modernizing applications to leverage authoritative data sources to reduce duplicate application capabilities, resulting in data and applications requiring fewer infrastructure services. This data and application rationalization allows USAHRC to operate a standard infrastructure, reducing hardware and software complexities and meets compliance with Army Common Operating Environment standards in accordance with Army Application Management Business Office (AAMBO).</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding change reflects the planned lifecycle of this effort</p>					
<p>Title: SFL-TAP XXI Modernization</p> <p>Description: Transition Assistance Program (TAP) XXI Modernization - Provide new capability in order to create efficiencies and incorporate industry standards.</p> <p>FY 2023 Plans: Due to the delay in receiving approval of the Capability Requirements Document (CRD) from DASA-CE until March 2020 . Appropriation is pending legal review. Specific work for FY21 includes development / addition of: 1. Produce Intake Form Integration, 2. Case Synopsis Module; 3. New Data Elements; 4. Reporting Module; 5. Cybersecurity Requirements. Specific work for FY22 includes development / addition of: 1. Forms Upload Enhancements (MFR & DA Form 7746) 2. Data Warehouse Install 3. Ad Hoc Reporting & Predictive Analytics 4. User Management Module 5. Cybersecurity Requirements these actions will be implemented in FY 2023 to complete.</p> <p>FY 2024 Plans: The command has an estimated project completion to occur by expiration date of FY 2024 funds, 30 Sep 2025. The command is unable to provide a valid estimate completion date or correct appropriation based on pending legal opinion. Upon receipt of the legal opinion all necessary requirement actions will be in implemented by funds expiration of FY 2024. The increase is based on inflation to cover the Specific work for FY22 includes development / addition of: 1. Produce Intake Form Integration, 2. Case Synopsis Module; 3. New Data Elements; 4. Reporting Module; 5. Cybersecurity Requirements. Specific work for FY23 includes development / addition of: 1. Forms Upload Enhancements (MFR & DA Form 7746) 2. Data Warehouse Install 3. Ad Hoc Reporting & Predictive Analytics 4. User Management Module 5. Cybersecurity Requirements these actions will be implemented in FY 2024 to complete.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement:</p>			1.049	1.147	1.168

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) FM7 / Human Resources Information Technology	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
Funding change reflects the planned lifecycle of this effort				
Title: SBIR/STTR				
Description: Funding transferred in accordance with Title 15 USC §638				
FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638				
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638				
Accomplishments/Planned Programs Subtotals		12.497	11.574	11.449
C. Other Program Funding Summary (\$ in Millions)				
N/A				
Remarks				
D. Acquisition Strategy				
N/A				

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / Information Technology Dev elopment				Project (Number/Name) FM7 / Human Resouces Information Technology					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
SFL--TAP	TBD	To Be Determined : To Be Determined	0.615	0.652		0.850		-		-		-	0.000	2.117	-
SBIR/STTR	TBD	Various : Various	-	-		0.422		-		-		-	0.000	0.422	-
Subtotal			0.615	0.652		1.272		-		-		-	0.000	2.539	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
ARIMS	TBD	TBD : TBD	0.429	1.025		2.052		2.103		-		2.103	Continuing	Continuing	Continuing
Army SHARP Data Management	TBD	Data Management : TBD	-	0.996		0.986		1.117		-		1.117	Continuing	Continuing	Continuing
SFL-TAP	TBD	To Be Determined : To Be Determined	0.578	0.437		0.297		1.168		-		1.168	0.000	2.480	-
HRC Core IT	TBD	To Be Determined : To Be Determined	9.203	7.978		5.552		5.517		-		5.517	0.000	28.250	-
Subtotal			10.210	10.436		8.887		9.905		-		9.905	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Family Advocacy System of Records (FASOR)	TBD	TBD : TBD	3.166	1.409		1.415	Oct 2022	1.544	Oct 2023	-		1.544	Continuing	Continuing	Continuing
Subtotal			3.166	1.409		1.415		1.544		-		1.544	Continuing	Continuing	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			13.991	12.497		11.574		11.449		-		11.449	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army							Date: March 2023			
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development		Project (Number/Name) FM7 / Human Resouces Information Technology				
	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development		Project (Number/Name) FM7 / Human Resources Information Technology	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
HRC Core IT																												
HRC Core IT																												
SFL-TAP XXI Modernization																												
SFL-TAP XXI Modernization																												
ARIMS																												
ARIMS																												
Army SHARP Data Management																												
FASOR																												
FASOR Development Schedule																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) FM7 / Human Resouces Information Technology	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
HRC Core IT	4	2020	4	2027
SFL-TAP XXI Modernization	1	2020	4	2027
ARIMS	1	2020	4	2027
Army SHARP Data Management	1	2020	4	2026
FASOR	1	2020	4	2025

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) FM8 / Information Technology for Training Systems			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
FM8: Information Technology for Training Systems	-	60.670	36.893	5.993	-	5.993	1.562	3.275	3.306	3.451	0.000	115.150
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project funds information technology systems that support Army Training. The four systems under FM8 are described below. Of those, the Army Training Information System (ATIS) is an Army priority and the focus of the major investment in FM8. ATIS directly supports two of the four Army Unit Readiness Priorities - Training and Leader Development and serves as an enabler for Manning and Equipping.

1. Army Training Information System (ATIS). The Army currently lacks an enterprise level Common Operational Picture (COP) of the training environment. The ATIS is designated a Defense Business System (DBS) that will develop, integrate, test, deliver, operate, and maintain an enterprise capability for the Army training and education communities. Existing training information systems do not provide Commanders, leaders, Soldiers, and civilians a centralized COP of the training environment that enables persistent, consistent access to the Training and Education information and products necessary to support readiness to meet emerging threats. Annual costs to maintain current legacy systems is ~\$75 million. Without ATIS, Army organizations will continue to develop and maintain a multitude of training information systems that are not part of an enterprise, thus inhibiting efficient use of training resources, (people, time, money, material) that directly impacts the ability for units to meet readiness objectives. Ultimately, ATIS is aligned to support Army enterprise data object as an authoritative source of data for Training and Readiness information.

ATIS is currently operating under the Defense Business System (DBS) pathway under DoDI 5000.75. Going forward ATIS will continue to operate under DoDI 5000.75, as well as utilize aspects of the Software Acquisition pathway, DoDI 5000.87. This hybrid pathway is designed to provide rapid development and deployment of software running on commercial hardware, including modified hardware, and cloud computing platforms.

Once fully-fielded, ATIS will sunset the functionality in 28 primary and 70 supporting information training systems with a single, integrated, user-friendly and technologically current system that will support management of the following training functions for 1.8 million users:

- Training Development. Provides ability to develop and coordinate information, including training packages, training events, courses, and exercises.
- Training Management. Provides centralized ability to access and manage information, including individual and collective/unit training that supports mission tasks and individual training records.
- Enterprise Scheduling. Provides a single integrated set of applications to schedule training resources, including transportation, classrooms, ranges, supplies, and mandated legal/social individual and unit training.
- Content Management. Provides centralized access to training information anytime, anywhere, including educational and professional instruction.
- Resource Management. Provides ability to manage availability/sustainability of training enablers and resources.

NOTE: The next three systems are not part of the ATIS Development program.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) FM8 / <i>Information Technology for Training Systems</i>

2. Defense Language Proficiency Test, version 5 (DLPT5) Content Analysis, Categorization & Modeling (CACM). The DLPT5 Content Analysis, Categorization, and Modeling (CACM) contract is in direct response to DLIFLC's DoD Instruction assigned responsibilities for DLPT item bank maintenance, psychometric analysis, and informed pool management, and closely support the DLPT Validity Framework. This project enhances the DLIFLCs ability to efficiently execute high quality DLPT development processes through the integration of benchmark automation capabilities. Accomplishments include: developed and delivered ordered similarity analysis capabilities; developed and delivered integrated audio quality analysis capabilities; developed and delivered unordered similarity analysis capabilities; developed and delivered integrated Auto-ILR capabilities in 15 languages; developed and delivered integrated machine transcription capabilities in 6 languages; developed and delivered advanced text analytics capabilities; developed and delivered integrated grade level lookup capabilities; developed and delivered annotator alignment analysis capabilities in 2 languages.

3. The Army Career Tracker is leader development tool that leverages Army's prior investments to integrate education, training, assignment, self-development and other systems by linking these valuable technologies and resources into a common user-friendly portal across 1.35 million users consisting of enlisted, officers, and civilians. Users can search multiple education and training resources, monitor career development, and receive advice from their leadership. ACT provides single-site, easy access, and offers a complete and personalized career picture not available until now. ACT allows users to manage career objectives and monitor progress towards career requirements and goals. ACT provides an integrated approach to supporting military and civilian personnel's personal and professional development which capitalizes on the mutual (personnel and Army) need for life-long learning. The unique inter-relationship between the user's personal growth and development, and the Army's need for Soldiers to be continuously developing, building and cultivating a culture of life-long learning is critical for the Soldier's and Army's success. Users manage their lifelong learning career objectives, monitor progress towards career development and goals, search multiple Army education and training resources, and receive personalized advice from their supervisor and Army leadership. Completed development will modernize the Army Career Tracker (ACT) system to render web pages correctly base on the size of the screen. Responsive Web Design (RWD) is an approach to web design that renders web pages based on the size of the device's display screen (e.g., computer, tablet, and phone). This allows the site to load quickly and ensures the display appears as if it were made expressly for the device being used. RWD improves user experience by displaying messages, links, and controls in a logical manner regardless of the device. The actual presentation may not look the same across different devices; rather the rendering will depend on the Operating System (OS), screen size, screen resolution, and other factors. Implementing RWD on ACT would be a step forward toward allowing ACT to render better on tablets and other mobile devices (e.g., mobile phones).

4. Enhancement of Army Training Models (ATM) will provide the resources to build and sustain readiness requirements in a standardized process for automated methodology development and resource allocation in support of the Army's training needs.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
Title: Army Training Information System (ATIS)	59.078	33.916	4.447
Description: Army Training Information System (ATIS) is a Defense Business System that will provide a common operational picture (COP) of the training environment in five integrated and interoperable capability areas: Training Development; Training Management; Training Enterprise Scheduling; Learning Content Management and Training Resource Management. These capabilities will enable Commanders, leaders, Soldiers, and civilians to better understand, visualize, describe, direct, lead, and			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) FM8 / <i>Information Technology for Training Systems</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<p>assess training requirements so that they can more effectively plan, prepare, execute, and assess training. End result is an ATIS that enables Soldiers to train as they will fight, so they can effectively fight as they have trained.</p> <p>FY 2023 Plans: FY 2023 Plans: During FY23 ATIS will work toward migrating and sunseting the legacy Army Learning Management System (ALMS) into the ATIS Objective Environment, and rebrand the product as ATIS Learn. Additionally, ATIS is will work toward completing the features and functionality required to sunset the Digital Training Management System, which is the largest legacy system scheduled to be subsumed. Finally ATIS will Award and begin executing an Other Transaction Agreement to produce a scheduling and resourcing solution that can be integrated into ATIS, providing the majority of the enterprise scheduling and resourcing capabilities.</p> <p>Fund distribution is below:</p> <p>Management Services (using Bridging Contract) - Funds will be used to procure professional staff and software development teams, supporting the ATIS product management office in oversight of the development of ATIS and the sunseting of legacy systems</p> <p>Product Development (Bridge/OTA) - Bridge Contract: Funds will be used for development teams. The product teams will utilize the established ATIS environment and ATIS development pipeline to deliver software infrastructure and capability, beginning with the sunseting of the legacy Army Learning Management System (ALMS) and the standup of ATIS Learn in the ATIS objective environment in 1Q FY24. - OTA: Funds will be used to award Level of Effort 2 OTA, will focus on developing the Training Enterprise Scheduling Capability (TESC) and Training Resource Management Capability (TRMC) capabilities.</p> <p>Support Services - Cloud: Funds will continue to procure cloud services via the Cloud Account Management Optimization (CAMO) record with the Department of the Army Enterprise Cloud Management Agency. - Licenses: Funds will be used to develop Government Off the Shelf (GOTS) and Commercial Off the Shelf (COTS) products necessary to support sunseting the 28 legacy systems</p> <p>FY 2024 Plans: FY 2024 Plans: During 1QFY24 ATIS will successfully complete the migration and sunseting of the legacy Army Learning Management System (ALMS) and the standup of ATIS Learn in the ATIS Objective Environment. Additionally, ATIS is estimated to complete 30% of the features and functionality required to sunset the Digital Training Management System. These efforts will migrate and sunset</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) FM8 / <i>Information Technology for Training Systems</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<p>an additional two legacy systems. Finally ATIS will continue efforts to produce a scheduling and resourcing solution that can be integrated into ATIS, providing the majority of the enterprise scheduling and resourcing capabilities.</p> <p>Fund distribution is below:</p> <p>Management Services (using bridging contract)</p> <ul style="list-style-type: none"> - Funds will be used to continue funding professional staff and software development teams, supporting the ATIS product management office in oversight of the development of ATIS and the sunseting of legacy systems. <p>Product Development (bridge)</p> <ul style="list-style-type: none"> - Funds will be used for development teams. The product teams will utilize the established ATIS environment and ATIS development pipeline to deliver software infrastructure and capability, beginning with the sunseting of the legacy Army Learning Management System (ALMS) and the standup of ATIS Learn in the ATIS objective environment in 1Q FY24. <p>Support Services (cloud)</p> <ul style="list-style-type: none"> - Funds will continue to procure cloud services via the Cloud Account Management Optimization (CAMO) record with the Department of the Army Enterprise Cloud Management Agency. <p>FY 2023 to FY 2024 Increase/Decrease Statement: Decrease in FY24 funding reflects reduced development activities in FY24 and accomplishment of development activities in FY23.</p>			
<p>Title: DLPT5 Content Analysis, Categorization & Modeling</p> <p>Description: Development of DLPT5 Content Analysis, Categorization and Modeling (CACM) capabilities. For integration within the DLIFLC MIT LL TIDWA Domino system. These capabilities are in direct response to DLIFLC's DoDI assigned responsibilities for DLPT item bank maintenance, psychometric analysis and informed pool management, and closely support the DLPT Validity Framework.</p> <p>FY 2023 Plans:</p> <ul style="list-style-type: none"> - initiate development of Topic modeling capabilities - initiate development of predictive modeling capabilities <p>FY 2024 Plans:</p> <ul style="list-style-type: none"> - initiate development of Topic modeling capabilities - initiate development of predictive modeling capabilities <p>FY 2023 to FY 2024 Increase/Decrease Statement:</p>		1.407	1.517
		1.546	

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army					Date: March 2023				
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development		Project (Number/Name) FM8 / Information Technology for Training Systems					
B. Accomplishments/Planned Programs (\$ in Millions)					FY 2022	FY 2023	FY 2024		
The increase reflects the planned lifecycle of this effort.									
Title: Army Career Tracker Description: The Army Career Tracker is leader development tool that leverages Army's prior investments to integrate education, training, assignment, self-development and other systems by linking these valuable technologies and resources into a common user-friendly portal across 1.35 million users consisting of enlisted, officers, and civilians. Modify the existing Individual Development Plan (IDP) feature in the Army Career Tracking system. FY 2023 Plans: Continued modernization and enhancements of the Army Training Models. FY 2023 to FY 2024 Increase/Decrease Statement: The decrease reflects the planned lifecycle of this effort.					0.185	0.113	-		
Title: SBIR/STTR Description: Funding transferred in accordance with Title 15 USC §638 FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638 FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638					-	1.347	-		
Accomplishments/Planned Programs Subtotals					60.670	36.893	5.993		
C. Other Program Funding Summary (\$ in Millions)									
N/A									
Remarks									
C. Other Program Funding Summary (\$ in Thousands) is listed below as a memo since ATIS is a child from the parent line, OPA2/BD3000.									
					FY2022	FY2023	FY2024	FY2025	FY2026
Army	BE4162 - OPA2/BD3000/BE4162/MACOM AUTOMATION SYSTEMS				1,018	0	1,908	0	0
Legacy systems that will be subsumed by the Army Training Information System (ATIS) are listed below. Annual cost to maintain these systems is ~\$75M.									

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023																																																												
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<table><tr><td>Acronym</td><td>System Name</td></tr><tr><td>-----</td><td></td></tr><tr><td colspan="2">1. ACT - Army Career Tracker (IDP and PDM only).</td></tr><tr><td colspan="2">2. AIRS - Army IMCOM Reservation System.</td></tr><tr><td colspan="2">3. ARM - Army Range Mapper - JMTC/TSAE (EUR).</td></tr><tr><td colspan="2">4. ARTIMS - Army Training Information Management (NIPRnet version Only).</td></tr><tr><td colspan="2">5. ATHD - Army Training Help Desk.</td></tr><tr><td colspan="2">6. ATIA - Army Training Information Architecture.</td></tr><tr><td colspan="2">7. ATLAS - Army Training and Learning Assessment System.</td></tr><tr><td colspan="2">8. ATMS - Army Training Management System.</td></tr><tr><td colspan="2">9. CAMP - Career Acquisition Management Portal.</td></tr><tr><td colspan="2">10. DLRS-T - Distributed Learning Reporting and Scheduling Tool.</td></tr><tr><td colspan="2">11. DLS - Distributed Learning System (Army Learning Management System).</td></tr><tr><td colspan="2">12. ECDC - Enterprise Content Development Capability.</td></tr><tr><td colspan="2">13. ESC - Enterprise Scheduling Capability.</td></tr><tr><td colspan="2">14. GTIMS - Graduate Training Integration Management System (Aviation Resource Training System - ARTS)</td></tr><tr><td colspan="2">15. IDMS - Inventory and Distribution Management System</td></tr><tr><td colspan="2">16. LLC - Lifelong Learning Center</td></tr><tr><td colspan="2">17. RFMSS - Range Facility Management Support System</td></tr><tr><td colspan="2">18. SCINI - IMCOM Senior Commander Installation Needs and Issues</td></tr><tr><td colspan="2">19. SMS - CGSC -Student Management System- Command and General Staff College</td></tr><tr><td colspan="2">20. SRP GIS TK - Sustainable Range Program (SRP) Geographic Information System (GIS) ToolKit</td></tr><tr><td colspan="2">21. SRPP - SRPWeb Portal</td></tr><tr><td colspan="2">22. SWT - System Training Plan (STRAP) Writing Tool</td></tr><tr><td colspan="2">23. TD2QA - Training and Doctrine Development Quality Assurance Management System</td></tr><tr><td colspan="2">24. TDC - Training Development Capability</td></tr><tr><td colspan="2">25. TMSS-E - Training Management Scheduling System - Enterprise</td></tr><tr><td colspan="2">26. TSIMS - Training Support Information Management System *identified as a system to feed HQDA Training COP</td></tr><tr><td colspan="2">27. TS-MATS - Training Support Materiel Army-wide Tracking System</td></tr><tr><td colspan="2">28. WEB TED - Web Based Total Employee Development System</td></tr></table>			Acronym	System Name	-----		1. ACT - Army Career Tracker (IDP and PDM only).		2. AIRS - Army IMCOM Reservation System.		3. ARM - Army Range Mapper - JMTC/TSAE (EUR).		4. ARTIMS - Army Training Information Management (NIPRnet version Only).		5. ATHD - Army Training Help Desk.		6. ATIA - Army Training Information Architecture.		7. ATLAS - Army Training and Learning Assessment System.		8. ATMS - Army Training Management System.		9. CAMP - Career Acquisition Management Portal.		10. DLRS-T - Distributed Learning Reporting and Scheduling Tool.		11. DLS - Distributed Learning System (Army Learning Management System).		12. ECDC - Enterprise Content Development Capability.		13. ESC - Enterprise Scheduling Capability.		14. GTIMS - Graduate Training Integration Management System (Aviation Resource Training System - ARTS)		15. IDMS - Inventory and Distribution Management System		16. LLC - Lifelong Learning Center		17. RFMSS - Range Facility Management Support System		18. SCINI - IMCOM Senior Commander Installation Needs and Issues		19. SMS - CGSC -Student Management System- Command and General Staff College		20. SRP GIS TK - Sustainable Range Program (SRP) Geographic Information System (GIS) ToolKit		21. SRPP - SRPWeb Portal		22. SWT - System Training Plan (STRAP) Writing Tool		23. TD2QA - Training and Doctrine Development Quality Assurance Management System		24. TDC - Training Development Capability		25. TMSS-E - Training Management Scheduling System - Enterprise		26. TSIMS - Training Support Information Management System *identified as a system to feed HQDA Training COP		27. TS-MATS - Training Support Materiel Army-wide Tracking System		28. WEB TED - Web Based Total Employee Development System	
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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) FM8 / Information Technology for Training Systems
<p>D. Acquisition Strategy</p> <p>Army Senior leadership decided to terminate the ATIS's prototype development under an Other Transactions Authority (OTA) Agreement in 1QFY22. To capitalize on initial efforts under that Agreement, the Program Management Office (PMO) immediately leveraged the support contracts currently in place to mitigate schedule risks and still deliver useful capabilities to the Force. In 2QFY22 ATIS established an AWS GovCloud, cArmy environment to continue prototype development. In 3QFY22 the PMO awarded a contract modification to update and migrate the Army Learning Management System (ALMS) to the ATIS Objective cArmy environment NLT 1QFY24. PdM ATIS will employ a modular contracting approach to award a mix of traditional FAR-based contracts and OTA to develop the objective system. This strategy allows for the competitive selection of multiple vendors with innovative technologies to develop the fully integrated system. This approach will help to reduce the risks associated with vendor lock as well. The first OTA for Enterprise Scheduling and Resource Management capabilities will be awarded 3QFY23. ATIS will continue to utilize the principles of Agile development to deliver capabilities to the Army. Sunset for the 28 legacy systems that ATIS will replace is expected in 4QFY27.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) FM8 / Information Technology for Training Systems					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
ATIS Interface Agreements (Army Software Factory)	MIPR	Various : Various	-	1.400		-		-		-		-	0.000	1.400	-
ATIS Program Management Office (includes LMI Bridge Effort)	C/FFP	ATIS Program Management Office : Newport News, VA	0.699	12.857		10.178		2.233		-		2.233	Continuing	Continuing	Continuing
ATIS MITRE Support	MIPR	W4GV USA HQ COMM ELECT CMD : Aberdeen Proving Grounds, MD	-	2.677		1.536		-		-		-	Continuing	Continuing	Continuing
SBIR/STTR Transfer	TBD	TBD : TBD	-	-		1.347		-		-		-	0.000	1.347	-
Subtotal			0.699	16.934		13.061		2.233		-		2.233	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
ATIS Product Development Contract (Peraton FY22, LMI FY23/24)	C/FPIF	Various : Newport News, VA	49.297	36.281		7.869		1.107		-		1.107	0.000	94.554	-
ATIS OTA Contract Level of Effort 2 (New)	C/TBD	To Be Determined : To Be Determined	-	-		10.875		-		-		-	Continuing	Continuing	Continuing
DLPT5 Content Analysis, Categorization & Modeling	MIPR	Army Test and Evaluation Center : Aberdeen Proving Grounds, Maryland	1.151	1.407		1.517		1.546		-		1.546	Continuing	Continuing	Continuing
Army Career Tracker	TBD	TBD : TBD	0.195	0.185		0.113		-		-		-	Continuing	Continuing	Continuing
Subtotal			50.643	37.873		20.374		2.653		-		2.653	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / Information Technology Dev elopment				Project (Number/Name) FM8 / Information Technology for Training Systems					
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
ATIS Cloud Services: CAMO (Cloud Account Management Optimization Agreement (CAMO))	MIPR	AWS : PEO EIS, FT. Belvoir, VA 22060	-	4.355		1.475		1.107		-		1.107	Continuing	Continuing	Continuing
ATIS Software	Various	TBD : TBD	-	1.418		1.983		-		-		-	Continuing	Continuing	Continuing
Subtotal			-	5.773		3.458		1.107		-		1.107	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
ATIS - System Test and Evaluation	MIPR	Army Test and Evaluation Center : Aberdeen Proving Grounds, Maryland	0.115	0.090		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			0.115	0.090		-		-		-		-	Continuing	Continuing	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			51.457	60.670		36.893		5.993		-		5.993	Continuing	Continuing	N/A
Remarks Cost category that has "ATIS" supports the ATIS Product Development.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>		Project (Number/Name) FM8 / <i>Information Technology for Training Systems</i>	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
ATIS: Contract Terminated/Environment Transition to the...	1																											
ATIS: Establish Data Centric Architecture		2																										
ATIS: Implement Bridge Strategy																												
ATIS: Solution Integrator Contract (SI)																												
ATIS: Army Learning Mgmt Sys (ALMS) Migration																												
ATIS: Line of Effort 2 (LOE2) OTA Contract Award (TESC, ...																												
ATIS: Line of Effort 1(LOE1) OTA Contract Award (ATMC, ...																												
ATIS: Line of Effort 3 (LOE3) OTA Contract Award (ALMC)																												
ATIS: FY27 Final Sunset of Remaining Legacy Systems																												
ATIS: Enters Capability Support (Full Deployment)																												

Note

- Will sunset the legacy Army Learning Management System (ALMS) in 1QFY24 and deliver ATIS Learn to the Army community.
- The Bridge effort will continue to develop the ATIS objective Environment while the Solution Integrator contract is competed and awarded

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
2040 / 5	PE 0605013A / <i>Information Technology Development</i>	FM8 / <i>Information Technology for Training Systems</i>
- Final sunset of remaining legacy systems is 1QFY28 and will signal full deployment.		

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) FM8 / <i>Information Technology for Training Systems</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
ATIS: Contract Award	3	2020	3	2020
ATIS: Contract Terminated/Environment Transition to the Gov't	1	2022	1	2022
ATIS: Establish Data Centric Architecture	2	2022	2	2022
ATIS: Implement Bridge Strategy	2	2022	4	2024
ATIS: Solution Integrator Contract (SI)	2	2025	2	2028
ATIS: Army Learning Mgmt Sys (ALMS) Migration	3	2022	1	2025
ATIS: Line of Effort 2 (LOE2) OTA Contract Award (TESC, TRMC)	3	2023	3	2027
ATIS: Line of Effort 1(LOE1) OTA Contract Award (ATMC, ATDC)	2	2025	2	2027
ATIS: Line of Effort 3 (LOE3) OTA Contract Award (ALMC)	2	2025	2	2027
ATIS: FY27 Final Sunset of Remaining Legacy Systems	4	2027	4	2027
ATIS: Enters Capability Support (Full Deployment)	1	2028	1	2028

Note

ATIS - The ATIS program will be officially baselined at the Limited Deployment - Acquisition Authority to Proceed (LD ATP) at the end of Release 1. The objective system is reached upon reaching full deployment in FY24.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) FM9 / Information Technology for Criminal Investigations			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
FM9: Information Technology for Criminal Investigations	-	1.181	1.273	2.697	-	2.697	1.298	1.313	1.328	1.342	0.000	10.432
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The project Criminal Investigation Management System (CIMS) is to develop, maintain, and operate a secure, unified comprehensive system of applications to support the Army's law enforcement (LE) mission and to transform CID LE applications through continuous innovation and modernization to improve operational methodologies consistent with current LE community practices.

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

	FY 2022	FY 2023	FY 2024
Title: Criminal Investigative Management System (CIMS)	1.181	1.227	2.697
<p>Description: Criminal Investigative Management System (CIMS). CIMS is a collection of mission essential information technology (IT) systems that supports the USACID, the Office of the Provost Marshal General (OPMG), the U.S. Army Crime Records Center (USACRC), the Army Military Police School (USAMPS), and other DoD Law Enforcement (LE) entities and stakeholders. Through CIMS, the USACID and the OPMG developed an integrated and unified, comprehensive enterprise program / system that houses both classified and unclassified Law Enforcement Sensitive (LES) data, leveraging existing and future Army LE information technology assets and other external data sources, and providing a full range of law enforcement functions. The primary component of CIMS is a comprehensive enterprise system known as the Army Law Enforcement Reporting and Tracking System (ALERTS) providing Army LE stakeholders the enhanced capability to rapidly and efficiently manage a variety of LE and criminal intelligence functions, as well as a broader range of senior executive reporting requirements. The Consolidated Operation Police Suite (COPS) was previously comprised of five separate applications: two of these applications have been rationalized under ALERTS: two of these applications have been consolidated into one and modernized under CIMS: the final unclassified and classified Detainee Reporting System (DRS) modules have been modernized and rationalized under CIMS. The Deserter Verification Information System (DVIS) is being modernized and rationalized under CIMS. RDT&E dollars are required to transform ALERTS along with multiple CID mission systems through software modernization from an Army-centric investigative LE agency into an elite Federal LE agency that is ahead of the threat, continuously evolving and strategically partnering with Federal LE agencies. Strategically partnering requires the creation of multiple interagency data feeds. All requested CID RDT&E funding in program element 0606013A will be applied to CIMS initiatives.</p> <p>FY 2023 Plans: ALERTS, a vital component of CIMS, is over 5 years old and requires a major rewrite of the software application and back-end database to ensure it maintains its operational efficiency, security requirements,</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army							Date: March 2023				
Appropriation/Budget Activity 2040 / 5			R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development			Project (Number/Name) FM9 / Information Technology for Criminal Investigations					
B. Accomplishments/Planned Programs (\$ in Millions)							FY 2022	FY 2023	FY 2024		
and ability to support the LE stakeholder community. The rewrite will be started during FY 2023 and continue through the following FY. FY 2024 Plans: ALERTS, the primary component of CIMS, has been online for over 5 years. It requires a major application rewrite which will start in FY 2023 with gathering stakeholder requirements and the development of a more efficient and effective database structure to store case information. Modernization of ALERTS will continue through FY 2024 with a new CIMS development contract. New Law Enforcement (LE) case data procedures to support senior executive reporting requirements will be developed through the CID Director's COMPSTAT program and data feeds between multiple interagency applications including IPPS-A will be developed, configured, and implemented. FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase will be used to develop a more efficient and effective database structure to store case information and develop mapping module for Army Law Enforcement & Tracking System (ALERTS).											
Title: SBIR/STTR Transfer Description: Funding transferred in accordance with Title 15 USC §638 FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638 FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638							-	0.046	-		
Accomplishments/Planned Programs Subtotals							1.181	1.273	2.697		
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• OMA - Firm Fix Price: Labor IT Support Services	1.181	2.915	3.170	-	3.170	-	-	-	-	0.000	7.266
Remarks OMA dollars are used for the operations and maintenance of the CIMS environment which includes ensuring the mission applications are operational and available 24 hours, 365 days per year. It includes server patching with the latest security patches, backing up the data, providing customer service through a CIMS Help Desk, creating/deleting user accounts, monitoring the health of the server environment, operating the Army's Law Enforcement (LE) case management system.											

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) FM9 / Information Technology for Criminal Investigations
<p>D. Acquisition Strategy</p> <p>USACID utilized Agile Development which is a process where development is broken up into several stages. It involves constant collaboration with the stakeholders for continuous improvement and changes in each stage. Development is delivered in Releases to the customer for testing and acceptance ensuring that the project stays on track. The CIMS contract ended 30 June 2022 and a bridge contract was put in place with an end date of 1 March 2023. A new contract will be negotiated to continue the RDT&E development of the CIMS applications.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity						R-1 Program Element (Number/Name)				Project (Number/Name)					
2040 / 5						PE 0605013A / Information Technology Development				FM9 / Information Technology for Criminal Investigations					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	TBD : TBD	-	-		0.046		-		-		-	0.000	0.046	-
Subtotal			-	-		0.046		-		-		-	0.000	0.046	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Criminal Investigative Management System (CIMS)	C/CPFF	ACC-New Jersey : New Jersey	2.055	1.181	Jul 2022	1.227	Mar 2023	2.697	Feb 2024	-		2.697	0.000	7.160	-
Subtotal			2.055	1.181		1.227		2.697		-		2.697	0.000	7.160	N/A
Remarks															
CIMS will continue to establish DoD internal and external congressional mandated law enforcement data transfer initiatives.															
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			2.055	1.181		1.273		2.697		-		2.697	0.000	7.206	N/A
Remarks															
The FY24 funds will enable the modernization of ALERTS, which is the primary component of CIMS. Modernization will continue through FY 2024 with a new CIMS development contract.															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development		Project (Number/Name) FM9 / Information Technology for Criminal Investigations	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Criminal Investigative Management System (CIMS)_ OY4/Bridge																												
Criminal Investigative Management System (CIMS)_Base																												
Criminal Investigative Management System (CIMS)_OY1																												
Criminal Investigative Management System (CIMS)_OY2																												
Criminal Investigative Management System (CIMS)_OY3																												

Note
There will be a vendor change with the base contract starting in FY23.

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) FM9 / Information Technology for Criminal Investigations	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Criminal Investigative Management System (CIMS)_ OY4/Bridge	4	2022	2	2023
Criminal Investigative Management System (CIMS)_Base	2	2023	2	2024
Criminal Investigative Management System (CIMS)_OY1	2	2024	2	2025
Criminal Investigative Management System (CIMS)_OY2	2	2025	2	2026
Criminal Investigative Management System (CIMS)_OY3	2	2026	2	2027

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) T04 / USMEPCOM TRANSFORMTION - IT MODERNIZATION			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
T04: USMEPCOM TRANSFORMTION - IT MODERNIZATION	-	8.753	2.221	2.239	-	2.239	2.240	2.242	2.617	2.646	0.000	22.958
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

USMIRS 1.1 Minimum Viable Product (MVP): Supports core functionality comprised of multiple sub applications and non-core applications modernization and testing and order writing applications. The US Military Entrance Processing Command Integrated Resource System (USMIRS) provides automation and communications capabilities to support the peacetime, mobilization and wartime military manpower accession mission for the Armed Services. USMEPCOM conducts its work through 65 Military Entrance Processing Station (MEPS) across the country and 189 Military Entrance Test Sites (METS). USMIRS provides automated support for conducting aptitude tests and medical examinations and administratively processing, enlisting and shipping applicants for the Armed Forces, Reserves, and Coast Guard. This includes support for automated versions of the Armed Services Vocational Aptitude Battery (ASVAB) tests. USMIRS initiates Social Security Administration (SSA) checks for identity verification; interfaces with US Citizenship & Immigration Services (USCIS) to verify citizenship status for military service applicants to screen out individuals that may be security threats; and interfaces with the Federal Bureau of Investigation (FBI) for background screening, using digital fingerprints to identify/eliminate individuals with criminal records from entering military service.

USMEPCOM reports operationally to the Office of the Under Secretary for Personnel and Readiness and has an executive agency (EA) agreement with the Army. USMEPCOM serves all six uniformed services, but only receives funding from the Army to perform its mission.

USMIRS supports recruiting capabilities through electronic interfaces and data sharing, using standard Department of Defense (DoD) data elements with Recruiting Service systems. In the event a military draft is required, USMIRS supports mobilization through electronic links with the Selective Service System (SSS) as well as automated support for conducting aptitude tests and medical examinations and administratively processing, inducting and shipping SSS registrants.

Customers/beneficiaries of this investment: the Accessions Community of Interest (ACOI), including components of the Army, Navy, Air Force, Marines, Coast Guard, Space Force, USMEPCOM, and Office of the Under Secretary of Defense (Personnel & Readiness).

Requested funding underpins system sustainability and scalability and improves cybersecurity to include protection of Personally Identifiable Information (PII). Funding covers costs to redesign/develop existing MIRS capabilities to operate efficiently in a cloud environment and to integrate with MHS-Genesis. This will allow for the closure of 65 Army data centers, in support of the Army Data Center Consolidation Plan (Army Directive 2016-38) and movement towards the Force of the Future mandate of all digital processing.

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

	FY 2022	FY 2023	FY 2024
Title: USMIRS Modernization/Digitization	8.753	2.140	2.239

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) T04 / <i>USMEPCOM TRANSFORMATION - IT MODERNIZATION</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<p>Description: As of March FY21, the USMIRS 1.1 Minimum Viable Product (MVP) was launched. This is the core functionality of the system. USMIRS 1.1 is a system that is comprised of multiple sub applications, and those non-core applications will need to be modernized. FY22 RDTE supports the further modernization of non-core applications in the USMRIS system of systems such as our testing and order writing applications.</p> <p>FY 2023 Plans: FY23 BASE funding supports the continual modernization of USMIRS 1.1 core system and supporting applications. These funds ensure that incremental modernization efforts can be completed in order to keep the new system current and secure.</p> <p>FY 2024 Plans: FY24 BASE funding supports the continual modernization of USMIRS 1.1 core system and supporting applications. These funds ensure that incremental modernization efforts can be completed in order to keep the new system current and secure.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase reflects planned lifecycle of this effort.</p>			
<p>Title: FY23 SBIR/STTR Transfer</p> <p>Description: Funding transferred in accordance with Title 15 USC §638</p> <p>FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638</p>		-	0.081
Accomplishments/Planned Programs Subtotals		8.753	2.221
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
The overall effort of the USMEPCOM IT transformation is to modernize and fully digitize the US Military Entrance Processing Command Integrated Resource System (MIRS). The modernization of the system will minimize vulnerabilities and fully digitize 65 military entrance processing stations resulting in efficiencies to all six uniformed services.			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) T04 / <i>USMEPCOM TRANSFORMATION - IT MODERNIZATION</i>
<p>The modernization of the USMIRS system is being accomplished using the agile method of software development in short time-boxed "sprints". Program management functions were being performed by the Defense Digital Service (DDS). DDS managed an prototype development contract with a local consulting firm called Tandem (previously known as Devmynd. Based in Chicago IL). The DDS/Tandem effort ended in December of CY2019 and produced a prototype. An in-house program management element of USMEPCOM will manage a follow-on contract to turn the prototype USMIRS 1.1 into a deployable system in FY21.</p> <p>The efforts in FY21 and beyond will be to develop the non-core applications of USMIRS 1.1 (plug in items to the main system that communicate with other systems across all five uniformed services to include Army Accession Information Environment (AIE). The contracting for this is being done through GSA Chicago as the owning contract agency. This will most likely be awarded in October of FY2021 with work beginning in October.</p> <p>Milestones:</p> <ul style="list-style-type: none"> 1 - Core USMIRS 1.1 prototype delivered in December of Calendar 2019. 2 - Award contract to develop core USMIRS 1.1 prototype into a Minimum Viable Product that can be deployed to the field in 2Q FY2021. 3 - Award contract to develop the USMIRS 1.1 non-core applications (plug ins) in 1Q FY2021 with work to begin 2Q FY2021. 4 - FY22 and beyond will be to primarily establish the link between various systems (AIE, MHS Genesis Etc). 		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>						Project (Number/Name) T04 / <i>USMEPCOM TRANSFORMATION - IT MODERNIZATION</i>			
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	TBD : TBD	-	-		0.081		-		-		-	0.000	0.081	-
Subtotal			-	-		0.081		-		-		-	0.000	0.081	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Develop NON-CORE USMIRS 1.1 Applications	C/FP	ITILITY LLC UNDER GSA GWAC : Chantilly, VA 20151	8.997	8.753	Dec 2021	-		-		-		-	Continuing	Continuing	Continuing
USMIRS 1.1 Incremental Updates and Improvements	C/FP	TBD : TBD	-	-		2.140		2.239		-		2.239	Continuing	Continuing	Continuing
Subtotal			8.997	8.753		2.140		2.239		-		2.239	Continuing	Continuing	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			8.997	8.753		2.221		2.239		-		2.239	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

[illegible]

2040 / 5

[illegible]

PE 0605013A / Information Technology Development

Project (Number/Name)	Start Date	End Date	Duration (Days)	Progress (%)	Status	Owner	Team	Budget (€)	Actual Cost (€)	Variance (€)	Risk Level	Notes
101	2023-01-01	2023-03-31	90	100	Completed	John Doe	Team Alpha	50000	48000	2000	Low	Project completed ahead of schedule.
102	2023-02-01	2023-05-31	120	75	In Progress	Jane Smith	Team Beta	75000	70000	5000	Medium	Minor delays in procurement.
103	2023-03-01	2023-06-30	120	20	On Hold	Mike Johnson	Team Gamma	60000	0	60000	High	Waiting for client approval.
104	2023-04-01	2023-07-31	120	0	Not Started	Sarah Lee	Team Delta	80000	0	80000	Medium	Initial planning phase.
105	2023-05-01	2023-08-31	120	0	Not Started	David Kim	Team Epsilon	90000	0	90000	Low	Resource allocation in progress.

T04 / USMEPCOM TRANSFORMTION - IT MODERNIZATION

[illegible]

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) T04 / USMEPCOM TRANSFORMATION - IT MODERNIZATION	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Core USMIRS 1.1 Prototype is Delivered	1	2020	1	2020
Award Contract and Develop Prototype into MVP	1	2020	1	2021
Award Contract to Develop USMIRS 1.1 Non-Core Applications	1	2021	1	2021
Receive Finished MVP	1	2021	1	2021
Rollout Production MVP to the Field	1	2021	2	2021
Core USMIRS 1.1 FOC	2	2021	2	2021
Develop Non-Core USMIRS 1.1 Applications	1	2021	4	2030

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) T05 / Army Business System Modernization Initiatives			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
T05: Army Business System Modernization Initiatives	-	19.855	24.875	65.143	-	65.143	24.574	18.328	18.007	17.591	0.000	188.373
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Global Force Information Management (GFIM): GFIM is an automated, integrated, and interoperable digital environment that enables the Army's Deploy to Redeploy/Retrograde (D2RR) end-to-end business processes in support of Dynamic Force Employment (DFE). The GFIM system will provide the core Global Force Management-Data Initiative (GFM-DI) compliant data necessary for Enterprise Resource Planning (ERP) systems, Business Mission Area (BMA) systems, and Warfighting Mission Area (WMA) systems to execute business processes efficiently and effectively in support of Army warfighting operations and Title 10 responsibilities.

Today, over 85% of these core Army Business Processes are accomplished manually or with tools that are end-of-life, do not meet current Cybersecurity/Technology requirements, and are hosted on disparate technology platforms that are unable to be integrated. GFIM will provide an integrated planning, programming, and production capability to dynamically develop, design, and document an Army at rest and an Army in motion. GFIM will evolve both long-term and immediate bridging solutions that integrate and automate Army operational business processes. The result will be an interoperable, collaborative environment to enable the seamless creation and exchange of authoritative data across the operational community of practice to provide rapid, accurate, and auditable outcomes that will support risk-informed senior leader decisions.

The Student Information Repository (SIR) Application will replace several independent applications and business processes used to track student data including, but not limited to, personal information, grades, attendance, official records, transcripts, teaching teams, student assignments, and surveys. It is a customized information system that is comprised of separate modules that are tied in together as one system.

Army Business System Modernization Initiatives (subline). The Program Planning Budget (PPB) - Business Operating System (BOS) will standardize and better integrate the transactional automated information systems used in the HQDA level programming and budgeting processes. These systems are core to the PPBE business processes of the HQ for gathering programmatic requirements, balancing resources and delivering the Army's program budget to OSD. This project is streamlining programming and budgeting processes and significantly improving strategic analysis capabilities. The project is architecting, reengineering, streamlining and consolidating HQDA systems, feeder data base systems, and streamlining the associated processes. Initiatives also support HQDA systems such as the Integrated Resource Management Information System (IRMIS) and Structure And Manpower Allocation System (SAMAS). These improvements will improve capability, eliminate redundancies and reduce overall cost of operations. The PPB BOS project is complementary to the Army's General Fund Enterprise Business System (GFEBS) program. It includes a new effort in FY 2014, the Army Contract Writing System, a replacement for the DoD Standard Procurement System (SPS). This Project undertakes necessary efforts to integrate, implement, and build the next generation of Enterprise Business Systems capabilities. This effort is required to develop a converged, modernized Enterprise Resource Planning system that streamlines and integrates the Army's core business functions.

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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) T05 / <i>Army Business System Modernization Initiatives</i>
<p>Additive Manufacturing (AM) is a SEC Army priority. AM will fully integrate AM capabilities and enable the Digital Thread within the Army ERPs. It will provide a common collaboration portal to enable sharing of AM 3D print data across the Army and with other DoD entities to address Army readiness driver requirements. Capability will communicate and track user requests for AM 3D print data, and allow users to search for relevant 3D print data with feedback to Engineering Support Activities, Army industrial base and Army tactical units.</p> <p>The Enterprise Sustainment Management System (ESMS) Web Application is a cloud-based solution, bringing all real property infrastructure domains under the umbrella of a single SMS application. Performing long-range work requirements projections across all SMS domains allows for a comprehensive analysis of various courses of action and the related effects and tradeoffs of each decision. In addition to the incorporation of all SMS domains in a single application. The ESMS application provides increased control of user permission definition, teaming, and how permissions are applied; updated business intelligence reporting capabilities; and improved user experience, leveraging state of the art web development techniques for more efficient use from beginning to end. ESMS helps all real property asset management stakeholders - from civil engineers, technicians and managers to headquarters - decide when, where and how to best maintain existing infrastructure. Because assets are so vast and diverse, a "knowledge-based" philosophy drives the SMS process.</p> <p>Army Energy and Water Reporting System (AEWRS) is used to collect rollups of energy/water usage and program management at Army installations. AEWRS is the Army's official database of record for all energy and water usage data, and energy program management information. It provides the basis for documenting Army progress in meeting statutory and mandated performance metrics. Data is passed other systems and to DOD to be joined by similar energy and water data from the other services. AEWRS incorporated as a module the Solid Waste Annual Reporting for the Web (SWARWeb) which is the Army's official database of record for solid waste management and recycling data at the Installation, Subordinate Command, Major Command, Region and Army levels. Data is collected for disposal sites, disposal and recycling transactions, recycling revenues and recycling program management. Solid waste data collected throughout the fiscal year is submitted to higher command levels to fulfill reporting requirements and to track compliance with DoD waste reduction/recycling goals.</p> <p>IEE EBS BUILDER and PAVER DoD requires a standardized, auditable, process for facility condition assessments and the calculation of deferred maintenance. The DoD uses the Sustainment Management System (SMS) to conduct real property condition assessments, identify work requirements, and report on real property asset conditions. SMS provides a consistent baseline for condition assessment of all assets across DoD.</p> <p>This effort develops interfaces with Enterprise Business Systems-Convergence (EBS-C) within the Army's Enterprise Business System Multi-Functional Capabilities Team (EBS-MFCT) for Installations, Energy, and the Environment (IEE) domain related to construction and real property.</p> <p>This effort develops and integrates modules for buildings (BUILDER) and pavement (PAVER) to modernize and consolidate these modules so that installations can manage all assets in a single enterprise system called Enterprise SMS (ESMS).</p> <p>The Enterprise Architecture Business Systems Consolidation effort provides direct execution support for the following Major Objectives of ACP - Army Campaign Plan Strategy Map. The objective is a reduced number of systems and reduced IT costs. Current systems include Headquarters Installation Information System (HQIIS),</p>		

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<p>Installation Decision Support (IDS), Real Property Planning and Analysis System (RPLANS), Army Stationing and Installation Plan, Installation Geospatial Information & Services (IGI&S), and Installations Status Report (ISR).</p> <p>The Vantage Program [previously Army Leader Dashboard (ALD)] is a data integration and visualization platform that enables the Army to "see itself" by providing Senior Leaders, Soldiers, Staff, and analytic communities with a common, integrated data platform to visualize and analyze the current and predicted future state(s) of the Army. Vantage spans all data domains, powers a set of configurable views, and provides tools for making data-driven decisions at every level of the Army.</p> <p>The Army Vantage Program is a data integration and visualization platform that enables the Army to "see itself" by providing Senior Leaders, Soldiers, Staff, and analytic communities with a common, integrated data platform to visualize and analyze the current and predicted future state(s) of the Army. Spans all data domains, powers a set of configurable views, and provides tools for making data-driven decisions at every level of the Army. VANTAGE supports up to five concurrent lines of effort (LOEs) - investments in new use cases, workflows, or capabilities. LOEs focus on platform configuration, data integration, and user engagement for select critical workflows. The features and advantages of the platform allow the Army to (1) see itself clearly through its data, (2) meet its strategic modernization objectives, and (3) rapidly realize ROI.</p> <p>Enterprise Business Systems-Convergence (EBS-C)- In 2019, SAP announced that the current application, Enterprise Central Component (ECC), would not be maintained after 2027 and customers will be required to upgrade to their new version SAP S/4 HANA. In response to this notification, the Army conducted studies in 2019/2020 by the Business Enterprise IT Leaders Group chaired by the Office of Business Transformation. Based on the results of these studies and direction from the Under Secretary of the Army, EBS-C is executing a strategic approach to modernize the Army business system landscape; align modern combat and combat support system capabilities with existing modernization efforts to enable Army force dominance during multi-domain large-scale combat operations in contested logistics environments; and improve overall Army financial operations resulting in improved financial management and successful audit outcomes. The Army is working EBS-C requirements to improve process agility and cross process integration; provide consistent user experiences with an intuitive user interface; and improve data integrity and security. At the enterprise level, EBS-C seeks to integrate financial and logistics processes and create opportunities to decrease overall DBS redundancies and duplications existing in the Army portfolio. In order to achieve the EBS-C mission, the RDT&E in FY24 will set the conditions for the innovation required to implement a de-customized ERP solution integrated with an agility layer providing an intuitive user interface with minimal customization reducing long term maintenance costs. The in-scope Defense Business Systems (DBS) for this effort include General Funds Enterprise Business Systems (GFEBS) and GFEBS-Sensitive Activities (SA), Logistics Management Program (LMP), Global Combat Support System (GCSS)-Army, Army Enterprise System Integration Program (AESIP) Hub, and numerous non-ERP systems performing needed logistics and financial functions.</p>				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
Title: Global Force Information Management		9.705	13.230	17.075
Description: GFIM will provide the Army an integrated, interoperable, and authoritative global force management transactional capability for lifecycle management of global force/organizational structure data for the entire Army. This effort is in direct support of dynamic force structure and dynamic force employment as directed in the National Defense Strategy. GFIM will establish a common standard for force structure data by implementing OSD's Global Force Management-Data Initiative (GFM-DI) directive and Army Data Standard. GFIM will replace the capabilities of 14 legacy systems and 26 subsystems that support the Army's end to end (E2E) business processes for Deploy to Redeploy and Retrograde of Materiel (D2RR). GFIM awarded an OTA Agreement				

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<p>for a Phase 1 Minimum Viable Product (MVP) (Develop the Future Force) and Phase 2 prototype (Provide the Current Force) activities. The OTA will also establish an IL5 and IL6 cloud environment and integrate with the other two components of the GFIM Objective Environment (OE) (D2RR Data Lake and Analytical Tool) to ensure an integrated and inter-operable environment is delivered and the Army can sunset legacy systems.</p> <p>FY 2023 Plans: Using the existing GFIM OTA, FY23 RDTE funds will be used to continue development of the two elements of the GFIM Transactional Material System (TMS) - Develop the Future Force (DFF) and Provide the Current Force (PCF). In FY22 under Phase 1 of the OTA, the vendor developed the DFF prototype, which equates to 50% development completion. In FY23, this DFF prototype will be further developed to the Minimum Viable Product (MVP) solution which equates to 70% completion. The PMO will initiate development of the second element, PCF, and will complete the PCF prototype (50% solution) and MVP (70% solution) using FY23 RDTE funds. These two MVPs combine to form the authoritative transactional capability that creates the requisite force structure, deployment, and readiness data needed to man, equip, train, ready, and resource an Army at Rest and an Army in Motion. Costs includes software engineering, application development, data analytics, PMO SETA support, cloud hosting, and development of Cybersecurity protocols/requirements (Security Control Assessor-Validator (SCA-V) scans and assessments, IL5 and IL6 Authority To Operate (ATOs), etc.). FY23 funds will also be used to conduct developmental testing (Unit Verification Testing (UVT) and Unit Acceptance Testing (UAT)) throughout the OTA development process in order to ensure a robust, capable, user community-accepted product is delivered at the end of Phase 2. Phase 2 activities are scheduled to complete in Q1FY24.</p> <p>FY 2024 Plans: GFIM will use FY24 RDTE funding to award a FAR-based Production Contract in coordination with Army Contracting Command - Rock Island, IL (ACC-RI). The contract is scheduled to be awarded in Q1FY24. The FY24 RDTE funding will be used to complete development of the DFF and PCF MVPs from the 70% solution to 100% solution. The capabilities will be architected to reside in the established cArmy hosting environment. The vendor, in coordination with the PMO and functional sponsor, will also develop the GFIM training plan and training materials (virtual, embedded, and targeted fielding materials). These capabilities provide the Army with a fully functional, integrated, interoperable transactional platform that creates and develops the requisite force structure, deployment, redeployment, retrograde, and readiness data needed to man, equip, train, ready, and resource the force and feed the Army's Enterprise Resource Planning (ERPs) and Non-ERPs in support of multi-domain operations. Development during FY24 will position the Army to sunset the 14 legacy systems being replaced by GFIM.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement:</p>			

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
Increase funding supports modifying the acquisition strategy for hosting solutions (moving from Government Cloud hosting to the Army Cloud Hosting environment) to increase efficiencies in FY24. This will streamline the architectures into a single, more efficient architecture and provide cost avoidance in the out-years.			
Title: Army Business System Modernization Initiatives Description: Modernization requirements will add new capabilities to legacy IT systems that support human resource functions such as organization and position management, training, and employment. The PPB BOS system standardize and integrate the transactional information systems used in the Headquarters Department of Army (HQDA) Programming and Budgeting processes. The program is streamlining programming and budgeting business processes and significantly improving strategic analysis capabilities. The PPB BOS architecture reengineers, streamlines, and consolidates HQDA systems and financial feeder systems; aligns to the DoD Business Enterprise Architecture (BEA); implements powerful business intelligence analytical tools to support strategic planning, programming, and budgeting within HQDA; and provides access to GFEBS funds management and execution data through system interfaces with required SFIS compliancy integral to the PPB BOS data model. The LEAP program will provide criminal intelligence querying and reporting capabilities in compliance with regulatory and policy standards for Army Law Enforcement regarding investigation of felony crimes. LEAP captures criminal case investigative information regarding incidents, location descriptors, entities (name, social security number, rank, title, physical characteristics, sex, birth place, and date), agent assignment, crime description and identifiers, statements, property data, laboratory tests; verifies and stores this data for criminal intelligence purposes: and reports this information to the proper authorities from the Division Commanding Officer to the United States Grand Jury. The system will extract necessary data for consolidation and input to Defense Incident-Based Reporting System (DIBRS) monthly reports, National Incident-Based Reporting System (NIBRS) monthly reports and the Defense Clearance and Investigations Index (DCII) daily updates. The LIMS system will automate business processes that support the forensic examiners. These processes include, but are not limited to, analytics, materials management, management reporting, Freedom of Information Act requests (FOIA), legal discovery request, court preparation and outsource processing. Civilian Personnel Online - Portal (CPOL-Portal) is a one stop secure site which provides Army civilian employees and HR specialists access to a private portal with a complete set of employment related resources, links and web based applications that require single sign-on access - Army Regional Tools (ART). CPOL-Portal will provide an Integrated Management System (IMS) in support of Civilian Workforce Transformation (CWT). It will support Civilian human capital decision making and allow leaders and employees to perform their roles more efficiently in support of Army goals and missions. CPOL Portal will provide the full spectrum of IT application support and access to Acquire, Develop, Distribute and Sustain		5.676	-
			0.572

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
components of the Army Civilian HCM Life-Cycle and link to G3 'Structure' IT Enterprise Applications.			
<p>The Fully Automated System for Classification (FASCLASS) is a centralized, web-based system that maintains civilian position descriptions and position related information across Department of the Army. It provides classifiers and managers capability to create, edit, and verify position descriptions. Also it offers robust search, report generation, and lookup & support capabilities.</p> <p>The Overseas Entitlement Tracker (OET) provides the capability to accurately track Living Quarters Allowance (LQA). LQA is provided to reimburse employees for suitable, adequate living quarters at posts where the U.S. Government does not provide quarters. OET also tracks these other overseas entitlements for employees: Advance Pay, Danger Pay, Imminent Danger Pay, Foreign Differential, Home Leave, Post Allowance, Separation Maintenance Allowance, and Temporary Quarters Subsistence Allowance.</p> <p>FY 2024 Plans: Continue to fund new and existing Army Business System Modernization Initiatives.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Increase in funding to fund new efforts for Army business system modernization.</p>			
Title: Corp of Engineers Installation IT Support		0.951	-
Description: This effort serves as the foundation to modernize Army Installation IT systems to include analytic, planning and visualization capabilities; and integration of diverse installation enterprise data sources in a common platform.			-
Title: Additive Manufacturing		1.807	-
Description: Additive Manufacturing (AM) is a SEC Army priority. AM will fully integrate AM capabilities and enable the Digital Thread within the Army ERPs. It will provide a common collaboration portal to enable sharing of AM 3D print data across the Army and with other DoD entities to address Army readiness driver requirements. Capability will communicate and track user requests for AM 3D print data, and allow users to search for relevant 3D print data with feedback to Engineering Support Activities, Army industrial base and Army tactical units. It will also enable interface between the LMP DT repository and the DLA JAMMEX system			-
Title: Installation Systems Modernization		1.716	-
Description: Consolidation of installation systems and upgrades of applications			-
Title: Army Vantage		-	9.455
			3.013

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<p>Description: Description: The Army Vantage Program is a data integration and visualization platform that enables the Army to "see itself" by providing Senior Leaders, Soldiers, Staff, and analytic communities with a common, integrated data platform to visualize and analyze the current and predicted future state(s) of the Army. Spans all data domains, powers a set of configurable views, and provides tools for making data-driven decisions at every level of the Army. The features and advantages of the platform allow the Army to (1) see itself clearly through its data, (2) meet its strategic modernization objectives, and (3) rapidly realize ROI.</p> <p>FY 2023 Plans: FY23 RDTE funds will be used to assess and evaluate Advana capabilities, define requirements and build Army Vantage capabilities, and improve the trustworthiness of Vantage by supporting process champions, domain data stewards and other subject matter experts verify and endorse the data, sources, pipeline integration and logic. Will also be used to improve data quality by making all data visible, accessible, understandable, trusted and interoperable. Make data available to external partners through Common Data Platform capabilities.</p> <p>FY 2024 Plans: FY24 RDTE will be used to continue effort(s) with ADVANA to mitigate risk with enterprise data platform migration. Pilot an open architecture universal data connection adapter to broker data with legacy systems. Further support the Army CIOs API layer enabling the enterprise data mesh construct.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Decrease in FY24 is to continue the development of an Army Community Space in ADVANA with the majority of the work performed in FY23.</p>			
<p>Title: Enterprise Resource Planning (ERP) Modernization</p> <p>Description: The Army created the EBS-C initiative as a strategic direction to modernize the Army business system landscape, align modern combat and combat support system capabilities with existing modernization efforts to enable Army force dominance during multi-domain large-scale combat operations in contested logistics environments, and improve overall Army financial operations resulting in improved financial management and successful audit outcomes. In-scope DBS for this effort include GFEBS and GFEBS-SA, LMP, GCSS-Army, AESIP Hub, and numerous non-ERP systems performing needed logistics and financial functions.</p> <p>FY 2023 Plans: Funds will be used to analyze legacy ERPs to consider modernization efforts in preparation for development efforts starting in FY24.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement:</p>		-	0.021
			-

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
Funding realigned to EBS-C accomplishment within this program element.			
Title: IEE EBS SYSTEM CONSOLIDATION Description: Development of interface of legacy DBS systems with Enterprise Resource Planning (ERP) modernization efforts. FY 2023 Plans: In FY23 RDTE fund will be used for preliminary development of interface of legacy DBS systems with Enterprise Resource Planning (ERP) modernization. FY 2023 to FY 2024 Increase/Decrease Statement: Funding realigned to EBS-C accomplishment within this program element.		-	0.488
Title: IEE EBS FOR FACILITY & ENERGY SYSTEMS (AWERS AND SWARWeb) Description: Update application software for the Army Energy and Water Reporting System (AEWRS). AEWRS is the Army's official database of record for all energy and water usage data, energy program management information, and solid waste management/recycling program information. AEWRS provides the basis for documenting and reporting Army progress in meeting statutory and mandated performance metrics for the active Army, National Guard, Reserves at the Installation, Subordinate Command, Major Command, Region, Headquarters, and supporting organization levels. Army data is reported to DoD to be joined with similar reporting from other services and reporting agencies. AEWRS incorporated as a module the Solid Waste Annual Reporting for the Web (SWARWeb) system which was decommissioned. Funding is required to modernize application software and update/expand data collection as required by revised statutes and federal/DoD policies. FY 2023 Plans: In FY23 RDTE funds will be used to update application software for the Army Energy and Water Reporting System (AEWRS). AEWRS is the Army's official database of record for all energy and water usage data, energy program management information, and solid waste management/recycling program information. AEWRS provides the basis for documenting and reporting Army progress in meeting statutory and mandated performance metrics for the active Army, National Guard, Reserves at the Installation, Subordinate Command, Major Command, Region, Headquarters, and supporting organization levels. Army data is reported to DoD to be joined with similar reporting from other services and reporting agencies. AEWRS incorporated as a module the Solid Waste Annual Reporting for the Web (SWARWeb) system which was decommissioned. Funding is required to modernize application software and update/expand data collection as required by revised statutes and federal/DoD policies. FY 2024 Plans: In FY24 RDTE funds will be used to modernize application software for the Army Energy and Water Reporting System (AEWRS) from the earlier software to improve its risk management posture, as well as providing additional of mandated reporting capabilities required by revised statutes and federal/DoD policies. AEWRS is the Army's official database of record for all energy		-	0.405

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
and water usage data, and energy program management information. AEWRS incorporated as a module the Solid Waste Annual Reporting for the Web (SWARWeb) system which was decommissioned.			
FY 2023 to FY 2024 Increase/Decrease Statement: Program increase reflects planned lifecycle of this effort.			
Title: IEE EBS BUILDER and PAVER		-	0.470
Description: Development of interface of Interface Energy and Environment related to Construction and Real Property with Enterprise Business Systems-Convergence (EBS-C) for Multifunctional Capabilities Team (MFCT). In addition, FY23 RDTE funds will be used for preliminary development of interface of interface Energy and Environment related to Construction and development of the Real Property Enterprise Sustainment Management System (SMS) BUILDER SMS, and PAVER SMS.			2.147
FY 2023 Plans: In FY23 RDTE fund will be used for preliminary development of interface of Interface Energy and Environment related to Construction and Real Property with Enterprise Business Systems-Convergence (EBS-C) for Multifunctional Capabilities Team (MFCT). In addition, FY23 RDTE funds will be used for preliminary development of interface of interface Energy and Environment related to Construction and development of the Real Property Enterprise Sustainment Management System (SMS) BUILDER SMS, and PAVER SMS.			
FY 2024 Plans: Continued development of ESMS to integrate data, models, work planning, and analysis tools from BUILDER and PAVER. Further develop the Application Programming Interface (API). This work is critical to make ESMS data available to EBS-C and other enterprise systems in support of DoD and Army readiness assessment and prioritization of sustainment resources across the Department and Service.			
FY 2023 to FY 2024 Increase/Decrease Statement: Increase in Funding supports extensive software development efforts expanding from the foundational work accomplished in FY23, including development of PAVER specific technology and methodology into the ESMS platform.			
Title: Enterprise Business Systems -Convergence		-	-
Description: In 2019, SAP announced that SAP would be moving to the next generation software, S4/HANA, as a replacement of the current software, ECC. As part of the risk reduction efforts, the Army is executing an Other Transaction Authority (OTA) to identify a Technical Integration Provider or multiple providers to support the development of the EBS-C solution. This will lead to development of the EBS-C solution with a planned initial capability in early FY26.			41.931

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B. Accomplishments/Planned Programs (\$ in Millions)			FY 2022	FY 2023	FY 2024
<p>The in-scope Defense Business Systems (DBS) for this effort include GFEBS and GFEBS-SA, LMP, GCSS-Army, AESIP Hub, and numerous non-ERP systems performing needed logistics and financial functions. The Army is working EBS-C requirements to improve process agility and cross-process integration, provide consistent user experiences with an intuitive user interface, and improve data integrity and security. At the enterprise level, EBS-C seeks to integrate financial and logistics processes and create opportunities to decrease overall DBS redundancies and duplications existing in the Army portfolio.</p> <p>FY 2024 funding supports development engineering, integration, testing, training development and program management to establish planned capabilities of the program.</p> <p>FY 2024 Plans:</p> <p>RDT&E funding in FY24 to support EBS-C will provide analysis and prototype(s) demonstrating key Audit, Finance and Logistics capabilities, application and technical architecture to support the next phases of the ERP modernization. In support of this, government Program Management plan, Systems Engineering and Technical Assistance (SETA) contractors will be needed to plan for and manage the initiation of the EBS-C implementation effort. A cloud prototype(s) environment(s) will be established to support the development of modernized finance and logistics capabilities in compliance with Impact Level 4 (IL4) and Impact Level 6 (IL6) requirements. In addition, the EBS-C team will establish a Lean Agile Center of Excellence (LACE) to prepare for rapid capability development providing capability to the warfighter through Continuous Integration and Continuous Deployment (CI/CD). The LACE will create the agile oversight and methodology to integrate with the TIP's agile development approach at the end of FY24.</p> <p>Product and Software Development: \$23.8M</p> <p>Description: Product and Software Development and prototyping includes all efforts related to the technical integration provider's labor costs for developing Minimum Viable Products (MVPs) of the ERP Modernized solution in the IL4 and IL6 cloud hosted environment. The vendors will demonstrate their solution through various knowledge points to Army SMEs and leadership while maintaining high levels of cybersecurity posture to set the foundation for Initial Authority to Test (IATT) and Authority to Operate (ATO).</p> <p>Program Support: \$15.1M</p> <p>Description: Program support includes program operations, acquisition support, system engineering, technical management, agile implementation support and test management for the ERP Modernized solution. Costs include government management, contractor support, travel and facilities.</p> <p>Cloud Support Development \$3.0M</p>					

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2022	FY 2023	FY 2024
<p>Description: Cloud support includes all costs related to cloud support provider (CSP), managed services provider (MSP), remote access for vendors, in support of Impact Level 4 and Impact Level 6 environments. Environments will include sandbox and development for the vendors conducting the prototypes for ERP Modernization.</p> <p><i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> Increase in FY24 supports implementation and enables funding to be executed in the EBS-C official program of record contract support, system integration services and implementation of the engineering to deliver Minimum Viable Products in support of Initial Limited Deployment (ILD) planned for FY26 (pending vendor feedback). The EBS-C effort intends to converge five logistics and financial ERP systems (GFEBS, GFEBS-SA, GCSS-ARMY, LMP, and AESIP) as well as numerous, smaller defense business systems reducing redundancy existing across the systems and providing a user informed experience and interface for Soldiers and civilians.</p>			
<p><i>Title:</i> SBIR/STTR</p> <p><i>Description:</i> Funding transferred in accordance with Title 15 USC §638</p> <p><i>FY 2023 Plans:</i> Funding transferred in accordance with Title 15 USC §638</p> <p><i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> Funding transferred in accordance with Title 15 USC §638</p>	-	0.908	-
Accomplishments/Planned Programs Subtotals	19.855	24.875	65.143

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u> <u>Base</u>	<u>FY 2024</u> <u>OCO</u>	<u>FY 2024</u> <u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• B66002: Army Contract Writing System	14.957	4.075	6.061	-	6.061	14.226	9.858	10.064	10.274	0.000	69.515
• OMA - 438001000: Operations and Maintenance	-	-	70.254	-	70.254	114.400	118.100	121.500	126.119	0.000	550.373

Remarks
OMA and OPA funding for EBS-C were programmed in POM24-28.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) T05 / <i>Army Business System Modernization Initiatives</i>

D. Acquisition Strategy

GFIM utilizes an Other Transactional Authority (OTA) vehicle for development of the GFIM prototypes and Minimum Viable Products through Q1FY24. GFIM plans to award a Federal Acquisition Regulation (FAR)-based production contract through Army Contracting Command-Rock Island (ACC-RI) in Q1FY24 to finalize development of the GFIM solution, transition the architecture to the cArmy hosting environment, and transition to the production environment. The Army is working through the optimal approach and will include contract options for FY25 and out.

EBS-C is following the Business Capability Acquisition Cycle and is expected to be a BCAT I Program. As part of the risk reduction efforts, the Army is executing an Other Transaction Authority (OTA) to identify a Technical Integration Provider or multiple providers to support the development of the EBS-C solution. The first prototype award to multiple vendors will be executed in FY23 with a final vendor selection to be completed by the end of FY24. This will lead to development of the EBS-C solution with a planned initial capability in early FY26. Additionally, EBS-C is developing a production contract for the deployment, enhancement and sustainment of the cloud-solution in the cArmy infrastructure.

Army Vantage is following the Business Capability Acquisition Cycle and is expected to be a BCAT II program. As a part of risk reduction efforts in the transition of the Other Transaction Authority (OTA) Army Vantage pilot, FY24 RDTE will be used to continue effort(s) with the ADVANA Army Community, pilot an open architecture universal data connector adapter to broker data with legacy systems, and further support the Army Chief Information Officer's (CIO) API layer pilots informing the enterprise data mesh construct.

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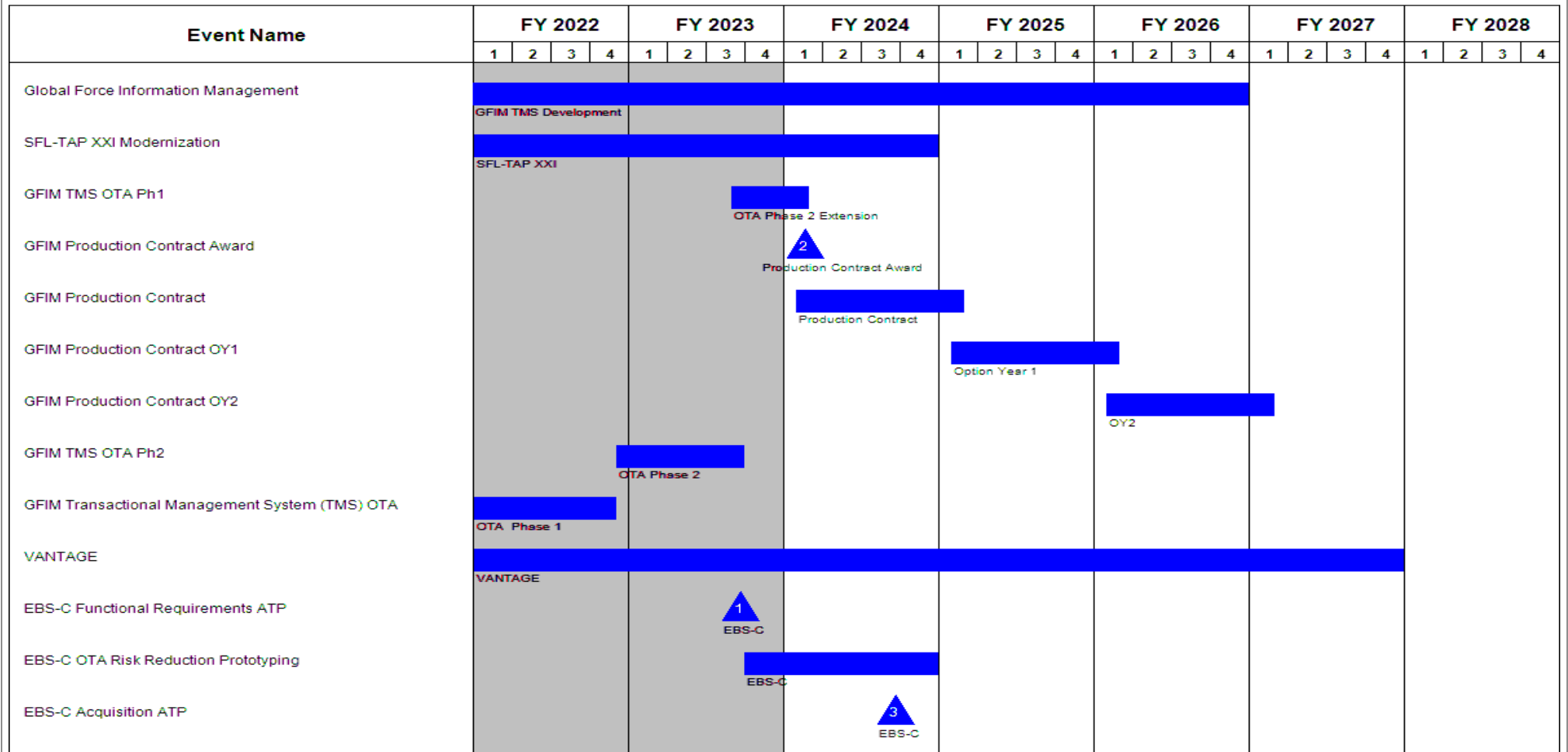
Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) T05 / Army Business System Modernization Initiatives					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
OA22 - G-8 Funding	TBD	TBD : TBD	-	1.716		-		-		-		-	0.000	1.716	-
SBIR/STTR	TBD	Various : Various	-	-		0.908		-		-		-	0.000	0.908	-
Subtotal			-	1.716		0.908		-		-		-	0.000	2.624	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Army Business System Modernization Initiatives	TBD	To Be Determined : To Be Determined	34.435	5.676		-		0.572		-		0.572	Continuing	Continuing	-
Global Force Information Management	Option/CPAF	CACI : Chantilly, VA	15.644	9.705		13.230		17.075		-		17.075	Continuing	Continuing	Continuing
Corp of Engineers Installation IT Suppor	MIPR	Engineer Research and Development Center : Champaign IL	1.725	0.951		-		-		-		-	0.000	2.676	-
Additive Manufacturing	C/CPFF	Accenture : Picatinny Arsenal NJ	4.958	1.807		-		-		-		-	0.000	6.765	-
VANTAGE	C/TBD	TBD : TBD	-	-		9.455		3.013		-		3.013	0.000	12.468	-
Enterprise Business Systems Convergence (EBS-C)	C/TBD	TBD : TBD	-	-		-		41.931		-		41.931	0.000	41.931	-
IEE EBS SYSTEM CONSOLIDATION	C/TBD	TBD : TBD	-	-		0.488		-		-		-	0.000	0.488	-
IEE EBS FOR FACILITY & ENERGY SYSTEMS (AEWRS AND SWARWeb)	C/TBD	TBD : TBD	-	-		0.303		0.405		-		0.405	0.000	0.708	-
IEE EBS BUILDER and PAVER	C/TBD	TBD : TBD	-	-		0.470		2.147		-		2.147	0.000	2.617	-
ERP Modernization	C/TBD	TBD : TBD	-	-		0.021		-		-		-	0.000	0.021	-
Subtotal			56.762	18.139		23.967		65.143		-		65.143	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) T05 / Army Business System Modernization Initiatives					
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Remarks															
Global Force Information Management (GFIM): GFIM will provide the Army an enterprise, integrated authoritative force management capability for lifecycle management of force/organizational structure data for the total force. In addition, it will establish a common data standard for force structure data by implementing the Global Force Management - Data Initiative (GFM-DI).															
The Army Human Resources Command (HRC) has several efforts for which RDT&E will be applied. One is to prepare those systems for subsumption into the Integrated Personnel and Pay System(IPPS-A). The other is to disconnect and upgrade those systems not being subsumed by IPPS-A. Systems that will be targeted by HRC to prepare for IPPS-A subsumption or upgrade are the Automated Orders and resources System (AORS), Army Selection Board System (ASBS), Data Base Administration Suite of System (DBA), Enlisted Distribution and Assignment system (EDAS), Enlisted Promotion Model (EPM), Enterprise Service Bus (ESB), Human Resource Command Identity Management System (HIMS), Integrated Total Army Personnel Database (ITAPDB), Officer Selection Support System (OSSS), Reserve Statistics Accounting System/ Reserve Component Common Personnel Data System (RSAS/RCCPDS), Senior Enlisted Promotions Model (SEPM), Single Evaluation Processing System (SEPS), Soldier Management System Webified Suite of System (SMSWEB), Total Army Personnel Data Base - Active Enlisted (TAPDB-AE), Total Army Personnel Data Base - Active Officer (TAPDB-AO), Total Army Personnel Data Base - Active Reserve (TAPDB-AR), Total Officer Personnel Management Information System (TOPMIS), Total Officer Personnel Management Information System II (TOPMIS II), Keystone Request/Retain System, and the Interactive Personnel Electronic Records Management System (iPERMS).															
HRC Core IT: Award date shown reflects iPERMS IT Integration Contract. SMS-WEB and ASBS 2.0 are on the Digital Application Support Task Order (DASTO) with an award date of 6 Feb 2018.															
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			56.762	19.855		24.875		65.143		-		65.143	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>		Project (Number/Name) T05 / <i>Army Business System Modernization Initiatives</i>	



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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development		Project (Number/Name) T05 / Army Business System Modernization Initiatives	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
EBS-C OTA Phase 2 ILD Deployment													<div>EBS-C</div>				<div>4 EBS-C</div>											
EBS-C Limited Deployment ATP																												
EBS-C Phase 3 Cont Integration/Cont Dev																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) T05 / <i>Army Business System Modernization Initiatives</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Global Force Information Management	2	2019	4	2026
HRC Core IT	4	2018	4	2020
SFL-TAP XXI Modernization	1	2019	4	2024
GFIM TMS OTA Ph1	3	2023	1	2024
GFIM Production Contract Award	1	2024	1	2024
GFIM Production Contract	1	2024	1	2025
GFIM Production Contract OY1	1	2025	1	2026
GFIM Production Contract OY2	1	2026	1	2027
GFIM TMS OTA Ph2	4	2022	3	2023
GFIM Transactional Management System (TMS) OTA	1	2022	4	2022
Capabilities Requirement Document	1	2020	1	2021
VANTAGE	1	2018	4	2027
EBS-C Functional Requirements ATP	3	2023	3	2023
EBS-C OTA Risk Reduction Prototyping	4	2023	4	2024
EBS-C Acquisition ATP	3	2024	3	2024
EBS-C OTA Phase 2 ILD Deployment	4	2024	2	2026
EBS-C Limited Deployment ATP	2	2026	2	2026
EBS-C Phase 3 Cont Integration/Cont Dev	3	2026	4	2032

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) VR3 / ASMIS-R (REPORTIT)			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
VR3: ASMIS-R (REPORTIT)	-	3.064	3.341	3.270	-	3.270	3.350	3.386	3.423	3.494	0.000	23.328
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Army Safety Management Information System (ASMIS) 2.0 is the Army's designated system of record for Army Safety and Occupational Health (SOH) data collection, information management, decision support, and reporting. It is built to holistically support the information management needs of the Army SOH program in accordance with Public Law 91-596, Executive Order 12196, DoDI 6055.01, The Army Strategy LOE 1: Build Readiness, LOE 2: Modernize, AR 385-10, and ASA(IEE) strategic guidance. ASMIS 2.0 provides support for the five key Army SOH capabilities: (1) Mishap and Near Miss Investigations and Reporting, (2) Safety Assessments and Inspections, (3) Hazard Management, (4) SOH Program Management, and (5) SOH Training and Education.

ASMIS 2.0 enables commanders and Army senior leaders to use data collected via these five key capabilities and other DoD data sources to prevent accidental losses, reduce associated costs, and enhance readiness. ASMIS 2.0 currently interfaces with 9 DoD systems and will interface with 22 upon completion. It directly supports the Warfighter through improved IT-enabled business processes and enterprise data analytics to enhance decision-making at all levels of the Army through greater use of leading indicators. In support of the Army Data Strategy, ASMIS 2.0 enables the Army to make SOH data visible, accessible, understandable, linked, trustworthy, interoperable, and secure (VAULTIS). Beyond the cost avoidance and reduction achieved by loss prevention, ASMIS 2.0 provides additional cost savings by eliminating 12 legacy systems.

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

	FY 2022	FY 2023	FY 2024
Title: ASMIS-R Development	3.064	3.219	3.270
Description: ASMIS 2.0 provides a framework of people, processes, and technology to synchronize, integrate and optimize Army SOH capabilities to preserve war fighting capabilities and enhance the force by providing a safe and healthy environment for Soldiers, Families, Civilians, and contractors. An analysis of Army SOH DOTMLPF-P in 2014 determined that the legacy system, a Defense Business System, was not able to satisfy current and emerging SOH capability requirements without modernization to resolve these capability gaps. Changes in requirements for the Army Safety and Health Management System (Programmatic) related to DoDI 6055.01, AR 385-10, Information Assurance requirements and direct feedback from the Safety professionals within the DoD and the Army have resulted in the need for changes in associated business processes. Additionally, a business gap analysis performed by the ASA(ESOH) revealed a deficiency in the system's requirements that would support Army Commands in identifying hazards in the workplace, determining hazard mitigation strategies and controls, employing these strategies and controls, and measuring their potential for reducing mishaps. Addressing these problems will have an immediate and direct impact on meeting regulatory requirements, improving data integrity, improving information assurance posture (compliance), increasing the Army's ability to reduce mishaps across the force structure, and promoting ARFORGEN capabilities.			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / <i>Information Technology Development</i>	Project (Number/Name) VR3 / <i>ASMIS-R (REPORTIT)</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<p><i>FY 2023 Plans:</i> Continue modernization of ASMIS 2.0. In FY23 the Program Management capability will be reach interim operating capability and will be available for Army-wide use to provide safety professionals, commanders, and senior leaders to effectively measure the health of their SOH programs and focus efforts on the areas needed to prevent loss.</p> <p><i>FY 2024 Plans:</i> In FY24 the SOH Training & Education capability will be fielded for Army-wide use. This module will enable safety professionals and supervisors to effectively execute and track SOH training based on individual job analyses and needs.</p> <p><i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> Funding decrease reflects planned lifecycle of this effort.</p>			
<p><i>Title:</i> SBIR/STTR Transfer</p> <p><i>Description:</i> Funding transferred in accordance with Title 15 USC §638</p> <p><i>FY 2023 Plans:</i> Funding transferred in accordance with Title 15 USC §638</p> <p><i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> Funding transferred in accordance with Title 15 USC §638</p>		-	0.122
			-
Accomplishments/Planned Programs Subtotals		3.064	3.341
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
<p>ASMIS 2.0 is comprised of five distinct capabilities, as outlined on the previous page, and each of these is being developed incrementally with a strategic sequencing that enables the primary data collection modules to be completed first with the risk analysis and program management modules executed subsequently.</p> <p>The acquisition strategy employed executed separate contracts for the construction of the first three modules, with a distinct deployment phase concluding the last two. With the maturity of the fielded capabilities in support of the first three, a multi-year contract was issued for the sustainment and operation of the first three modules and the development and deployment of the latter two. This contract will enter Option Year 1 in May 2022 with another option year thereafter.</p> <p>Acquisition is executed and managed by the USACRC and the organization is directly engaged with its Contracting Office and Contracting Office Representative.</p>			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development				Project (Number/Name) VR3 / ASMIS-R (REPORTIT)					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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	TBD : TBD	-	-		0.122		-		-		-	0.000	0.122	-
Subtotal			-	-		0.122		-		-		-	0.000	0.122	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
ASMIS-R	MIPR	DLA : Fort Belvoir, VA	1.109	-		0.341		-		-		-	Continuing	Continuing	-
Subtotal			1.109	-		0.341		-		-		-	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
ASMIS-R	MIPR	DLA : Fort Belvoir, VA	9.296	3.064		2.878		3.270		-		3.270	Continuing	Continuing	Continuing
Subtotal			9.296	3.064		2.878		3.270		-		3.270	Continuing	Continuing	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			10.405	3.064		3.341		3.270		-		3.270	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0605013A / Information Technology Development

Project (Number/Name)

VR3 / ASMIS-R (REPORTIT)

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605013A / Information Technology Development	Project (Number/Name) VR3 / ASMIS-R (REPORTIT)

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Product Development	3	2018	4	2027

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)					PE 0605018A I Integrated Personnel and Pay System-Army (IPPS-A)							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	65.230	67.519	102.084	-	102.084	95.129	60.124	44.481	38.293	Continuing	Continuing
ED9: Integrated Personnel and Pay System - Army Inc 2	-	65.230	67.519	102.084	-	102.084	95.129	60.124	44.481	38.293	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Integrated Personnel and Pay System-Army Increment II (IPPS-A Inc II) provides an integrated, multi-Component, personnel and pay system that streamlines existing Human Resources (HR) systems and processes by enhancing efficiency and accuracy of personnel and pay procedures in support of 1.1 million Soldiers. This program is an essential building block to reform the Department of the Army towards achieving greater performance and affordability in support of the National Defense Strategy and the Congressional audit mandate.

The IPPS-A program has deployed two major software releases:

Release 2 completed a phased deployment of Military Human Resource capabilities to all Army National Guard (ARNG) units in the 54 states and territories in March 2020. Release 2 replaced the Standard Installation/Division Personnel System and consolidated many disparate state/territory systems into one single solution. Release 3 completed a phased deployment of Military Human Resource and talent management capabilities across all Army components (Active, Guard and Reserve) in January 2023. Release 3 fully subsumed 12 legacy systems and 11 partial capabilities bringing the Army's Total Force into a single authoritative system.

In accordance with the Acquisition Strategy approved by the Army Acquisition Executive on 21 June 2022, the next major software capabilities are Military Payroll (previously referred to as Release 4) and providing software enhancements to the existing solution. The program is transitioning from a waterfall development approach to an agile development approach for future delivery of capabilities.

The FY 2024 RDT&E budget supports technical analysis for the Military Payroll solution and provides funding for a competitive contract award to begin iterative design and build for the future capabilities. In addition, the funding will support software enhancements for the Human Resource capabilities.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army				Date: March 2023	
Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)		PE 0605018A I Integrated Personnel and Pay System-Army (IPPS-A)			
B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	67.701	67.564	94.133	-	94.133
Current President's Budget	65.230	67.519	102.084	-	102.084
Total Adjustments	-2.471	-0.045	7.951	-	7.951
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-2.471	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	7.951	-	7.951
• FFRDC Transfer	-	-0.045	-	-	-
Change Summary Explanation					
The increase in FY 2024 RDT&E is a result of an Army adjustment to support refined program costs for Infrastructure Hosting and Software Development.					

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605018A / Integrated Personnel and Pay System-Army (IPPS-A)				Project (Number/Name) ED9 / Integrated Personnel and Pay System - Army Inc 2			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
ED9: Integrated Personnel and Pay System - Army Inc 2	-	65.230	67.519	102.084	-	102.084	95.129	60.124	44.481	38.293	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Integrated Personnel and Pay System-Army Increment II (IPPS-A Inc II) provides an integrated, multi-Component, personnel and pay system that streamlines existing Human Resources (HR) systems and processes by enhancing efficiency and accuracy of personnel and pay procedures in support of 1.1 million Soldiers. This program is an essential building block to reform the Department of the Army towards achieving greater performance and affordability in support of the National Defense Strategy and the Congressional audit mandate.

The IPPS-A program has deployed two major software releases:

Release 2 completed a phased deployment of Military Human Resource capabilities to all Army National Guard (ARNG) units in the 54 states and territories in March 2020. Release 2 replaced the Standard Installation/Division Personnel System and consolidated many disparate state/territory systems into one single solution. Release 3 completed a phased deployment of Military Human Resource and talent management capabilities across all Army components (Active, Guard and Reserve) in January 2023. Release 3 fully subsumed 12 legacy systems and 11 partial capabilities bringing the Army's Total Force into a single authoritative system.

In accordance with the Acquisition Strategy approved by the Army Acquisition Executive on 21 June 2022, the next major software capabilities are Military Payroll (previously referred to as Release 4) and providing software enhancements to the existing solution. The program is transitioning from a waterfall development approach to an agile development approach for future delivery of capabilities.

The FY 2024 RDT&E budget supports continued technical analysis for the Military Payroll solution and provides funding for a competitive contract award to begin iterative design and build for the future capabilities. In addition, the funding will support software enhancements for the Human Resource capabilities.

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

	FY 2022	FY 2023	FY 2024
Title: Acquisition and Technical Support Services	1.360	1.214	1.291
Description: Provides acquisition support services and technical support for cybersecurity and infrastructure management. Includes Program Management Support and PMO Change Management Travel.			
FY 2023 Plans: The FY23 RDT&E funding provides acquisition support services and technical support for cybersecurity and infrastructure management.			
FY 2024 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605018A / Integrated Personnel and Pay System-Army (IPPS-A)	Project (Number/Name) ED9 / Integrated Personnel and Pay System - Army Inc 2		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
The FY23 RDT&E funding provides acquisition support services and technical support for cybersecurity and infrastructure management.				
FY 2023 to FY 2024 Increase/Decrease Statement: Increase due to slight increase in support services and technical support costs.				
Title: Technical Services		11.905	15.272	15.992
Description: Provides technical and program management contractor services providing systems engineering including business process design, enterprise architecture management, data management, interface management, testing, cybersecurity, infrastructure management, audit support, training and deployment support. Includes Software Product Level SME Consulting Support and Technical Services.				
FY 2023 Plans: The FY23 RDT&E funding provides technical and program management contractor services providing systems engineering including business process design, enterprise architecture management, data management, interface management, testing, cybersecurity, infrastructure management, audit support, training and deployment support.				
FY 2024 Plans: The FY23 RDT&E funding provides technical and program management contractor services providing systems engineering including business process design, enterprise architecture management, data management, interface management, testing, cybersecurity, infrastructure management, audit support, training and deployment support.				
FY 2023 to FY 2024 Increase/Decrease Statement: The increase to FY24 supports the agile development and delivery of future capabilities including Military Payroll.				
Title: Design, Development and Integration		39.835	39.921	64.898
Description: Funds the design, development, integration, and deployment of Human Resource, Military Payroll, and future capabilities for 1.1 Million Soldiers across all Army Components.				
FY 2023 Plans: The FY23 RDT&E funding supports completion of the software and testing for the Human Resource capabilities for 1.1 Million Soldiers across all Army Components and funds technical analysis studies in support of Military Payroll and the transformation to an agile software development approach.				
FY 2024 Plans:				

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605018A / <i>Integrated Personnel and Pay System-Army (IPPS-A)</i>	Project (Number/Name) ED9 / <i>Integrated Personnel and Pay System - Army Inc 2</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<p>The FY24 RDT&E funding supports continued technical analysis and provides funding for a competitive contract award to begin iterative design and build for the Military Payroll and other future capabilities. In addition, the funding will support software enhancements for the Human Resource capabilities.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Additional RDT&E in FY24 supports the agile design and development of future capabilities for a full fiscal year versus a partial fiscal year in FY23.</p>			
<p>Title: Network Support / Hardware Leasing</p> <p>Description: Supports infrastructure hosting at Defense Information Systems Agency (DISA). Includes computer processing, memory, and associated labor costs to maintain the IPPS-A software development environments.</p> <p>FY 2023 Plans: The FY23 funding supports infrastructure hosting at Defense Information Systems Agency (DISA). Includes computer processing, memory, and associated labor costs to maintain the IPPS-A software development environments.</p> <p>FY 2024 Plans: The FY24 funding supports infrastructure hosting at Defense Information Systems Agency (DISA). Includes services for computer processing, memory, and associated labor costs to maintain the IPPS-A hardware and software development environments.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Additional RDT&E in FY24 supports revised infrastructure hosting costs based on additional Cybersecurity requirements.</p>		7.869	6.686
<p>Title: Systems Interfaces</p> <p>Description: Supports other government agencies providing technical services for interface design and build to enable end- to-end data integration.</p> <p>FY 2023 Plans: The FY23 funding supports other government agencies providing technical services for interface design and build to enable end-to-end data integration.</p> <p>FY 2024 Plans: The FY24 funding supports other government agencies providing technical services for interface design and build to enable end-to-end data integration.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement:</p>		1.796	1.962
			5.522

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605018A / Integrated Personnel and Pay System-Army (IPPS-A)					Project (Number/Name) ED9 / Integrated Personnel and Pay System - Army Inc 2		
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2022	FY 2023	FY 2024
Additional RDT&E in FY24 supports additional system interface requirements in support of the agile development for delivery of future capabilities including Military Payroll.												
Title: Test and Evaluation										2.465	-	-
Description: There is no Test and Evaluation for FY24												
Title: FY 2023 SBIR/STTR Transfer										-	2.464	-
Description: Funding transferred in accordance with Title 15 USC §638.												
FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638.												
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638.												
Accomplishments/Planned Programs Subtotals										65.230	67.519	102.084
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost	
• B66706: IPPS-A INC 2	16.077	6.926	5.318	-	5.318	5.229	6.266	7.358	4.108	Continuing	Continuing	
• OMA - Sustainment and Support OMA: OMA - 432612000	107.056	107.180	110.253	-	110.253	112.045	119.371	146.704	145.139	Continuing	Continuing	
Remarks												
B66706000 (Other Procurement, Army) funding supports continued system implementation and deployment of the Integrated Personnel and Pay System-Army Increment III (IPPS-A Inc II). Procurement funds will support training and instruction development for Release 4 and continuous improvements for all Army components (Army, National Guard, Reserves - 48,700 total Human Resource transactional users).												
432612000 (Operation and Maintenance, Army (OMA)) funding supports overall software system sustainment including Help Desk support (Tier I through Tier II), system maintenance break/fixes, minor enhancements, software licenses, cyber compliance, program office contractor support, civilian salaries, and program office operations. IPPS-A now supports 1.1 million system users as of January 17, 2023.												
D. Acquisition Strategy												
The Integrated Personnel and Pay System-Army Increment II (IPPS-A Inc II) provides an integrated, multi-Component, personnel and pay system that streamlines existing Human Resources (HR) systems and processes by enhancing efficiency and accuracy of personnel and pay procedures in support of 1.1 million Soldiers.												

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605018A / <i>Integrated Personnel and Pay System-Army (IPPS-A)</i>	Project (Number/Name) ED9 / <i>Integrated Personnel and Pay System - Army Inc 2</i>
<p>The IPPS-A program achieved a Milestone B on 14 December 2014 under the authority of Department of Defense Instruction (DODI) 5000.02. The program transitioned to a Priority Defense Business System Category I (BCAT I) under the authority of the DODI 5000.75 and has implemented a tailored Acquisition approach for Defense Business Systems.</p> <p>In accordance with the Acquisition Strategy approved by the Army Acquisition Executive on 21 June 2022, the next major software capabilities are Military Payroll (previously referred to as Release 4) and providing software enhancements to the existing solution. The program is transitioning from a waterfall development approach to an agile development approach for future delivery of capabilities.</p> <p>With the transition to an agile implementation approach along with recent responses from industry the IPPS-A contracting strategy is being revised to better support future competition for delivery of the future capabilities.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605018A / Integrated Personnel and Pay System-Army (IPPS-A)				Project (Number/Name) ED9 / Integrated Personnel and Pay System - Army Inc 2					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Acquisition and Technical Support Services	C/CPIF	Various : Various	32.208	1.360	Jun 2022	1.214	Jun 2023	1.291	Jun 2024	-		1.291	Continuing	Continuing	Continuing
PMO Change Management Travel	Allot	PM IPPS-A : Arlington, VA	-	-		0.072		-		-		-	Continuing	Continuing	Continuing
FY 2023 SBIR/STTR Transfer	TBD	Various : Various	-	-		2.464		-		-		-	0.000	2.464	-
Subtotal			32.208	1.360		3.750		1.291		-		1.291	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Technical Services	C/CPFF	MITRE : Various	-	11.905	Jul 2022	15.272	Mar 2023	15.992	Mar 2024	-		15.992	Continuing	Continuing	Continuing
Design, Development and Integration	C/Various	To Be Determined : To Be Determined	-	39.835	Mar 2022	39.849	Dec 2022	64.898	Jun 2023	-		64.898	Continuing	Continuing	Continuing
Network Support / Hardware Leasing	MIPR	Defense Information Systems Agency (DISA) Defense Enterprise Computing Center (DECC) : various	178.434	7.869	Jan 2022	6.686	Jan 2023	14.381	Dec 2023	-		14.381	Continuing	Continuing	Continuing
Systems Interfaces	C/ FFPLOE	Various Government Agencies : Various Locations	24.130	1.796	Jul 2022	1.962	Jul 2023	5.522	Dec 2023	-		5.522	Continuing	Continuing	Continuing
Subtotal			202.564	61.405		63.769		100.793		-		100.793	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605018A / Integrated Personnel and Pay System-Army (IPPS-A)						Project (Number/Name) ED9 / Integrated Personnel and Pay System - Army Inc 2			
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Increment II-Operational Test - Limited User Test (LUT)	MIPR	Various Government Agencies : Various	3.437	2.465	Oct 2021	-		-		-		-	0.000	5.902	-
Subtotal			3.437	2.465		-		-		-		-	0.000	5.902	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			238.209	65.230		67.519		102.084		-		102.084	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605018A / Integrated Personnel and Pay System-Army (IPPS-A)		Project (Number/Name) ED9 / Integrated Personnel and Pay System - Army Inc 2	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Release 3 - Human Resources - All Army Components																												
Release 3.0																												
Release 3 - Testing and Evaluation																												
Testing and Evaluation																												
Release 3 - Limited Deployment Authority To Proceed (ATP)																												
Release 3 - Go-Live																												
Release 3 - Software Stabilization																												
Software Baseline Stabilization																												
Capability Support Contract Award																												
Contract Award Capability Support																												
Future Capabilities (R4) - Military Payroll analysis / t...																												
Military Payroll analysis and technical studies																												
Agile Development and Delivery of Future Capabilities																												
Development and Incremental Deployment of Future Capabilities																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army

Date: March 2023

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0605018A / Integrated Personnel and Pay System-Army (IPPS-A)

Project (Number/Name)

ED9 / Integrated Personnel and Pay System - Army Inc 2

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Milestone B (MS B) - Increment II	1	2015	1	2015
Release 2 - SIDPERS Functionality (ARNG)	4	2015	3	2020
Release 2 - Configuration, Development, and Integration	3	2017	3	2018
Release 2 - T & E	4	2018	2	2019
Release 2 - Limited Deployment Authority To Proceed (ATP)	3	2019	3	2019
Release 3 - Human Resources - All Army Components	4	2017	2	2023
Release 3 - Design and Development	2	2020	3	2021
Release 3 - Integrated Baseline Review (IBR)	3	2018	3	2018
Release 3 - Preliminary Design Review (PDR)	4	2019	4	2019
Release 3 - Critical Design Review (CDR)	1	2020	1	2020
Release 3 - Testing and Evaluation	3	2021	3	2023
Release 3 - Limited Deployment Authority To Proceed (ATP)	1	2023	1	2023
Release 3 - Go-Live	1	2023	1	2023
Release 3 - Software Stabilization	4	2022	4	2023
Capability Support Contract Award	2	2024	2	2024
Future Capabilities (R4) - Military Payroll analysis / technical studies	2	2023	4	2024
Agile Development and Delivery of Future Capabilities	2	2024	2	2029

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605028A I Armored Multi-Purpose Vehicle (AMPV)							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	0.000	34.262	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	34.262
EB5: Armored Multi-Purpose Vehicle	-	34.262	-	-	-	-	-	-	-	-	0.000	34.262

A. Mission Description and Budget Item Justification

This funding line is directly aligned to the Next Generation Combat Vehicle (NGCV) Army Modernization Priority. The Armored Multi-Purpose Vehicle (AMPV) is the materiel solution for replacement of the Army's Armored Personnel Carrier (M113) Family of Vehicles (FoV) within the Armored Brigade Combat Team (ABCT). It will mitigate current and future capability gaps in force protection, mobility, reliability, and interoperability across the Spectrum of Conflict. The AMPV will replace five mission roles currently performed by the M113 FoV by transferring the current M113 mission equipment packages to a new Military Vehicle Derivative platform. In total, the AMPV FoV will account for approximately 30% of the ABCT's tracked fleet and consists of the following five variants:

1. Mission Command Vehicle (MCmd): This platform enables effective mission command planning and execution for both the Tactical Operations Center and Tactical Command Vehicle versions of the MCmd. It will host current Battle Command Systems, future replacements, and upgrades of hardware and software.
2. Medical Treatment (MT) Vehicle: This platform will provide a protected surgical environment, with adequate lighting and accessible medical equipment. It will provide a capability for immediate medical care for one patient by a medical crew of four.
3. Medical Evacuation (ME) Vehicle: This platform will conduct ambulance type activities and provide casualty evacuation for up to four litters or six ambulatory patients, with a crew of three medical attendants.
4. General Purpose (GP) Vehicle: This platform will operate throughout the battle space by conducting re-supply, maintenance, casualty evacuation, and other tasks within the formation.
5. Mortar Carrier (MC) Vehicle: This platform will provide immediate responsive fire support to conduct fast-paced offensive operations.

The AMPV program was initiated as an Acquisition Category (ACAT) ID program at Milestone B (MS B). The Defense Acquisition Executive signed the Acquisition Decision Memorandum (ADM) on 22 December 2014, authorizing entry into the Engineering and Development phase and approving contract award to BAE Systems Land & Armaments, L.P. The vehicle was developed to the Capability Development Document, which was approved 21 June 2013 and revised 24 October 2016. The DAE issued an ADM 26 September 2017 that approved revising the acquisition documentation tailoring plan, revising Milestone C entrance criteria, and increasing the Low Rate Initial Production (LRIP) quantity to 551 vehicles (to recognize the Army's desire for early fielding of AMPVs for the European Deterrence Initiative). AMPV was re-designated as an ACAT IC program on 1 November 2017, with the Army Acquisition Executive (AAE) and as the Milestone Decision Authority. The Army convened an Army Systems Acquisition Review Council (ASARC) for Milestone C on December 20, 2018, and the AAE signed the ADM on January 25, 2019. As a result of vehicle delivery delays, the AAE approved a revised Acquisition Program Baseline to adjust the program schedule on January 7, 2021.

The Fiscal Year (FY) 2022 planned program primarily consisted of finalizing efforts associated with Production Qualification Testing (PQT), Initial Operational Test & Evaluation (IOT&E), Live Fire Test and Evaluation (LFT&E) and corrective action implementation resulting from test results. Prime contractor support was required

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)		PE 0605028A / Armored Multi-Purpose Vehicle (AMPV)			
for testing and engineering to ensure adequate system support packages were available during the tests. Government test locations were used for the tests and government personnel were responsible for the overall management of the efforts.					
B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	35.560	0.000	0.000	-	0.000
Current President's Budget	34.262	0.000	0.000	-	0.000
Total Adjustments	-1.298	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-1.298	-			
• SBIR/STTR Transfer	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605028A / Armored Multi-Purpose Vehicle (AMPV)				Project (Number/Name) EB5 / Armored Multi-Purpose Vehicle			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
EB5: Armored Multi-Purpose Vehicle	-	34.262	-	-	-	-	-	-	-	-	0.000	34.262
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Armored Multi-Purpose Vehicle (AMPV) is the materiel solution for replacement of the Army's Armored Personnel Carrier (M113) Family of Vehicles (FoV) within the Armored Brigade Combat Team (ABCT). It will mitigate current and future capability gaps in force protection, mobility, reliability, and interoperability across the Spectrum of Conflict. The AMPV will replace five mission roles currently performed by the M113 FoV by transferring the current M113 mission equipment packages to a new Military Vehicle Derivative platform. In total, the AMPV FoV will account for approximately 30% of the ABCT's tracked fleet and consists of the following five variants:

1. Mission Command (MCmd) Variant: This platform enables effective mission command planning and execution for both the Tactical Operations Center and Tactical Command Vehicle versions of the MCmd. It will host current Battle Command Systems, future replacements, and upgrades of hardware and software.
2. Medical Treatment (MT) Variant: This platform will provide a protected surgical environment, with adequate lighting and accessible medical equipment. It will provide a capability for immediate medical care for one patient by a medical crew of four.
3. Medical Evacuation (ME) Variant: This platform will conduct ambulance type activities and provide casualty evacuation for up to four litters or six ambulatory patients, with a crew of three medical attendants.
4. General Purpose (GP) Variant: This platform will operate throughout the battle space by conducting re-supply, maintenance, casualty evacuation, and other tasks within the formation.
5. Mortar Carrier (MC) Variant: This platform will provide immediate responsive fire support to conduct fast-paced offensive operations.

The AMPV program was initiated as an Acquisition Category (ACAT) ID program at Milestone B (MS B). The Defense Acquisition Executive signed the Acquisition Decision Memorandum (ADM) on 22 December 2014, authorizing entry into the Engineering and Development phase and approving contract award to BAE Systems Land & Armaments, L.P. The vehicle was developed to the Capability Development Document, which was approved 21 June 2013 and revised 24 October 2016. The DAE issued an ADM 26 September 2017 that approved revising the acquisition documentation tailoring plan, revising Milestone C entrance criteria, and increasing the Low Rate Initial Production (LRIP) quantity to 551 vehicles (to recognize the Army's desire for early fielding of AMPVs for the European Deterrence Initiative). AMPV was re-designated as an ACAT IC program on 1 November 2017, with the Army Acquisition Executive (AAE) and as the Milestone Decision Authority. The Army convened an Army Systems Acquisition Review Council (ASARC) for Milestone C on December 20, 2018, and the AAE signed the ADM on January 25, 2019. As a result of vehicle delivery delays, the AAE approved a revised Acquisition Program Baseline to adjust the program schedule on January 7, 2021.

The Fiscal Year (FY) 2022 planned program primarily consisted of finalizing efforts associated with Production Qualification Testing (PQT), Initial Operational Test & Evaluation (IOT&E), Live Fire Test and Evaluation (LFT&E) and corrective action implementation resulting from test results. Prime contractor support was required for testing and engineering to ensure adequate system support packages were available during the tests. Government test locations were used for the tests and

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army								Date: March 2023					
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605028A / Armored Multi-Purpose Vehicle (AMPV)				Project (Number/Name) EB5 / Armored Multi-Purpose Vehicle					
government personnel were responsible for the overall management of the efforts. This program supports the Next Generation Combat Vehicle (NGCV) Cross Functional Team (CFT).													
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2022		FY 2023		FY 2024	
Title: Armored Multi-Purpose Vehicle (AMPV) Product Development								22.439		-		-	
Description: AMPV Product Development costs included all efforts provided under the AMPV Engineering and Manufacturing Development (EMD) prime contract along with Government Furnished Material (GFM). Significant examples of prime contract effort included: development engineering, system engineering/program management, prototype hardware procurement, prototype system level fabrication and integration, software development, support to the government test program, and oversight of subcontractors/suppliers. Also included are all efforts performed by subcontractors / suppliers who are under contract to the AMPV EMD prime contractor. This element also included the recurring manufacturing cost to procure the vehicles that will support Full-Up System Level (FUSL) live fire testing.													
Title: AMPV Government Program Management Costs								3.196		-		-	
Description: AMPV Government Program Management costs included efforts to provide Government oversight of the AMPV program. This included Systems Engineering and Program Management. Government and support Contractor salaries are included, as well as travel and other support costs that are required to effectively manage the program. Costs in this category do not include Government Furnished Material or efforts that are specific and unique to end item testing that is performed at Government test locations.													
Title: Government Test Costs								8.627		-		-	
Description: Government Test costs were for efforts required to perform and validate system-related tests. This element included costs of the detailed planning, conduct, support, data reduction, and reports from such testing. Also included were costs necessary to acquire data during the conduct of the Government tests. The actual test articles (i.e., functionally configured systems) were excluded from this element. Also excluded are prime contractor costs incurred in support of the Government system level test.													
Accomplishments/Planned Programs Subtotals								34.262		-		-	
C. Other Program Funding Summary (\$ in Millions)													
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost		
• G80819: Armored Multi Purpose Vehicle (AMPV)	950.366	380.677	554.777	-	554.777	561.462	631.904	513.920	613.453	14,094.908	18,301.467		

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605028A / Armored Multi-Purpose Vehicle (AMPV)	Project (Number/Name) EB5 / Armored Multi-Purpose Vehicle	

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

<u>Line Item</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u> <u>Base</u>	<u>FY 2024</u> <u>OCO</u>	<u>FY 2024</u> <u>Total</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• G99911: PRODUCTION BASE SUPPORT FOR SPECIAL CONTINGENCIES	27.500	-	0.000	-	0.000	-	-	-	-	0.000	27.500

Remarks

D. Acquisition Strategy

The AMPV program was initiated at Milestone B (MS B). The 22 December 2014 MS B Acquisition Decision Memorandum (ADM) approved contract award for the Engineering and Manufacturing Development phase plus three Low Rate Initial Production (LRIP) options to BAE Systems Land & Armaments, L.P. on a competitive basis. The Army Acquisition Executive (AAE) approved the Milestone C ADM on January 25, 2019, authorizing Low Rate Initial Production. All three LRIP options have since been exercised. As a result of vehicle delivery delays, the AAE approved a revised Acquisition Program Baseline to adjust the program schedule on January 7, 2021.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023					
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605028A / Armored Multi-Purpose Vehicle (AMPV)						Project (Number/Name) EB5 / Armored Multi-Purpose Vehicle					
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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		
Contractor Development Engineering	C/CPIF	BAE : Sterling Heights, MI	262.500	13.084	Dec 2021	-		-		-		-	0.000	275.584	-		
Prototype Material Contractor	C/CPIF	BAE : Sterling Heights, MI	119.298	-		-		-		-		-	0.000	119.298	-		
Prototype Material Government Furnished	Various	Various : .	27.673	-		-		-		-		-	0.000	27.673	-		
Contractor System Engineering, Data, Test and Program Management	C/CPIF	BAE : Sterling Heights, MI	163.805	4.381	Dec 2021	-		-		-		-	0.000	168.186	-		
Procurement of Live Fire Test Assets	Option/ FPIF	BAE : York, PA	50.650	-		-		-		-		-	0.000	50.650	-		
Contractor Support to Qualification, Live Fire, & Operational Testing	C/CPIF	BAE : Sterling Heights, MI	56.138	4.974	Dec 2021	-		-		-		-	0.000	61.112	-		
Subtotal			680.064	22.439		-		-		-		-	0.000	702.503	N/A		
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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		
Program Management Support	MIPR	PMO : Warren, MI	121.303	3.196	Dec 2021	-		-		-		-	0.000	124.499	-		
Subtotal			121.303	3.196		-		-		-		-	0.000	124.499	N/A		
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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		
Government System Testing	MIPR	Various : .	153.144	8.627	Dec 2021	-		-		-		-	0.000	161.771	-		
Subtotal			153.144	8.627		-		-		-		-	0.000	161.771	N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605028A / Armored Multi-Purpose Vehicle (AMPV)					Project (Number/Name) EB5 / Armored Multi-Purpose Vehicle					
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Remarks Testing locations are as follows. Aberdeen Test Center (ATC) = Maryland, Yuma Test Center (YTC) = Arizona, White Sands Missile Range (WSMR) = New Mexico, Electronic Proving Ground (EPG) = Arizona, Cold Regions Test Center (CRTC) = Alaska, Tropic Regions Test Center (TRTC) = Suriname, South America, Dugway Proving Grounds (DPG) = Utah															
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			954.511	34.262		-		-		-		-	0.000	988.773	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army																Date: March 2023												
Appropriation/Budget Activity 2040 / 5									R-1 Program Element (Number/Name) PE 0605028A / Armored Multi-Purpose Vehicle (AMPV)								Project (Number/Name) EB5 / Armored Multi-Purpose Vehicle											
Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
EMD Contract																												
Production Qualification Testing																												
Live Fire Test																												
Initial Operational Test & Evaluation																												
Full Rate Production Decision																												
First Unit Equipped																												
Initial Operational Capability																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023	
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605028A / <i>Armored Multi-Purpose Vehicle (AMPV)</i>	Project (Number/Name) EB5 / <i>Armored Multi-Purpose Vehicle</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Milestone B Decision	1	2015	1	2015
EMD Contract	1	2015	4	2022
Preliminary Design Review	3	2015	3	2015
Critical Design Review	3	2016	3	2016
Production Prove Out Test	4	2017	4	2018
Limited User Test	4	2018	1	2019
Milestone C	2	2019	2	2019
Low Rate Initial Production 1	2	2019	2	2019
Production Qualification Testing	1	2021	3	2022
Live Fire Test	2	2021	2	2022
Initial Operational Test & Evaluation	2	2022	3	2022
Full Rate Production Decision	1	2023	1	2023
First Unit Equipped	2	2023	2	2023
Initial Operational Capability	2	2023	2	2023

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army **Date:** March 2023

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605030A / Joint Tactical Network Center (JTNC)							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	15.752	17.936	18.662	-	18.662	6.178	6.313	6.352	6.423	Continuing	Continuing
EA8: Joint Tactical Networking Center	-	15.752	17.936	18.662	-	18.662	6.178	6.313	6.352	6.423	Continuing	Continuing

Note

Joint Tactical Networking Center (JTNC) is funded using a Joint budget strategy. Each Military Department (MILDEP) budgets for one-third of the total program Research Development Test & Evaluation (RDT&E) requirements for joint efforts. Fiscal Year (FY) 2022 through FY 2024 funding reflects the full Army JTNC requirement with the consolidated funding from Air Force and Navy. FY 2025 and beyond reflects the Army one-third portion of total program RDT&E funds. Out-year funding is programmed in PE 0605030A by the Army, PE 0605030N by the Navy and PE 0605030F by the Air Force. Prior to submission of the President's Budget, the funding is consolidated in Army PE 0605030A for execution.

A. Mission Description and Budget Item Justification

This funding line supports the Army Network Modernization Strategy line of effort (LOE) 1, Unified Network. Efforts are directly aligned to the Army Network Modernization Priority.

The Joint Tactical Networking Center (JTNC) is chartered to enable the Department of Defense (DoD)'s rapid identification, characterization, procurement, fielding, and sustainment of modular, innovative tactical communications products that ensure secure, interoperable, and resilient Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) capabilities. The JTNC provides technical expertise to facilitate tactical communications management, innovation, and standardization. The JTNC: (1) maintains a cyber-hardened DoD Information Repository (IR), (2) provides Technical Analyses/Capability Characterizations on tactical communications products, (3) provides Open Systems Architecture Standards, (4) provides exportability analysis and licensing reviews, and (5) serves as Technical Advisor to the Communications, Command, and Control Leadership Board (C3LB) and Tactical Communications Senior Steering Group (TCSSG).

JTNC mission is executed in coordination with key government stakeholders to include: C3LB, TCSSG, Communications Technologies and Waveforms Working Group (CTWWG), Resiliency Sub-Working Group (RSWG), the Department of Defense (DoD) Chief Information Officer (CIO), Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)), Joint Staff J6 (JS J6), the Under Secretary of Defense for Research and Engineering USD(R&E), and the Services. Particular attention is paid to ensuring that interagency work is collaborative and eliminates duplicative capability. The JTNC enables a common software baseline that is hardware agnostic leading to increased competition for Software Defined Radios (SDR).

Current JTNC directed requirements, outlined by the C3LB, consist of the CTWWG, Joint All-Domain Command and Control (JADC2) support, development/maturation of the DoD IR framework & Cloud migration, and development of the Joint Communications Marketplace (JCM) to meet DoD and Industry requirements in conjunction with DoD Instruction 4630.09. Through collaboration with USD R&E (INSS) and industry partners, JTNC is in the process of capturing information on resilient waveform technologies and portfolio products. The ultimate goal is to expedite market research activities by collecting, analyzing, and making data available in support of emerging

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0605030A I Joint Tactical Network Center (JTNC)			
Government waveform acquisitions. The JTNC and Joint Interoperability Test Command (JITC) co-chair the High-Frequency Interoperability and Architecture Sub-Working Group (HF I&A SWG) to resolve HF 3G and 4G interoperability issues, thus facilitating next-generation HF systems. The JTNC HF team is also pathfinding for a new tactical MIL-STD to provide more resilient communications. Additionally, the JTNC is engaged in the analysis of software artifacts involving high assurance devices, such as software defined radios ported with specific waveforms to support National Security Agency (NSA) efforts. The JTNC participates in Standards-related activities such as the Interface Control Working Group (ICWG) and has been collaborating with the Army on the development of C4ISR/Electronic Warfare Modular Open Suite of Standards (CMOSS) specifications. Finally, the JTNC continues evolving its Waveform Assessment and Milestone Review (WASMR) and Capability Characterization processes.					
B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	16.350	17.950	6.195	-	6.195
Current President's Budget	15.752	17.936	18.662	-	18.662
Total Adjustments	-0.598	-0.014	12.467	-	12.467
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.598	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	12.467	-	12.467
• FFRDC Transfer	-	-0.014	-	-	-
Change Summary Explanation					
FY24 increase represents consolidated, Joint-program funding provided by Army (065030A), Navy (0605030N) and Air Force (0605030F).					

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605030A / Joint Tactical Network Center (JTNC)				Project (Number/Name) EA8 / Joint Tactical Networking Center			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
EA8: Joint Tactical Networking Center	-	15.752	17.936	18.662	-	18.662	6.178	6.313	6.352	6.423	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

Joint Tactical Networking Center (JTNC) is funded using a Joint budget strategy. Each Military Department (MILDEP) budgets for one-third of the total program Research Development Test & Evaluation (RDT&E) requirements for joint efforts. Fiscal Year (FY) 2022 through FY 2024 funding reflects the full Army JTNC requirement with the consolidated funding from Air Force and Navy. FY 2025 and beyond reflects the Army one-third portion of total program RDT&E funds. Out-year funding is programmed in PE 0605030A by the Army, PE 0605030N by the Navy and PE 0605030F by the Air Force. Prior to submission of the President's Budget, the funding is consolidated in Army PE 0605030A for execution.

A. Mission Description and Budget Item Justification

The Joint Tactical Networking Center (JTNC) is chartered to enable the Department of Defense (DoD)'s rapid identification, characterization, procurement, fielding, and sustainment of modular, innovative tactical communications products that ensure secure, interoperable, and resilient Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) capabilities. The JTNC provides technical expertise to facilitate tactical communications management, innovation, and standardization. The JTNC: (1) maintains a cyber-hardened DoD Information Repository (IR), (2) provides Technical Analyses/Capability Characterizations on tactical communications products, (3) provides Open Systems Architecture Standards, (4) provides exportability analysis and licensing reviews, and (5) serves as Technical Advisor to the Communications, Command, and Control Leadership Board (C3LB) and Tactical Communications Senior Steering Group (TCSSG).

JTNC mission is executed in coordination with key government stakeholders to include: C3LB, TCSSG, Communications Technologies and Waveforms Working Group (CTWWG), Resiliency Sub-Working Group (RSWG), the Department of Defense (DoD) Chief Information Officer (CIO), Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)), Joint Staff J6 (JS J6), the Under Secretary of Defense for Research and Engineering, USD(R&E), and the Services. Particular attention is paid to ensuring that interagency work is collaborative and eliminates duplicative capability. The JTNC enables a common software baseline that is hardware agnostic leading to increased competition for Software Defined Radios (SDR).

Current JTNC directed requirements, outlined by the C3LB, consist of the CTWWG, Joint All-Domain Command and Control (JADC2) support, development/maturation of the DoD IR framework & Cloud migration, and development of the Joint Communications Marketplace (JCM) to meet DoD and Industry requirements in conjunction with DoD Instruction 4630.09. Through collaboration with USD R&E (INSS) and industry partners, JTNC is in the process of capturing information on resilient waveform technologies and portfolio products. The ultimate goal is to expedite market research activities by collecting, analyzing, and making data available in support of emerging Government waveform acquisitions. The JTNC and Joint Interoperability Test Command (JITC) co-chair the High-Frequency Interoperability and Architecture Sub-Working Group (HF I&A SWG) to resolve HF 3G and 4G interoperability issues, thus facilitating next-generation HF systems. The JTNC HF team is also pathfinding for a new tactical MIL-STD to provide more resilient communications. Additionally, the JTNC is engaged in the analysis of software artifacts involving high assurance devices,

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605030A / Joint Tactical Network Center (JTNC)	Project (Number/Name) EA8 / Joint Tactical Networking Center		
such as software defined radios ported with specific waveforms to support National Security Agency (NSA) efforts. The JTNC participates in Standards-related activities such as the Interface Control Working Group (ICWG) and has been collaborating with the Army on the development of C4ISR/Electronic Warfare Modular Open Suite of Standards (CMOSS) specifications. Finally, the JTNC continues evolving its Waveform Assessment and Milestone Review (WASMR) and Capability Characterization processes.				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
Title: DoD Waveform IR Support, Waveform Standards Evolution and Compliance & Certification Analysis		15.752	17.281	18.662
Description: Joint Tactical Networking Center (JTNC) aligns with the Communications, Command, and Control Leadership Board (C3LB), DoD Chief Information Officer (CIO), Joint Staff, the Services, and other key stakeholders for those JTNC chartered processes that ensure secure, interoperable, and resilient tactical communications. The JTNC provides technical expertise to facilitate tactical communications management, innovation, and standardization. The JTNC: (1) maintains a cyber-hardened DoD Information Repository (IR), (2) provides Technical Analyses/Capability Characterizations on tactical communications products, (3) provides Open Systems Architecture Standards, (4) provides exportability analysis and licensing reviews, and (5) serves as Technical Advisor to the Communications, Command, and Control Leadership Board (C3LB) and Tactical Communications Senior Steering Group (TCSSG). The Joint Tactical Networking Center supports the Army's Network Modernization Strategy Line of Effort 1A - Unified Network.				
FY 2023 Plans: JTNC will continue to serve as Chair of the Communications Waveforms and Technologies Working Group (CTWWG), supporting both TCSSG and C3LB efforts towards managing Joint warfighter challenges and fielding tactical communications solutions. JTNC will continue technical analysis efforts for C3LB approved waveforms, in accordance with Service priorities and the FY 2023 JTNC Management Plan. The JTNC will continue to support both the Services and Principal Staff Assistant (DoD CIO) in oversight of Lead Service activities as Technical Advisor, assisting in the identification and resolution of cross-service networking disconnects. The JTNC will remain engaged in Joint All Domain Command and Control (JADC2) Operational Planning Teams/ systems engineering support across the Services. The JTNC, through the efforts of the CTWWG's Resiliency Sub-Working Group, will coordinate and socialize resiliency terminology, processes, and support resources to design, test, compare, and field tactical radio products most capable of mitigating adversary detection, interception, geolocation, and jamming threats. The JTNC will continue managing and maintaining the DoD Information Repository (IR), providing controlled access for proprietary and nonproprietary waveforms and associated tactical communications products. The JTNC will enhance DoD IR capabilities by evolving framework compliance and Cloud migration.				
The JTNC will continue Joint Communications Marketplace (JCM) development to meet DoD and Industry requirements in conjunction with DoD Instruction 4630.09. The JTNC will manage evolution of the JCM to provide value-added collaborative environment tools, enabling Government and Industry to share information on innovative technologies and DoD capability gaps leading to rapid acquisition efforts to meet warfighter needs. JCM capabilities/communities will continue to support PEO C3T and				

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605030A / <i>Joint Tactical Network Center (JTNC)</i>		Project (Number/Name) EA8 / <i>Joint Tactical Networking Center</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2022	FY 2023	FY 2024
<p>Network Cross-Functional Team (N-CFT) requirements for Industry engagement, TEMs, whitepaper submission and evaluation, and follow-on contract efforts. The JTNC will continue development of tactical communications vendor product capability characterizations for commercial off-the-shelf (COTS) and non-developmental item (NDI) tactical communication products. The JTNC will continue to evolve DoD Waveform Standards to facilitate common development, interoperability and re-use, reducing product development time and facilitating faster delivery of capabilities to warfighters. Focused efforts will leverage emerging Spectrum activities and facilitate deployment of the Modular Radio Architecture (MRA). Finally, the JTNC will continue to support export requests and analyses of products for exportability.</p> <p>FY 2024 Plans:</p> <p>JTNC will continue to serve as Chair of the Communications Waveforms and Technologies Working Group (CTWWG), supporting both TCSSG and C3LB efforts towards managing Joint warfighter challenges and fielding tactical communications solutions. JTNC will continue technical analysis efforts for C3LB approved waveforms, in accordance with Service priorities and the FY 2024 JTNC Management Plan. The JTNC will continue to support both the Services and Principal Staff Assistant (DoD CIO) in oversight of Lead Service activities as Technical Advisor, assisting in the identification and resolution of cross-service networking disconnects. The JTNC will remain engaged in Joint All Domain Command and Control (JADC2) Operational Planning Teams/ systems engineering support across the Services. The JTNC, through the efforts of the CTWWG's Resiliency Sub-Working Group, will coordinate and socialize resiliency terminology, processes, and support resources to design, test, compare, and field tactical radio products most capable of mitigating adversary detection, interception, geolocation, and jamming threats. The JTNC will continue managing and maintaining the DoD Information Repository (IR), providing controlled access for proprietary and nonproprietary waveforms and associated tactical communications products. The JTNC will enhance DoD IR capabilities by evolving framework compliance and Cloud migration.</p> <p>The JTNC will continue Joint Communications Marketplace (JCM) development to meet DoD and Industry requirements in conjunction with DoD Instruction 4630.09. The JTNC will manage evolution of the JCM to provide value-added collaborative environment tools, enabling Government and Industry to share information on innovative technologies and DoD capability gaps leading to rapid acquisition efforts to meet warfighter needs. JCM capabilities/communities will continue to support PEO C3T and Network Cross-Functional Team (N-CFT) requirements for Industry engagement, Technical Exchange Meetings (TEMs), whitepaper submission and evaluation, and contract efforts. The JTNC will continue development of tactical communications vendor product capability characterizations for commercial off-the-shelf (COTS) and non-developmental item (NDI) tactical communication products. The JTNC will continue to evolve DoD Waveform Standards to facilitate common development, interoperability and re-use, reducing product development time and facilitating faster delivery of capabilities to warfighters. Focused efforts will leverage emerging Spectrum activities and facilitate deployment of the Modular Radio Architecture (MRA). Finally, the JTNC will continue to support export requests and analyses of products for exportability.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement:</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605030A / <i>Joint Tactical Network Center (JTNC)</i>	Project (Number/Name) EA8 / <i>Joint Tactical Networking Center</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
FY24 increase reflects planned lifecycle efforts.			
Title: SBIR/STTR Transfer Description: Funding transferred in accordance with Title 15 USC §638. FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638 FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638.		-	0.655
			-
Accomplishments/Planned Programs Subtotals		15.752	17.936
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
JTNC operates based on a Joint Funding Strategy, there is no prior year funding for JTNC in the other Service lines. Prior to the year of execution, the JTNC funding is consolidated in Army PE 0605030A for execution.			
D. Acquisition Strategy			
<p>The Joint Tactical Networking Center (JTNC) is a Joint support program to the Services, the DoD Chief Information Officer (CIO), the Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)), and USD Research and Engineering (USD(R&E)). JTNC core functions as defined in the JTNC Acquisition Decision Memorandum and Charter signed on 20 January 2014 and revalidated on 13 September 2019 include execution in the following areas: Information Repository, Technical Analysis, Open Systems Architecture Standards, Exportability Analysis and Licensing Review, and Technical Advisor to the C3LB. The services derived from these core functions reinforce an acquisition environment which ensures that interoperable, secure, and resilient joint tactical waveforms and wireless communications applications can operate in a variety of hardware transport solutions.</p> <p>The FY 2024 Budget supports continued development/maturation of the DoD IR, analysis of directed software and artifacts, support of the National Security Agency (NSA) Commercial Communications Security (COMSEC) Evaluation Program (CCEP), JTNC Standards Interface Control Working Group (ICWG), the Capabilities Characterization and Joint Communications Marketplace (CC & JCM). The FY 2024 budget supports the Lead Service Initiative where JTNC will serve as a technical advisor and source of engineering and analytic resources in the conduct of Joint enterprise-level systems engineering and analysis and support DoD CIO. The FY 2024 budget supports the continued management of Joint warfighter challenges and solutions as assigned by the TCSSG. The FY 2024 budget supports Modular Radio Architecture (MRA) work, where JTNC will lead development and promulgation of a framework containing a collection of DoD standards and a description or architecture of how to use these to compose or control a communications system. The MRA defines how to implement a communications system or radio on select platforms.</p>			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605030A / Joint Tactical Network Center (JTNC)				Project (Number/Name) EA8 / Joint Tactical Networking Center					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Program Management Support	Various	Multiple Contract Awards : Various	7.452	0.180	Oct 2021	0.195	Oct 2022	0.197	Oct 2023	-		0.197	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	G2 Software Systems : San Diego, CA	4.678	0.490	Nov 2021	0.617	Oct 2022	0.656	Oct 2023	-		0.656	Continuing	Continuing	Continuing
Program Management Support	MIPR	NIWC PACIFIC : San Diego, CA	1.115	0.391	Dec 2021	0.375	Nov 2022	0.379	Nov 2023	-		0.379	Continuing	Continuing	Continuing
Subtotal			13.245	1.061		1.187		1.232		-		1.232	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
JTNC Product Development Support	MIPR	NIWC PACIFIC : San Diego, CA	5.583	0.517	Oct 2021	0.928	Oct 2022	0.937	Oct 2023	-		0.937	Continuing	Continuing	Continuing
JTNC Product Development Support	C/CPFF	G2 Software Systems : San Diego, CA	16.886	2.940	Nov 2021	2.665	Oct 2022	3.540	Oct 2023	-		3.540	Continuing	Continuing	Continuing
JTNC Product Development Support	MIPR	NIWC ATLANTIC : Charleston, SC	6.108	2.960	Oct 2021	1.181	Dec 2022	1.192	Dec 2023	-		1.192	Continuing	Continuing	Continuing
JTNC Product Development Support	C/CPFF	NIWC ATLANTIC JCM (SRC) : Atlanta, GA	-	0.439	Oct 2021	1.820	Nov 2022	1.837	Nov 2023	-		1.837	Continuing	Continuing	Continuing
Subtotal			28.577	6.856		6.594		7.506		-		7.506	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
JTNC Engineering/ Technical Support	C/CPFF	G2 Software Systems : San Diego, CA	7.682	0.779	Nov 2021	0.847	Oct 2022	0.983	Oct 2023	-		0.983	Continuing	Continuing	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605030A / Joint Tactical Network Center (JTNC)				Project (Number/Name) EA8 / Joint Tactical Networking Center					
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
JTNC Engineering/ Technical Support	FFRDC	MITRE Corporation : McLean, VA	1.225	0.148	Oct 2021	0.246	Oct 2022	0.248	Oct 2023	-		0.248	Continuing	Continuing	Continuing
JTNC Engineering/ Technical Support	MIPR	Aberdeen Proving Grounds : Aberdeen, MD	4.259	0.766	Nov 2021	0.490	Dec 2022	0.495	Dec 2023	-		0.495	Continuing	Continuing	Continuing
JTNC Engineering/ Technical Support	MIPR	NIWC PACIFIC : San Diego, CA	4.275	0.892	Oct 2021	1.277	Nov 2022	1.289	Nov 2023	-		1.289	Continuing	Continuing	Continuing
Subtotal			17.441	2.585		2.860		3.015		-		3.015	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Development/Test & Evaluation	MIPR	NIWC PACIFIC : San Diego, CA	11.207	1.910	Oct 2021	3.268	Nov 2022	2.638	Nov 2023	-		2.638	Continuing	Continuing	Continuing
Development/Test & Evaluation	C/CPFF	G2 Software Systems : San Diego, CA	15.455	3.003	Nov 2021	3.796	Oct 2022	4.038	Oct 2023	-		4.038	Continuing	Continuing	Continuing
Development/Test & Evaluation	C/CPFF	Multiple Awards : Various	2.173	0.337	Nov 2021	0.231	Nov 2022	0.233	Nov 2023	-		0.233	Continuing	Continuing	Continuing
Subtotal			28.835	5.250		7.295		6.909		-		6.909	Continuing	Continuing	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			88.098	15.752		17.936		18.662		-		18.662	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army																Date: March 2023			
Appropriation/Budget Activity 2040 / 5								R-1 Program Element (Number/Name) PE 0605030A / Joint Tactical Network Center (JTNC)								Project (Number/Name) EA8 / Joint Tactical Networking Center			

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Open Systems Architecture Standards Conformance Evaluation																												
JTNC Waveform and Wireless Certification																												
DoD Information Repository																												
JTNC Information Repository																												
Evolve Waveform Standards																												
JTNC Standards																												
Analyze Waveforms and Associated Artifacts																												
JTNC Analyses																												
Joint Communications Marketplace (JCM) and Capabilities ...																												
JTNC Innovation																												
Support to TCSSG and CTWWG activities																												
JTNC Joint Activities																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605030A / Joint Tactical Network Center (JTNC)	Project (Number/Name) EA8 / Joint Tactical Networking Center	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Open Systems Architecture Standards Conformance Evaluations	1	2020	4	2028
DoD Information Repository	1	2020	4	2028
Evolve Waveform Standards	1	2020	4	2028
Analyze Waveforms and Associated Artifacts	1	2020	4	2028
Joint Communications Marketplace (JCM) and Capabilities Characterization (CC)	1	2020	4	2028
Support to TCSSG and CTWWG activities	1	2020	4	2028

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	27.849	30.150	30.328	-	30.328	26.281	26.269	26.533	26.829	Continuing	Continuing
EF5: Joint Tactical Network (JTN)	-	9.644	10.714	10.240	-	10.240	4.222	4.226	4.272	4.319	Continuing	Continuing
EX6: Waveforms	-	18.205	19.436	20.088	-	20.088	22.059	22.043	22.261	22.510	Continuing	Continuing

A. Mission Description and Budget Item Justification

This funding line is directly aligned to the Army Network Modernization Priority.

EF5 project: This funding line is directly aligned to the Army Network Modernization Priority. This funding line supports the Army Network Modernization Strategy (LOE 1) and Unified Network and Joint Interoperability/Coalition Accessible (LOE 3). The Joint Enterprise Network Manager (JENM) software provides a single, converged network management tool allowing the Warfighter to plan, configure, load, and manage the Joint Services' Tactical Radios and their networks in the field - a capability not available in legacy planning systems. JENM funding supports several types of tactical radios, such as the Manpack and Rifleman, enabling them to utilize Mobile Ad Hoc Networking (MANET) and other waveforms to include: Mobile User Objective System (MUOS) waveform, Demand Assigned Multiple Access (DAMA) Satellite Communications (SATCOM), Integrated Waveform (IW), and Single Channel Ground and Airborne Radio System (SINCGARS) waveform. Using its Over-the-Air-Management (OTAM) functionality, JENM provides the Commander the ability to quickly reconfigure critical networks. JENM enhances the S6's ability to conduct Course of Action (COA) Analysis and the Military Decision Making Process (MDMP), providing commanders critical information regarding their ability to communicate.

FY 2024 funding will continue radio planner development efforts to design, engineer, integrate and test of planning and management capabilities for the Tactical Radio network in support of the Advanced Networking Waveform (ANWf). Continued development provides further integration of the Integrated Tactical Network (ITN) and Network Management of its emerging systems to enable Soldiers the ability to effectively manage the ITN. Radio planner development efforts will also support MUOS Waveform Planning Continuing System Improvements and rapid provisioning of MUOS end-user terminals.

Planning applications are deployed on, and critically tied to the Ruggedized Application Platform - Tactical Radios (RAP-TR) hardware from Division to the Company level.

EX6 project: Waveforms provides the transport technologies and capabilities necessary to support the overall connectivity of the Unified Network. Waveforms technology assessments, integration, and configuration management enable seamless updates and fluid communication between echelons of the Unified Network.

Waveforms delivers, maintains, and upgrades portable, interoperable, MANET waveforms, Advanced Networking Waveforms (ANWf), and network enterprise services in support of the Army's network modernization strategy.

Waveforms capabilities will remain agile to accommodate emerging warfighter needs by addressing the following:

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army			Date: March 2023			
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)				
<p>(1) Waveform (WF) analysis and system engineering activities for DoD as Lead Service Activity for Ground/Line of Sight (LoS) Waveforms (currently TSM, WREN, and SINCGARS) in accordance with DoD Instruction 4630.09, Communications Waveform Management and Standardization, 23 November 2020. (2) Development and/or integration efforts of Broadcast Waveforms (i.e. SINCGARS, WREN, ANWf) and Radio Services (i.e. enterprise Over The Air Management (eOTAM)) in support of Army Network modernization, and agile mission support initiatives. (3) Viability assessments of ANWf in support of the Integrated Tactical Network (ITN) and future capability sets to ensure waveform performance in advance of formal ITN experimentation and fielding activities.</p> <p>FY 2024 RDT&E dollars will fund the continued development, integration, and testing of new capabilities and waveform enhancements for SINCGARS, WREN, TSM, and ANWf. As well as fund the next generation Government developed waveforms and Radio Service applications, system and architectural engineering for ANWf radio communications technologies, post deployment software support for fielded versions of the waveforms and radio services, program management support, and examine modular and open system architectures (MOSA) to for future integration and waveform porting efficiencies.</p>						
B. Program Change Summary (\$ in Millions)		FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget		28.905	30.169	24.697	-	24.697
Current President's Budget		27.849	30.150	30.328	-	30.328
Total Adjustments		-1.056	-0.019	5.631	-	5.631
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-1.056	-			
• SBIR/STTR Transfer		-	-			
• Adjustments to Budget Years		-	-	5.631	-	5.631
• FFRDC Transfer		-	-0.019	-	-	-
Change Summary Explanation						
Increase in FY 2024 funding request from Previous President's Budget to Current President's Budget to support further development efforts of Joint Tactical Network (JTN).						

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)				Project (Number/Name) EF5 / Joint Tactical Network (JTN)			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
EF5: Joint Tactical Network (JTN)	-	9.644	10.714	10.240	-	10.240	4.222	4.226	4.272	4.319	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

JENM 655031EF5 funding is aligned with the Joint Service Agreement established with the Army, Navy and Air Force. Since contributions from other Services are received annually, \$10,240K reflects the Army, Navy and Air Force funding in FY24, while FY25 and out reflects only the Army funding.

A. Mission Description and Budget Item Justification

EF5 project: This funding line is directly aligned to the Army Network Modernization Priority. This funding line supports the Army Network Modernization Strategy (LOE 1) and Unified Network and Joint Interoperability/Coalition Accessible (LOE 3).

The Joint Enterprise Network Manager (JENM) software provides a single, converged network management tool allowing the Warfighter to plan, configure, load, and manage the Joint Services' Tactical Radios and their networks in the field - a capability not available in legacy planning systems. JENM funding supports several types of tactical radios, such as the Manpack and Rifleman, enabling them to utilize Mobile Ad Hoc Networking (MANET) and other waveforms to include: Mobile User Objective System (MUOS) waveform, Demand Assigned Multiple Access (DAMA) Satellite Communications (SATCOM), Integrated Waveform (IW), and Single Channel Ground and Airborne Radio System (SINCGARS) waveform. Using its Over-the-Air-Management (OTAM) functionality, JENM provides the Commander the ability to quickly reconfigure critical networks. JENM enhances the S6's ability to conduct Course of Action (COA) Analysis and the Military Decision Making Process (MDMP), providing commanders critical information regarding their ability to communicate.

FY 2024 funding will continue radio planner development efforts to design, engineer, integrate and test of planning and management capabilities for the Tactical Radio network in support of the Advanced Networking Waveform (ANWf). Continued development provides further integration of the Integrated Tactical Network (ITN) and Network Management of its emerging systems to enable Soldiers the ability to effectively manage the ITN. Radio planner development efforts will also support MUOS Waveform Planning Continuing System Improvements and rapid provisioning of MUOS end-user terminals.

Planning applications are deployed on, and critically tied to the Ruggedized Application Platform - Tactical Radios (RAP-TR) hardware from Division to the Company level.

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

	FY 2022	FY 2023	FY 2024
Title: JENM Program Office Support	2.608	3.280	3.028
Description: Program Management Office support in the development of the JENM software.			
FY 2023 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605031A / <i>Joint Tactical Network (JTN)</i>		Project (Number/Name) EF5 / <i>Joint Tactical Network (JTN)</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2022	FY 2023	FY 2024
<p>The JENM program office will continue to support the expansion of JENM design, engineering, integration and test of planning and management capabilities for the Tactical Radio Network in support of Joint Service requirements through the use of Matrix and Contractor support. The JENM program office supports the vision of integrating lower and mid-tier Network Management capabilities to enable Soldiers to manage their entire consolidated tactical network in conjunction with network elements managed by Sailors, Marines, and Airmen. Program office funding will also support completion of MUOS waveform planning simplification and rapid provisioning of MUOS end-user terminals and expansion for deployment onto the Top Secret Enclave.</p> <p>FY 2024 Plans:</p> <p>The JENM program office will continue to support the expansion of JENM design, engineering, integration and test of planning and management capabilities for the Tactical Radio Network in support of Joint Service requirements through the use of Matrix and Contractor support. The JENM program office supports the vision of integrating lower and mid-tier Network Management capabilities to enable Soldiers to manage their entire consolidated tactical network in conjunction with network elements managed by Sailors, Marines, and Airmen. Program office funding will also support completion of MUOS waveform planning simplification and rapid provisioning of MUOS end-user terminals and expansion for deployment onto the Top Secret Enclave.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement:</p> <p>JENM PMO reduced from FY23 to FY24 as the result of reduced contract costs for PMO activities.</p>					
<p>Title: JENM Development</p> <p>Description: JENM provides consolidated communications planning, network configuration, network activation, position reporting, fault management, security management, and network health and status reporting needed to establish and maintain a mobile wireless network comprised of SW defined network waveforms. JENM interfaces with other external network managers, mission planning systems, network planning systems, key management systems, and spectrum planning systems. JENM is considered a mission essential system. JENM is also considered a critical element within the Ruggedized Application Platform - Tactical Radios (RAP-TR) hardware configuration management tool kit.</p> <p>FY 2023 Plans:</p> <p>Development funding will continue design, engineering, integration and test of planning and management application for the Tactical Radio network. Support to align with Army Network Modernization to provide further integration of the lower and mid-tier Network Management for Integrated Tactical Network (ITN) to enable Soldiers the ability to manage the entire consolidated tactical network in conjunction with network elements managed by Sailors, Marines, and Airmen. Development funding will also support completion of MUOS waveform planning simplification and rapid provisioning of MUOS end-user terminals for joint service requirements.</p> <p>JENM planning applications are deployed on, and critically tied to the RAP-TR hardware from Division to the Company level.</p> <p>FY 2024 Plans:</p>			7.036	7.043	7.212

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army								Date: March 2023			
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)			Project (Number/Name) EF5 / Joint Tactical Network (JTN)				
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2022	FY 2023	FY 2024	
Development funding will continue design, engineering, integration and test of planning and management application for the Tactical Radio network. Support to align with Army Network Modernization to provide further integration of the lower and mid-tier Network Management for Integrated Tactical Network (ITN) to enable Soldiers the ability to manage the entire consolidated tactical network in conjunction with network elements managed by Sailors, Marines, and Airmen. Development funding will also support completion of MUOS waveform planning simplification and rapid provisioning of MUOS end-user terminals for joint service requirements.											
JENM planning applications are deployed on, and critically tied to the RAP-TR hardware from Division to the Company level.											
FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase reflects planned life cycle of this effort.											
Title: SBIR/STTR Transfer								-	0.391	-	
Description: Funding transferred in accordance with Title 15 USC §638											
FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638											
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638											
Accomplishments/Planned Programs Subtotals								9.644	10.714	10.240	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• B99318: Joint Network Management System	0.930	1.967	1.987	-	1.987	2.066	2.075	2.075	2.076	Continuing	Continuing
Remarks											
PE 0605031A contains only the JTN (PdM Waveforms and PdM TCNO (JENM)) RDTE funding. Funding of the Joint Enterprise Network Manager (JENM) is achieved in total using Joint contributions to the Army budget shown here. The Joint contributions are provided in the year of execution and not reflected in the Army's request. Each Military Department (MILDEP) budgets for approximately one-third of the total program RDT&E requirements for joint efforts. Out-year funding is programmed in PE 0605031A by the Army, PE 0605031N by the Navy and PE 0605031F by the Air Force. JENM and baseline planning applications are deployed on the RAP-TR hardware from Division to the Company level. JENM Logistics & Training capabilities are captured under the Joint Network Management System OPA-2 line (JNMS B99318)											

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)	Project (Number/Name) EF5 / Joint Tactical Network (JTN)
<p>D. Acquisition Strategy</p> <p>Product Manager Tactical Cyber & Network Operations (TCNO) manages a Government Owned, Government Operated (GOGO) Software Development & Integration Facility which employs competitive contracting strategies for software development & sustainment of the network manager components to ensure warfighter access to the best technology and innovative capabilities while addressing emerging threats and future requirements via an affordable, operationally effective, and timely framework.</p> <p>The Army will continue a radio planner effort that will plan, manage, and provision capabilities for simplified workflow based planning solutions to rapidly meet emerging capability requirements.</p> <p>JENM will support continuing system improvements for JENM v3.5.X development, which includes upgrades of MUOS, upgrades to JENM Public Key Infrastructure (PKI) certificate management, and cyber enhancements.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)				Project (Number/Name) EF5 / Joint Tactical Network (JTN)					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
JENM Program Management Support	MIPR	Various : Various	9.877	2.608	Oct 2021	3.671	Oct 2022	3.028	Oct 2023	-		3.028	Continuing	Continuing	Continuing
Subtotal			9.877	2.608		3.671		3.028		-		3.028	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
JENM NMRIL Development CIT II	MIPR	NM RIL : San Diego, CA	6.399	3.050	Dec 2021	2.685	Dec 2022	1.117	Dec 2023	-		1.117	Continuing	Continuing	Continuing
JENM NMRIL Development	MIPR	NMRIL : San Diego, CA	22.221	1.956	Oct 2021	1.111	Oct 2022	1.945	Oct 2023	-		1.945	Continuing	Continuing	Continuing
JENM NMRIL Development SSA	MIPR	NMRIL : San Diego, CA	8.058	2.030	Jan 2022	3.247	May 2023	0.650	May 2024	-		0.650	Continuing	Continuing	Continuing
Next Gen Radio Planner Development	MIPR	L3 Harris : Rochester, New York	-	-		-		3.500	May 2024	-		3.500	Continuing	Continuing	Continuing
Subtotal			36.678	7.036		7.043		7.212		-		7.212	Continuing	Continuing	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			46.555	9.644		10.714		10.240		-		10.240	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army					Date: March 2023	
Appropriation/Budget Activity		R-1 Program Element (Number/Name)		Project (Number/Name)		
2040 / 5		PE 0605031A / Joint Tactical Network (JTN)		EF5 / Joint Tactical Network (JTN)		

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
JENM v3.5 Continuing System Improvements																												
JENM v3.5.x Continuing System Improvements																												
JENM v3.4 Logistics and Training Support																												
JENM v3.4 Sunset																												
JENM v3.5 Logistics and Training Support																												
JENM v3.5 Sunset																												
APB Expiration																												
Future Joint Software																												
Future Contracts																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605031A / <i>Joint Tactical Network (JTN)</i>	Project (Number/Name) EF5 / <i>Joint Tactical Network (JTN)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
JENM v3.5 Continuing System Improvements	2	2021	2	2023
JENM v3.5.x Continuing System Improvements	3	2023	4	2026
JENM v3.5 FQT	2	2020	2	2020
Next Generation Planner v1.0	4	2018	4	2019
Next Generation Planner v1.1	3	2019	4	2020
MUOS MOT&E 1	4	2019	4	2019
JENM v3.3.2 Sunset	4	2020	4	2020
JENM v3.4 Logistics and Training Support	4	2019	1	2023
JENM v3.4 Sunset	1	2023	1	2023
JENM v3.5 Logistics and Training Support	4	2021	4	2026
JENM v3.5 Sunset	4	2026	4	2026
APB Expiration	4	2026	4	2026
Future Joint Software	1	2027	1	2029
Future Contracts	1	2027	1	2029

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)				Project (Number/Name) EX6 / Waveforms			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
EX6: Waveforms	-	18.205	19.436	20.088	-	20.088	22.059	22.043	22.261	22.510	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This funding line is directly aligned to the Army Network Modernization Priority.

This project provides the transport technologies necessary to support the overall connectivity of the Unified Network. Waveforms technology assessments, integration, and configuration management enable seamless updates and fluid communication between echelons of the Unified Network.

Waveforms delivers, maintains, and upgrades portable, interoperable, Mobile Ad-hoc Networking (MANET) waveforms, Advanced Networking Waveforms (ANWf), and network enterprise services in support of the ARMY network modernization strategy. These waveforms and services are deployed by technical insertion into production of Program of Record (PoR) radios and field upgrades to existing tactical radios.

Waveforms will remain agile to accommodate emerging warfighter needs by addressing the following:

- 1) Waveform (WF) analysis and system engineering activities for DoD as Lead Service Activity for Ground/Line of Sight (LoS) Waveforms (currently TSM), Warrior Robust Enhanced Network (WREN), and Single Channel Ground and Airborne Radio System (SINCGARS)) in accordance with (IAW) Deputy Secretary of Defense memo for Enhancing DoD's Joint Tactical Networks and Datalink Modernization, 29 March 2019
- 2) Development and/or integration efforts of Broadcast Waveforms (i.e. SINCGARS, WREN, ANWf) and Radio Services (i.e. enterprise Over The Air Management (eOTAM)) in support of Army Network modernization, and agile mission support initiatives
- 3) Viability assessments of ANWf in support of the Integrated Tactical Network (ITN) and future capability sets to ensure waveform performance in advance of formal ITN experimentation and fielding activities

FY 2024 RDT&E dollars will fund the continued development, integration, and testing of new capabilities and waveform enhancements for SINCGARS, WREN, TSM, and ANWf. Additionally, funding supports the next generation Government developed waveforms and Radio Service applications, system and architectural engineering for ANWf radio communications technologies, post deployment software support for fielded versions of the waveforms and radio services, program management support, and examine modular and open system architectures (MOSA) to make future integration and waveform porting more efficient.

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

	FY 2022	FY 2023	FY 2024
Title: Program Management Office Support	2.979	2.732	2.968
Description: Waveform matrix and contractor support, including technical, logistics, and business staff oversight			
FY 2023 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605031A / <i>Joint Tactical Network (JTN)</i>		Project (Number/Name) EX6 / <i>Waveforms</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2022	FY 2023	FY 2024
Continue Program Management support for PdM Waveforms, including contractors. Funding will provide for matrix and contractor support for Waveforms engineering development, testing, and program oversight.					
FY 2024 Plans: Program Management support for PdM Waveforms. Funding will provide for matrix and contractor support for Waveforms engineering development, testing, and program oversight.					
FY 2023 to FY 2024 Increase/Decrease Statement: Increase due to an expected increase in matrix and contractor support for the Next Generation Waveform/SINCGARS replacement effort and annual inflation.					
Title: Waveforms Software Development			8.940	10.009	10.528
Description: PdM Waveforms provides software development and waveforms support for tactical radios operational and networking requirements for the following: 1) Single Channel Ground and Airborne Radio System (SINCGARS) - Develop NexGen SINCGARS waveform to combat the adversary's near, mid, and far-term Electronic Attack/Electronic Warfare (EA/EW) capabilities 2) Warrior Robust Enhanced Network (WREN) Waveform will enhance range, scalability, and Electronic Protection (EP) for a unified transport to Army tactical networks. 3) Radio Services (i.e. enterprise Over The Air Management (eOTAM) in support of Army Network modernization, and agile mission support initiatives.					
FY 2023 Plans: Funding will support the requirement and initial design development of SINCGARS NexGen, WREN problem fixes and hardening the capability in support of the ITN and CS25. Support will include effort to alleviate Cyber Electro-Magnetic Activities (CEMA) threats for SINCGARS and WREN, including Lead Service activities, and Radio Services (i.e. enterprise Over The Air Management (eOTAM)).					
FY 2024 Plans: Funding will support the requirement and initial design development of SINCGARS NexGen, WREN problem fixes and hardening the capability in support of the ITN and CS25, design and development of WREN enhancements for ITN and CS27. Support will include effort to alleviate Cyber Electro-Magnetic Activities (CEMA) threats for SINCGARS and WREN, including Lead Service activities, and Radio Services (i.e. enterprise Over The Air Management (eOTAM)).					
FY 2023 to FY 2024 Increase/Decrease Statement:					

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)	Project (Number/Name) EX6 / Waveforms		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
Decrease due to maintenance software development work in FY24 which requires less work as full software development for eOTAM and WREN. Increased resources were allocated for eOTAM 2.1 and WREN Release B Lab and Field Based Risk Reductions, and Formal Qualification Testing (FQT) under test and evaluation.				
Title: Waveforms Test and Evaluation Description: PdM Waveforms performs test and evaluation activities to address interoperability, range, scalability, resiliency, Electronic Warfare (EW)/Cyber Electromagnetic Activities (CEMA), and readiness. Advanced Networking Waveforms (ANWf) assessments support inclusion and/or integration of technologies into Army experimentation and Capability Sets (CS's) Viability and Readiness Assessments including Technology Readiness Level (TRL) assessment, test and evaluation of EW and cyber capabilities in support of Integrated Tactical Network (ITN), performance and behavior analysis of waveforms against topologies, architectures, operational use cases and fielding activities. FY 2023 Plans: Funding will validate continued design and system engineering activities of the NexGen of Single Channel Ground and Airborne Radio System (SINCGARS), validate and test the enhancements and problem fixes of the Warrior Robust Enhanced Network (WREN) waveforms, validate implementation of fielded enterprise Over The Air Management (eOTAM), and provide performance characterization and analysis of waveforms to meet current and future warfighter's requirements. FY 2024 Plans: Funding will validate continued design and system engineering activities of the NexGen of Single Channel Ground and Airborne Radio System (SINCGARS), validate and test the enhancements and problem fixes of the Warrior Robust Enhanced Network (WREN) waveforms, validate implementation of fielded enterprise Over The Air Management (eOTAM), and provide performance characterization and analysis of waveforms to meet current and future warfighter's requirements. Conduct analysis on Advanced Networking Waveforms (ANWf) / Non-Developmental Items (NDI). FY 2023 to FY 2024 Increase/Decrease Statement: Increase is due to additional resources required for eOTAM 2.1 and WREN Release B Lab and Field Based Risk Reductions, and Formal Qualification Testing (FQT).		3.973	3.697	4.273
Title: Waveforms Software Support and System Engineering Description: PdM Waveforms software support and systems engineering for waveforms and network manager applications provides the following: 1) Radio Services applications that enable over-the-air (OTA) NSA cryptographic key, radio and network configuration tools and bandwidth efficient OTA protocols supporting the Unified Network Line of Effort (LOE) for CSs 2) eOTAM will enhance radio health services, Common Management Information Base (MIB) integration, integration with Army network management systems and comply with NSA security standards		2.313	2.289	2.319

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605031A / <i>Joint Tactical Network (JTN)</i>	Project (Number/Name) EX6 / <i>Waveforms</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
3) Evaluate the Technology Readiness Level (TRL) of ANWf in support of the ITN, and CS' requirements and architectures. 4) Oversight and inform policy for SINCGARS, WREN, TSM, eOTAM, and related products for DoD, including Lead Service activities FY 2023 Plans: Funding will support radio services software, product enhancement, and systems engineering & integration (SE&I) as described above in support of PdM Waveforms. Support will include: release of enterprise Over The Air Management (eOTAM); Lead Service activities for the integration of existing and emerging waveforms in the DoD; analysis of TSM capabilities for Warrior Robust Enhanced Network (WREN) integration to Manpack and Leader Radios, and release to DoD, NATO and ABCANZ ensuring interoperability between the US and Coalition partners, including Lead Service activities. FY 2024 Plans: Funding will support radio services software, product enhancement, and systems engineering & integration (SE&I) as described above in support of PdM Waveforms. Support will include: release of enterprise Over The Air Management (eOTAM) and integration into Integrated Network Battalion and Below (INB2) and Unified Network Operations (UNO); Lead Service activities for the integration of existing and emerging waveforms in the DoD; analysis of TSM capabilities for Warrior Robust Enhanced Network (WREN) integration to Manpack and Leader Radios, Risk Management Framework(RMF) for new WREN capabilities, and release to DoD, NATO and ABCANZ ensuring interoperability between the US and Coalition partners, including Lead Service activities. FY 2023 to FY 2024 Increase/Decrease Statement: Funding change reflects planned life cycle of this effort.			
Title: SBIR/STTR Transfer Description: Funding transferred in accordance with Title 15 USC §638 FY 2023 Plans: SBIR/STTR Transfer FY 2023 to FY 2024 Increase/Decrease Statement: SBIR/STTR Funding to be transferred in accordance with Title 15 USC §638		-	0.709
Accomplishments/Planned Programs Subtotals		18.205	20.088
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)	Project (Number/Name) EX6 / Waveforms
<p>D. Acquisition Strategy</p> <p>PdM Waveforms is responsible for core activities, includes analyzing, developing, and updating legacy and current waveforms that operate on multiple radio sets supporting network-centric operational warfare. Waveform developments (upgrading, developing, and maintaining) will generally be procured through full and open contract competitions or through leveraging other government agencies.</p> <p>While maintaining legacy and current networking waveforms, PdM Waveforms implemented a strategy which focuses on vetting and analyzing ANWf. The product office continues to establish working relationships with industry partners within the waveform market. The strategy consists of conducting initial analysis of commercial waveforms, identifying implementation strategies, documenting and remediating vulnerabilities, and making recommendations to senior leadership on potential Army and other Services' use cases.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army													Date: March 2023		
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)				Project (Number/Name) EX6 / Waveforms					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Program Management Support - Matrix	MIPR	C5ISR Center : APG, MD	5.350	0.784	Jan 2022	1.575	Jan 2023	1.940	Jan 2024	-		1.940	Continuing	Continuing	Continuing
Program Management Support - SETA	C/CPFF	SEV1-Tech : Woodbridge, VA	8.819	2.195	Dec 2021	1.866	Nov 2022	1.828	Nov 2023	-		1.828	Continuing	Continuing	Continuing
Subtotal			14.169	2.979		3.441		3.768		-		3.768	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Software Development - C5ISR Center	MIPR	C5ISR Center : APG, MD	38.376	1.288	Apr 2022	4.527	Nov 2022	2.391	Mar 2024	-		2.391	Continuing	Continuing	Continuing
Software Development - Technical/Coding (MA-IDIQ)	C/CPAF	MA - IDIQ : Various Locations	19.632	4.129	Sep 2022	-		3.213	Mar 2024	-		3.213	Continuing	Continuing	Continuing
Software Development - WREN/TSM (ACC- PICA/ OTA)	C/CPFF	Advanced Technology International : Summerville, SC	-	3.523	Sep 2022	5.482	Apr 2023	-		-		-	0.000	9.005	-
Software Development - WREN/TSM (IDIQ)	TBD	TBD : TBD	-	-		-		4.124	Mar 2024	-		4.124	Continuing	Continuing	Continuing
Subtotal			58.008	8.940		10.009		9.728		-		9.728	Continuing	Continuing	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Systems Engineering - SSC NIWC	MIPR	SSC LANT/PAC : Charleston, SC; San Diego, CA	2.148	0.460	Dec 2021	0.418	Dec 2022	0.470	Nov 2023	-		0.470	Continuing	Continuing	Continuing
Software Support - WREN	MIPR	C5ISR Center : APG, MD	5.993	1.853	Nov 2021	1.871	Nov 2022	1.849	Nov 2023	-		1.849	Continuing	Continuing	Continuing
Subtotal			8.141	2.313		2.289		2.319		-		2.319	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)				Project (Number/Name) EX6 / Waveforms					
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Test and Evaluation - C5ISR Center	MIPR	C5ISR Center : APG, MD	14.164	3.973	Feb 2022	3.697	Feb 2023	4.273	Mar 2024	-		4.273	Continuing	Continuing	Continuing
Test and Evaluation - NATO	MIPR	RAND : Arlington, VA	0.490	-		-		-		-		-	0.000	0.490	-
Subtotal			14.654	3.973		3.697		4.273		-		4.273	Continuing	Continuing	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			94.972	18.205		19.436		20.088		-		20.088	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0605031A / Joint Tactical Network (JTN)

Project (Number/Name)

EX6 / Waveforms

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
SINGARS 3.1.1 Waveform	1																											
	SINC 3.1.1 Release																											
SINGARS NexGen Waveform Development																												
SINGARS NexGen Waveform Problem Report (PR) Fixes																												
SINGARS NexGen Waveform																												
SINGARS NexGen Waveform FQT																												
Warrior Robust Enhanced Network (WREN) PR Fixes																												
Warrior Robust Enhanced Network (WREN) A Maintenance/ LB...																												
Warrior Robust Enhanced Network (WREN) A																												
Warrior Robust Enhanced Network (WREN) B Development																												
Warrior Robust Enhanced Network (WREN) B PR Fixes																												
Warrior Robust Enhanced Network (WREN) B Maintenance/ LB...																												
Warrior Robust Enhanced Network (WREN) B																												
Warrior Robust Enhanced Network (WREN) C Development																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

Appropriation/Budget Activity
2040 / 5

R-1 Program Element (Number/Name)
PE 0605031A / Joint Tactical Network (JTN)

Project (Number/Name)
EX6 / Waveforms

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Enterprise Over The Air Management (eOTAM) 2.1																												
Enterprise Over The Air Management (eOTAM) 2.2																												
Enterprise Over The Air Management (eOTAM) 2.2.1																												
Enterprise Over The Air Management (eOTAM) 2.3																												
Enterprise Over The Air Management (eOTAM) 2.3.1																												
Advanced Networking Waveforms (ANWF) Analysis																												
MA/IDIQ - Contract Award																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605031A / Joint Tactical Network (JTN)	Project (Number/Name) EX6 / Waveforms	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
SINCGARS 3.1.1 Waveform	1	2022	1	2022
SINCGARS NexGen Waveform Development	1	2024	3	2028
SINCGARS NexGen Waveform Problem Report (PR) Fixes	4	2024	3	2025
SINCGARS NexGen Waveform	2	2025	2	2025
SINCGARS NexGen Waveform FQT	1	2027	1	2027
Warrior Robust Enhanced Network (WREN) C5ISR Transition	4	2020	4	2020
Warrior Robust Enhanced Network (WREN) PR Fixes	1	2021	4	2022
Warrior Robust Enhanced Network (WREN) A Maintenance/ LBRR/ FBRR	1	2022	4	2024
Warrior Robust Enhanced Network (WREN) A	1	2023	1	2023
Warrior Robust Enhanced Network (WREN) B Development	1	2023	4	2024
Warrior Robust Enhanced Network (WREN) B PR Fixes	1	2025	1	2026
Warrior Robust Enhanced Network (WREN) B Maintenance/ LBRR/ FBRR	1	2026	4	2028
Warrior Robust Enhanced Network (WREN) B	1	2027	1	2027
Warrior Robust Enhanced Network (WREN) C Development	1	2028	4	2028
Enterprise Over The Air Management (eOTAM) 2.0	1	2021	1	2021
Enterprise Over The Air Management (eOTAM) 2.1	4	2024	4	2024
Enterprise Over The Air Management (eOTAM) 2.2	4	2025	4	2025
Enterprise Over The Air Management (eOTAM) 2.2.1	4	2026	4	2026
Enterprise Over The Air Management (eOTAM) 2.3	4	2027	4	2027
Enterprise Over The Air Management (eOTAM) 2.3.1	4	2028	4	2028
Advanced Networking Waveforms (ANWf) Analysis	1	2021	4	2028
MA/IDIQ - Contract Award	4	2018	4	2028

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army **Date:** March 2023

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)	R-1 Program Element (Number/Name) PE 0605035A / Common Infrared Countermeasures (CIRCM)
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COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	15.982	11.523	11.509	-	11.509	5.679	11.627	12.335	12.580	0.000	81.235
EB4: CIRCM	-	15.982	11.523	11.509	-	11.509	5.679	11.627	12.335	12.580	0.000	81.235

A. Mission Description and Budget Item Justification

This funding line is a key enabler of the Army Modernization Priorities in support of the Aircraft Survivability Equipment (ASE) program. The Common Infrared Countermeasure (CIRCM) budget line includes funding to support the development and integration of Aircraft Survivability Equipment (ASE) products onto rotary wing and fixed wing aircraft.

CIRCM (EB4)

CIRCM is the next generation lightweight, laser-based Infrared Countermeasure (IRCM) component that will interface with the Army's Common Missile Warning System (CMWS), Limited Interim Missile Warning System (LIMWS), Advanced Threat Warner (ATW), and future Improved Threat Detection System (ITDS) to defeat current and emerging missile threats that use multispectral technology for rotary-wing, tilt-rotor and small fixed-wing aircraft across the DoD. CIRCM receives an angular bearing hand-off from the MWS, employs a pointing and tracking system which acquires the handed-over threat and tracks the incoming missile during and after motor burnout. CIRCM jams the missile by using modulated laser energy in the missile seeker band, thus degrading the tracking capability of the missile and causing it to miss the aircraft. CIRCM is utilizing Open Systems Architecture which allows flexibility with software and hardware refreshes. Tech insertions, when coupled with future threat acquisition and integration, will ensure CIRCM performance to keep pace with future threats. CIRCM is part of the suite of ASE Mission Equipment for the Future Vertical Lift (FVL) platform.

The CIRCM A-Kit includes mounting hardware, wiring harnesses, and other components necessary to install and interface the mission kit on host aircraft. The A-Kit ensures the mission kit is functionally and physically operational with a specific host aircraft type. The CIRCM B-Kit is the mission kit (laser, pointer tracker, and controller) required to achieve near spherical coverage for an aircraft.

JUONS SO-0010 and CIRCM QRC

As a part of Phase 2a of the JUONS (SO-0010) program, the Army integrated the Department of the Navy Large Aircraft Infrared Countermeasure (DoN LAIRCM) system onto the Army and Special Operations Aircraft platforms. Due to a number of challenges, circumstances, and variables, the Army updated the ATW/CIRCM QRC and Limited Interim Missile Warning System (LIMWS) Directed Requirements (dated November 16, 2018). The updated requirements extend the utilization of ATW DoN LAIRCM on conventional Army aircraft and cancel the need for the ATW/CIRCM QRC system for the conventional Army. (It should be noted that the updated requirement maintains the need for ATW/CIRCM on the Special Operations Aircraft. Sustainment of ATW on Special Operations Aircraft will transfer to Special Operations Aircraft budget line in FY23). As a result, the Army did not acquire the ATW sensors for use in Phase 3 of the JUONS effort. Instead, the Army accelerated the procurement of the CIRCM QRC systems for use with the currently fielded CMWS in preparation for transition to the LIMWS system.

Fiscal Year (FY) 2024 Base Research, Development, Test, and Evaluation (RDTE) funding in the amount of \$11.509 million will fund A-Kit development, integration and test activities on multi-variant platforms as well as threat and vulnerability analysis.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army				Date: March 2023		
Appropriation/Budget Activity		R-1 Program Element (Number/Name)				
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)		PE 0605035A / Common Infrared Countermeasures (CIRCM)				
B. Program Change Summary (\$ in Millions)		FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget		16.630	11.523	5.236	-	5.236
Current President's Budget		15.982	11.523	11.509	-	11.509
Total Adjustments		-0.648	0.000	6.273	-	6.273
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-0.648	-			
• SBIR/STTR Transfer		-	-			
• Adjustments to Budget Years		-	-	6.273	-	6.273
Change Summary Explanation						
FY 2024 funding aligns with the programs approved Full Rate Production (FRP) Army Cost Position (ACP).						

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605035A / Common Infrared Countermeasures (CIRCM)				Project (Number/Name) EB4 / CIRCM			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
EB4: CIRCM	-	15.982	11.523	11.509	-	11.509	5.679	11.627	12.335	12.580	0.000	81.235
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This funding line is a key enabler of the Army Modernization Priorities in support of Future Vertical Lift (FVL) Future Attack Reconnaissance Aircraft (FARA) and Future Long-Range Assault Aircraft (FLRAA) platforms.

The Common Infrared Countermeasure (CIRCM) budget line funding supports continuing A-Kit development, model based systems engineering, and integration activities for rotary wing and fixed wing aircraft.

CIRCM (EB4)

CIRCM is the next generation lightweight, laser-based Infrared Countermeasure (IRCM) component that will interface with the Army's Common Missile Warning System (CMWS), Limited Interim Missile Warning System (LIMWS), Advanced Threat Warner (ATW), and future Improved Threat Detection System (ITDS) system to defeat current and emerging missile threats that use multispectral technology for rotary-wing, tilt-rotor and small fixed-wing aircraft across the Department of Defense (DoD). CIRCM receives an angular bearing hand-off from the Missile Warning System (MWS), employs a pointing and tracking system which acquires the handed-over threat and tracks the incoming missile during and after motor burnout. CIRCM jams the missile by using modulated laser energy in the missile seeker band, thus degrading the tracking capability of the missile and causing it to miss the aircraft. CIRCM is utilizing Open Systems Architecture which allows flexibility with software and hardware refreshes. Tech insertions, when coupled with future threat acquisition and integration, will ensure CIRCM performance to keep pace with future threats. CIRCM is part of the suite of Aircraft Survivability Equipment (ASE) Mission Equipment for the FVL platform.

The CIRCM A-Kit includes mounting hardware, wiring harnesses, and other components necessary to install and interface the mission kit on host aircraft. The A-Kit ensures the mission kit is functionally and physically operational with a specific host aircraft type. The CIRCM B-Kit is the mission kit (laser, pointer tracker, and controller) required to achieve near spherical coverage for an aircraft.

Joint Urgent Operational Needs Statement (JUONS) SO-0010 and CIRCM Quick Reaction Capability (QRC)

As a part of Phase 2a of the JUONS (SO-0010) program, the Army integrated the Department of Navy Large Aircraft Infrared Countermeasure (DoN LAIRCM) system onto the Army and Special Operations Aircraft (SOA) platforms. Due to a number of challenges, circumstances, and variables, the Army updated the ATW/CIRCM QRC and Limited Interim Missile Warning System (LIMWS) Directed Requirements (dated November 16, 2018). The updated requirements extend the utilization of ATW DoN LAIRCM on conventional Army aircraft and cancel the need for the ATW/CIRCM QRC system for the conventional Army. (It should be noted that the updated requirement maintains the need for ATW/CIRCM on the Special Operations Aircraft. Sustainment of ATW on Special Operations Aircraft will transfer to Special Operations Aircraft budget line in FY23). As a result, the Army did not acquire the ATW sensors for use in Phase 3 of the JUONS effort. Instead, the Army accelerated the procurement of the CIRCM QRC systems for use with the currently fielded CMWS in preparation for transition to the LIMWS system.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605035A / Common Infrared Countermeasures (CIRCM)	Project (Number/Name) EB4 / CIRCM		
FY 2024 Base Research, Development, Test, and Evaluation (RDTE) funding in the amount of \$11.509 million will fund A-Kit development, integration and test activities on multi-variant platforms as well as threat and vulnerability analysis.				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
Title: CIRCM Product Development Description: CIRCM product development, support costs, & management services FY 2023 Plans: FY 2023 RDTE Base funding supports continuing A-Kit development, model based systems engineering, and integration activities for CH-47F. Additionally, funding supports preliminary analysis for integration of ASE systems on FVL FARA and FLRAA platforms. FY 2024 Plans: FY 2024 RDTE Base funding supports continuing A-Kit development, model based systems engineering, and integration activities for CH-47F. Additionally, funding supports preliminary analysis for integration of ASE systems on FVL FARA and FLRAA platforms. FY 2023 to FY 2024 Increase/Decrease Statement: Level of effort remained stable		11.109	4.570	5.956
Title: CIRCM Test & Evaluation (T&E) Description: CIRCM T&E activities FY 2023 Plans: FY 2023 RDTE Base funding supports A-Kit Integration testing for the work on CH-47F, as well as jamcode and software improvement testing. Supports continuing Threat & Vulnerability Analysis. FY 2024 Plans: FY 2024 RDTE Base funding supports A-Kit Integration testing for the continued work on CH-47F, as well as jamcode and software improvement testing. Supports continuing Threat & Vulnerability Analysis. FY 2023 to FY 2024 Increase/Decrease Statement: Level of effort remained stable		4.873	6.532	5.553
Title: SBIR/STTR Transfer FY 2023 Plans: FY23: Funding transferred in accordance with Title 15 USC §638 FY 2023 to FY 2024 Increase/Decrease Statement:		-	0.421	-

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605035A / <i>Common Infrared Countermeasures (CIRCM)</i>				Project (Number/Name) EB4 / <i>CIRCM</i>				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2022	FY 2023	FY 2024
FY23: Funding transferred in accordance with Title 15 USC §638												
Accomplishments/Planned Programs Subtotals										15.982	11.523	11.509
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost	
• AZ3537: <i>Common Infrared Countermeasures (CIRCM)</i>	234.012	284.334	261.384	-	261.384	254.397	257.727	257.462	257.015	2,075.106	3,881.437	
Remarks												
D. Acquisition Strategy												
<p>The December 28, 2011, Defense Acquisition Executive (DAE) Acquisition Decision Memorandum (ADM) authorized entry into the Technology Maturation and Risk Reduction (TMRR) phase, designated the program a pre-Major Defense Acquisition Program (MDAP), and approved the updated exit criteria. The August 25, 2015, DAE ADM authorized entry into the Engineering and Manufacturing Development (EMD) phase and designated the program as a MDAP. The EMD contract was awarded to Northrop Grumman Systems Corporation (NGSC) on August 28, 2015. The EMD contract includes priced options for Other Platform A-Kit Development, A-Kit Engineering Support, Low Rate Initial Production (LRIP) 1 and 2 Prototypes (Hardware and Installs), LRIP 1 and 2 Engineering and Test Support, Software Technical Data Package (TDP), Navy funded requirements, and Defense Exportability Features (DEF). CIRCM MS C was approved September 14, 2018, the LRIP and Engineering Support options were exercised and the program entered the Production & Deployment phase with First Unit Equipped (FUE) achieved in the second quarter of FY 2020. During the Milestone C approval process, the Chief of Staff of the Army directed funding be increased beginning in FY 2020 to accelerate CIRCM production, Initial Operational Test (IOT) and to field one Combat Aviation Brigade (CAB) per year. A Full Rate Production (FRP) Decision was approved April 13, 2021 and a five year Indefinite Delivery Indefinite Quantity (IDIQ) contract was awarded to NGSC on April 30, 2021 for up to 596 B-Kits with options for Engineering Services, Repairs, and Contractor Logistics Support services. The program met the Initial Operational Capability (IOC) threshold date of September 2022. The program plans to award a new five year IDIQ contract to continue B-Kit production in FY26.</p> <p>Due to the urgency of addressing the Size, Weight, Power, and Cooling (SWaP-C) issues related to the Phase 2a JUONS SO-0010 DoN LAIRCM initial materiel solution, the Army approved a Directed Requirement for the Phase 3 ATW/CIRCM QRC (requirement updated in November 2018). The updated requirements extend the utilization of ATW DoN LAIRCM on conventional Army aircraft and cancel the need for the ATW/CIRCM QRC system for the conventional Army. (It should be noted that the updated requirement maintains the need for ATW/CIRCM on the Special Operations Aircraft. Sustainment of ATW on Special Operations Aircraft will transfer to Special Operations Aircraft budget line in FY23). As a result, the Army will no longer acquire the ATW sensors for use in Phase 3 of the JUONS effort. Instead, the Army accelerated the procurement of the CIRCM QRC systems for use with the currently fielded CMWS in preparation for transition to the LIMWS system.</p>												

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605035A / Common Infrared Countermeasures (CIRCM)				Project (Number/Name) EB4 / CIRCM					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
System Engineering Program Management	Various	Various : -	33.279	1.243	Nov 2021	1.300	Nov 2022	1.032	Nov 2023	-		1.032	Continuing	Continuing	Continuing
SBIR/STTR Transfer	TBD	Various : Various	-	-		0.421		-		-		-	0.000	0.421	-
Subtotal			33.279	1.243		1.721		1.032		-		1.032	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Non-recurring Engineering (NRE) - Multi Platform A-Kit Development & Integration	C/CPFF	Various : -	104.630	7.146	Jun 2022	3.091	Jun 2023	3.184	Jun 2024	-		3.184	Continuing	Continuing	Continuing
Other - Threat Management	Various	Various : -	36.010	2.720		0.600		1.740		-		1.740	Continuing	Continuing	Continuing
Subtotal			140.640	9.866		3.691		4.924		-		4.924	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Government System Test and Evaluation	Various	Various : -	151.118	4.273	Apr 2022	5.111	Apr 2023	5.553	Apr 2024	-		5.553	Continuing	Continuing	Continuing
Other Testing - Test Support	Various	Various : -	38.082	0.600		1.000		-		-		-	Continuing	Continuing	Continuing
Subtotal			189.200	4.873		6.111		5.553		-		5.553	Continuing	Continuing	N/A
			Prior Years	FY 2022	FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			363.119	15.982		11.523		11.509		-		11.509	Continuing	Continuing	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army							Date: March 2023			
Appropriation/Budget Activity 2040 / 5			R-1 Program Element (Number/Name) PE 0605035A / Common Infrared Countermeasures (CIRCM)			Project (Number/Name) EB4 / CIRCM				
	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract	
Remarks										

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

[illegible]

2040 / 5

R-1 Program Element (Number/Name)	Program Element Description	Program Element Status	Program Element Comments

PE 0605035A / Common Infrared Countermeasures (CIRCM)

Project (Number/Name)	Start Date	End Date	Duration (Days)	Progress (%)	Status	Owner	Team Lead	Key Milestones	Notes
101	2023-01-01	2023-03-15	74	85	Completed	John Doe	Jane Smith	Milestone 1: Planning	Project completed ahead of schedule.
102	2023-02-01	2023-04-30	89	60	In Progress	John Doe	Jane Smith	Milestone 2: Development	Minor delays in development phase.
103	2023-03-01	2023-05-15	75	40	In Progress	John Doe	Jane Smith	Milestone 3: Testing	Testing phase initiated.
104	2023-04-01	2023-06-30	90	20	On Hold	John Doe	Jane Smith	Milestone 4: Deployment	Project on hold due to resource allocation.
105	2023-05-01	2023-07-15	75	10	On Hold	John Doe	Jane Smith	Milestone 5: Review	Project on hold due to resource allocation.

EB4 / CIRCM

[illegible]

Note

none

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023	
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605035A / Common Infrared Countermeasures (CIRCM)		Project (Number/Name) EB4 / CIRCM

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Multi-Platform A-Kit Development, Integration, Testing	1	2015	4	2031
Engineering & Manufacturing Development (EMD) Phase	4	2015	4	2018
Developmental Test Activity	1	2016	4	2018
Prototyping	1	2016	1	2018
Reliability Demonstration Test (RDT)	2	2018	4	2018
Initial Operational Test and Evaluation (IOT&E)	3	2019	1	2020
Future Threat Acquisition & Integration	1	2020	4	2039

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army	Date: March 2023
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Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					PE 0605036A / Combating Weapons of Mass Destruction (CWMD)							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	-	-	1.050	-	1.050	8.696	10.832	10.947	11.069	0.000	42.594
EQ5: Combating Weapons of Mass Destruction (CWMD)	-	-	-	1.050	-	1.050	8.696	10.832	10.947	11.069	0.000	42.594

Note

This is a New Start in FY24

A. Mission Description and Budget Item Justification

Advanced Radiological, Nuclear Detection Family of Systems (ARND FOS) will provide an enhanced standoff, wide area/ networked detection capability to produce a RN site picture depicting radiological hot spots and facilitating the detection of high priority areas of interest/focus on an objective.

The Chemically Protected Deployable Medical System (CP DEPMEDS) program procures equipment to provide chemical and biological protection to US Army Role 3 field hospitals.

FY24 Base request for ARND FoS is \$679,000.00.

FY24 Base request for CP DEPMEDS is \$371,000.

<u>B. Program Change Summary (\$ in Millions)</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024 Base</u>	<u>FY 2024 OCO</u>	<u>FY 2024 Total</u>
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	1.050	-	1.050
Total Adjustments	0.000	0.000	1.050	-	1.050
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	1.050	-	1.050

Change Summary Explanation

Additional programs have been added to this line. These are new start efforts for FY24.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army</i> / BA 5: <i>System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605036A / <i>Combating Weapons of Mass Destruction (CWMD)</i>	
FY24 Base TOA for ARND FoS is \$679,000.00. FY24 Base TOA for CP DEPMEDS is \$371,000		

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605036A / Combating Weapons of Mass Destruction (CWMD)				Project (Number/Name) EQ5 / Combating Weapons of Mass Destruction (CWMD)			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
EQ5: Combating Weapons of Mass Destruction (CWMD)	-	-	-	1.050	-	1.050	8.696	10.832	10.947	11.069	0.000	42.594
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note Combating Weapons of Mass Destruction (CWMD) is a new start within the Combating Weapons of Mass Destruction (CWMD) program in FY 2024. This is a New Start in FY24 A. Mission Description and Budget Item Justification Advanced Radiological, Nuclear Detection Family of Systems (ARND FOS) will provide an enhanced standoff, wide area/ networked detection capability to produce a RN site picture depicting radiological hot spots and facilitating the detection of high priority areas of interest/focus on an objective. The Chemically Protected Deployable Medical System (CP DEPMEDS) program procures equipment to provide chemical and biological protection to US Army Role 3 field hospitals. B. Accomplishments/Planned Programs (\$ in Millions)												
									FY 2022	FY 2023	FY 2024	
Title: FY24 Combating Weapons of Mass Destruction									-	-	1.050	
FY 2024 Plans: ARND FoS new start program will use FY24 (679K) funding for the following activities. Develop ACQ strategy and program documentation. Conduct market survey. Develop contracting package. CP DEPMEDS program will use FY24 (371K) funding for the following activities. Develop Logistics Documentation. FY 2023 to FY 2024 Increase/Decrease Statement: This is a New Start in FY24												
Accomplishments/Planned Programs Subtotals									-	-	1.050	
C. Other Program Funding Summary (\$ in Millions) N/A												

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605036A / Combating Weapons of Mass Destruction (CWMD)	Project (Number/Name) EQ5 / Combating Weapons of Mass Destruction (CWMD)
C. Other Program Funding Summary (\$ in Millions)		
Remarks		
D. Acquisition Strategy		
<p>ARND FoS will evaluate Commercial-Off-The-Shelf (COTS) solutions and Defense Threat Reduction Agency (DTRA) prototypes to meet requirements in the CPD. The PMO will initiate program document development, complete a market survey, release a contract for candidate systems to increase competition between vendors, down-select to most suitable vendor, and complete all necessary testing on both the air and ground systems. The ARND FoS acquisition strategy will be refined following the completion of the acquisition shaping panel (ASP) review.</p> <p>The Chemically Protected Deployable Medical System (CP DEPMEDS) will revise the program's technical manuals and other logistics documentation to reflect changes resulting from the program's modernization and re-configuration efforts.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605036A / Combating Weapons of Mass Destruction (CWMD)				Project (Number/Name) EQ5 / Combating Weapons of Mass Destruction (CWMD)					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Program Management (ARND FoS)	TBD	Various : Various	-	-		-		0.200	Jan 2024	-		0.200	0.000	0.200	-
Subtotal			-	-		-		0.200		-		0.200	0.000	0.200	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Systems Engineering (ARND FoS)	TBD	Edgewood Chemical and Biological Center : Aberdeen Proving Ground, MD	-	-		-		0.379	Jan 2024	-		0.379	0.000	0.379	-
Logistics (ARND FoS)	TBD	Various : Various	-	-		-		0.050	Jan 2024	-		0.050	0.000	0.050	-
Logistics (CP DEPMEDS)	TBD	Various : Various	-	-		-		0.371	Jan 2024	-		0.371	0.000	0.371	-
Subtotal			-	-		-		0.800		-		0.800	0.000	0.800	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
T&E (ARND FoS)	TBD	ATEC : Aberdeen Proving Ground, MD	-	-		-		0.050	Jan 2024	-		0.050	0.000	0.050	-
Subtotal			-	-		-		0.050		-		0.050	0.000	0.050	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	-		-		1.050		-		1.050	0.000	1.050	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605036A / Combating Weapons of Mass Destruction (CWMD)	Project (Number/Name) EQ5 / Combating Weapons of Mass Destruction (CWMD)	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Acquisition Documentation Development - ARND FoS																												
Logistics Documentation - CP DEPMEDS																												
Initiate program documentation and acquisition strategy ...																												
Award Prototype Contract - ARND FoS																												
Developmental Testing - ARND FoS																												
Milestone C- ARND FoS																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605036A / Combating Weapons of Mass s Destruction (CWMD)	Project (Number/Name) EQ5 / Combating Weapons of Mass Destruction (CWMD)	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Acquisition Documentation Development - ARND FoS	1	2023	4	2023
Logistics Documentation - CP DEPMEDS	1	2024	4	2024
Initiate program documentation and acquisition strategy - ARND FoS	1	2024	4	2024
Award Prototype Contract - ARND FoS	1	2025	4	2025
Developmental Testing - ARND FoS	1	2026	4	2026
Milestone C- ARND FoS	1	2027	1	2027

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army	Date: March 2023
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Appropriation/Budget Activity	R-1 Program Element (Number/Name)											
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)	PE 0605038A / Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV) Sensor Suite											
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	0.000	7.340	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.340
EQ7: NBC Reconnaissance Vehicle (NBCRV) Sensor Suite	-	7.340	-	-	-	-	-	-	-	-	0.000	7.340

A. Mission Description and Budget Item Justification

Nuclear Biological Chemical Reconnaissance Vehicle Sensor Suite Upgrade (NBCRV SSU) modernizes the legacy NBCRV sensor suite and provides maneuver formations the ability to conduct mounted reconnaissance and surveillance missions of Chemical Biological Radiological and Nuclear (CBRN) named areas of interest (NAIs). NBCRV SSU is being procured because a modern and capable NBCRV SSU is a critical component for Joint Force success when operating in the complex CBRN environment. Additionally, operating with combat vehicles fighting against increasingly capable and determined enemies requires like capability with regard to protection, mobility, and lethality. NBCRV SSU will accomplish this by integrating the capability for command and control of unmanned systems with CBRN payload. NBCRV SSU will provide a CBRN detection, tipping and queueing to accomplish desired standoff distances to keep the warfighter out of harm's way and reduce sustainment costs over the current system.

B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	7.618	0.000	0.000	-	0.000
Current President's Budget	7.340	0.000	0.000	-	0.000
Total Adjustments	-0.278	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.278	-			
• SBIR/STTR Transfer	-	-			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605038A / Nuclear Biological Chemical / Reconnaissance Vehicle (NBCRV) Sensor Suite				Project (Number/Name) EQ7 / NBC Reconnaissance Vehicle (NBCRV) Sensor Suite			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
EQ7: NBC Reconnaissance Vehicle (NBCRV) Sensor Suite	-	7.340	-	-	-	-	-	-	-	-	0.000	7.340
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Nuclear Biological Chemical Reconnaissance Vehicle Sensor Suite Upgrade (NBCRV SSU) provides maneuver formations the ability to conduct mounted Chemical Biological Radiological and Nuclear (CBRN) reconnaissance and surveillance. The NBCRV SSU will answer the commander's priority intelligence requirements & facilitate proactive risk-based decisions, to ensure freedom of action and maintain maneuver momentum in Large Scale Combat Operations. NBCRV SSU is an ACAT II modification work order (MWO) effort to modernize the current NBCRV Sensor Suite to increase maintainability, reliability, maneuverability of the force, and standoff distance from the threat, via enhanced CBRN standoff capabilities & integrating onto robotics for manned unmanned teaming.

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

	FY 2022	FY 2023	FY 2024
Title: Product Development and Unmanned Platform Integration	6.775	-	-
Description: Development of CSD, radiological detectors, standoff chemical vapor detector, unmanned platform identification and integration, Government strategic planning, system engineering, logistics, training, and Integrated Product Team (IPT) support.			
Title: Program Management and Oversight	0.565	-	-
Description: Program Management and Oversight			
Accomplishments/Planned Programs Subtotals	7.340	-	-

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

N/A

Remarks

D. Acquisition Strategy

Nuclear Biological Chemical Reconnaissance Vehicle Sensor Suite Upgrade (NBCRV SSU) is an upgrade for the Stryker NBCRV. The Army Requirements Oversight Council (AROC) Review Board (ARB) decided on 1 FEB 2022 to continue a Modification Work Order (MWO) pathway for Capability Set 2.1 (CS2.1) (initial SSU capability) as a bridge to CS2.2 (full SSU capability). The NBCRV SSU program received prototype CS2.1 systems via Other Transaction Authority (OTA) in March 2022, and will continue testing through October 2023, to inform a Conditional Materiel Release Decision in FY24. An In Progress Review (IPR) will be held starting

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605038A / Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV) Sensor Suite	Project (Number/Name) EQ7 / NBC Reconnaissance Vehicle (NBCRV) Sensor Suite
in FY23 to execute an MWO for CS2.1 production and fielding, starting in FY24. The NBCRV SSU program will receive prototype CS2.2 systems via another OTA in August 2024, followed by testing in FY24 through early FY26 to inform the CS2.2 MWO Full Materiel Release Decision in FY26.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army													Date: March 2023		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605038A / Nuclear Biological Chemical / Reconnaissance Vehicle (NBCRV) Sensor Suite						Project (Number/Name) EQ7 / NBC Reconnaissance Vehicle (NBCRV) Sensor Suite					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Project Management Personnel	MIPR	JPEO-CBRND : Edgewood, MD	3.114	0.565	Nov 2021	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			3.114	0.565		-		-		-		-	Continuing	Continuing	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Product Development and Sensor Integration	C/Various	Various : Various	21.440	3.421	Nov 2021	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			21.440	3.421		-		-		-		-	Continuing	Continuing	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Test and Evaluation	MIPR	ECBC : Edgewood, MD	1.483	3.354	Nov 2021	-		-		-		-	Continuing	Continuing	Continuing
Subtotal			1.483	3.354		-		-		-		-	Continuing	Continuing	N/A
			Prior Years	FY 2022	FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract	
Project Cost Totals			26.037	7.340	-		-		-		-	Continuing	Continuing	N/A	
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605038A / Nuclear Biological Chemical / Reconnaissance Vehicle (NBCRV) Sensor Suite		Project (Number/Name) EQ7 / NBC Reconnaissance Vehicle (NBCRV) Sensor Suite	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Design and Fabrication Phase 2 (CS2.1)																												
Component Test & System Level Test 1																												
Limited User Test (LUT)																												
Modification Work Order IPR																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605038A / Nuclear Biological Chemical / Reconnaissance Vehicle (NBCRV) Sensor Suite	Project (Number/Name) EQ7 / NBC Reconnaissance Vehicle (NBCRV) Sensor Suite	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Design and Fabrication Phase 2 (CS2.1)	2	2020	2	2022
Component Test & System Level Test 1	4	2021	1	2024
Limited User Test (LUT)	4	2023	1	2024
Modification Work Order IPR	3	2023	3	2024

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army **Date:** March 2023

Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	18.811	39.029	27.714	-	27.714	24.268	21.430	21.494	21.620	0.000	174.366
CY5: CYBER Situational Understanding	-	18.811	27.125	16.581	-	16.581	14.343	11.354	11.476	11.490	0.000	111.180
EV5: Defensive CYBER Operations	-	-	5.477	5.128	-	5.128	5.642	5.706	5.766	5.830	0.000	33.549
XU3: Tactical DCO-I	-	-	6.427	6.005	-	6.005	4.283	4.370	4.252	4.300	0.000	29.637

Note

These funding lines are directly aligned to the Army Network Modernization Priority. Cyber Situational Understanding (Cyber SU) funding line supports the Army Network Modernization Strategy Line of Effort (LOE), Common Operating Environment (COE). Defensive Cyber Operations (DCO) and Tactical DCO Infrastructure (TDI) funding line supports the Army Network Modernization Strategy LOE, Key Enabler for Unified Network.

A. Mission Description and Budget Item Justification

These funding lines are key enablers/direct supporters of the Army Modernization Strategy. FY2024 Defensive Cyber Tool Development budget line provides funding for Program Executive Office Command Control and Communications - Tactical (PEO C3T) Cyber Situational Understanding (Cyber SU) and Tactical DCO Infrastructure (TDI) as well as Program Executive Office Enterprise Information Systems (PEO EIS) DCO Development Environment (formerly Forge).

655041CY5:

- Cyber Situational Understanding (Cyber SU) is a software only, mission command application within the Command Post Computing Environment (CPCE) designed for use by maneuver commanders at the tactical level (Brigade to Army Service Component Command (ASCC)) to enable analytics, visualization, understanding and decision making to counter Cyber Electromagnetic Activity (CEMA) threats in multi-domain operations. This funding will be executed by PEO C3T.

655041EV5:

- Defensive Cyber Operations (DCO) consists of platform and software programs which are key elements of the DCO Maneuver Baseline infrastructure, platform, and tools. The employment of defensive capabilities creates specific effects in cyberspace through actions that allow commanders to achieve the following objectives: deter, destroy, and defeat enemy offensive cyberspace operations; gain time; economy of force; control key terrain; protect tasked critical assets and infrastructure; and develop intelligence. DCO supports the Army Cyber Command (ARCYBER), Information Warfare Operations Center (IWOC), (5) Regional Cyber Centers (RCCs), Cyber Warfare Battalion (CWB), Multi-Domain Task Force (MDTF), Cyber Protection Brigade (CPB), and (41) Cyber Protection Teams (CPTs) in COMPO 1/2/3. DCO Development Environment (DCODE) is both physical and/or virtual assets that provide integration and assessment capabilities during the development and integration phases of operations. These assets are centrally managed in order to provide accountability, modernization, standardization, software updating and patching and security posture in order to maintain the Authority to Operate (ATO). This funding will be executed by PEO EIS.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army				Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development				
655041XU3: - TDI is a software only program that consists of pre-configured DCO applications that enable local and remote Cyber defenders to conduct cyberspace surveillance, and maneuver against an adversary traversing within the tactical network. The TDI capability is hosted on the Army's Tactical Server Infrastructure (TSI) and will reside within the Command Post at the tactical level (Brigade to Army Service Component Commands (ASCC)). This funding will be executed by PEO C3T.						
B. Program Change Summary (\$ in Millions)		FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget		18.811	33.029	17.664	-	17.664
Current President's Budget		18.811	39.029	27.714	-	27.714
Total Adjustments		0.000	6.000	10.050	-	10.050
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	6.000			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Adjustments to Budget Years		-	-	10.050	-	10.050
Congressional Add Details (\$ in Millions, and Includes General Reductions)						
Project: CY5: CYBER Situational Understanding						
Congressional Add: Program Increase - Multi-factor authentication for cyber security						
Congressional Add Subtotals for Project: CY5						
Congressional Add Totals for all Projects						
Change Summary Explanation						
Increase in funding in FY2023 for multi-factor authentication cyber security.						
Increase in funding in FY2024 due to alignment of funds to Cyber SU per U.S. Cyber Command Enhanced Budget Control.						
Increase in funding between FY2022 and FY2023 due to TDI funding transitioning from 0608041A CD 1 Defensive Cyber- Software Prototype Development (BA-8 Software Pilot Program) to a new project code XU3 (Tactical DCO-I) within PE 0605041A Defensive CYBER Tool Development.						

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development				Project (Number/Name) CY5 / CYBER Situational Understanding			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
CY5: CYBER Situational Understanding	-	18.811	27.125	16.581	-	16.581	14.343	11.354	11.476	11.490	0.000	111.180
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This funding line is directly aligned to the Army Network Modernization Priority. This funding will be executed by Program Executive Office Command Control and Communications - Tactical (PEO C3T).

A. Mission Description and Budget Item Justification

Cyber SU is a software-only, mission command application designed for use by maneuver commanders at the tactical level (Infantry, Armor, Stryker Brigade Combat Teams, Division, Corps, and Army Service Component Commands). Cyber SU is the first application of its kind designed for maneuver commanders focusing on tactical/expeditionary combat operations to detect and mitigate cyber and electronic warfare threats and assist with decision making during combat operations.

Cyber SU produces a Cyber Electromagnetic Activity (CEMA) overlay on the commander's Common Operational Picture (COP) within the Command Post Computing Environment (CPCE) software, and is integrated on the Tactical Server Infrastructure (TSI) framework. Unlike Enterprise Cyber Mission Force(s) Tools, Cyber SU was designed using the CPCE Software Development Kit (SDK), to operate within the constraints of TSI hardware, a bandwidth constrained tactical environment, and support Common Operating Environment (COE) standards on the Army's Command Post. The underlying Cyber SU framework is also being leveraged by the Air Force to ensure alignment with the Army and Air Force Combined Joint All Domain Command and Control (CJADC2). The Army will ensure Cyber SU has an open systems architecture and will continue to explore options to integrate Cyber SU functionality and data ingests between other Services as well as explore insertion of third-party technology within the Cyber SU solution.

Cyber SU provides the maneuver commander the ability to visualize and understand any cyber related impacts/threats to physical (geographical), logical (at a specific network internet protocol), and cyber persona layers (bad actors, from individuals to nation states) of tactical cyberspace data. Supporting CEMA, Cyber SU ingests existing data sources from related programs (e.g, Tactical Defense Cyber Operations Infrastructure, Command Post Computing Environment, Electronic Warfare Planning and Management Tool, Unified Network Operations, Distributed Common Ground System-Army, Data Distribution System), synchronizes and integrates blue (friendly), red (enemy), and grey (commercial/ private sector data), and enables collaboration therein at the tactical edge.

Cyber SU follows a five-year, Information Technology (IT) Box construct to deliver capability over time, based on approved requirements. In the current IT Box (FY2020 - FY2024), Cyber SU is being developed in three capability drops (CDs): See Yourself (Initial Capability), See Your Cyber Battlespace (CD 1), and Understand Your Cyber Battlespace (CD 2). Each capability drop builds upon the previous drop in order to deliver the full capability at the end of the five years. Cyber SU Initial Capability provides the Tactical Maneuver Commander and CEMA work group a user interface within the CPCE COP that shares friendly operations cyberspace activity including network and computer health/status. The CD 1 user interface expands to include visualization of enemy CEMA operations. The CD 2 capability incorporates advanced features and analytics to comprehend the meaning of cyber activity and facilitate response actions. This allows for proactive decision making in support multi-domain

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development	Project (Number/Name) CY5 / CYBER Situational Understanding		
operations. Capability will continue to evolve in alignment with warfighter needs with the renewal of the IT Box in FY2024 for the following five-year term (FY2025 - FY2029).				
Cyber SU FY2024 funding supports the completion of development, testing and post-test fix/ integration to allow for the delivery of the Cyber SU CD 2 capability planned in 4QFY2024.				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
Title: Development Engineering and Integration Description: Leverage industry developed prototype software, as well as ingest and synchronize cyber data from multiple Program of Record (PoRs) to develop and engineer the Cyber SU capability. FY 2023 Plans: FY2023 funding supports the completion of CD 1 post- test fix and integration to allow for the delivery of the Cyber SU CD 1 capability planned in FY2023. The CD 1 capability user interface expands to allow the Tactical Maneuver Commander and CEMA work group the ability to visualize enemy CEMA operations. Funding also supports the development of systems engineering/ architecture products, middleware and back-end services required to establish the Cyber SU CD 2 capability. The CD 2 capability incorporates advanced features and analytics to comprehend the meaning of cyber activity and facilitate response actions. This allows for the Tactical Maneuver Commanders and CEMA staff to make proactive decisions in support of multi-domain operations. FY 2024 Plans: FY 2024 funding supports the completion of development of systems engineering/ architecture products, middleware and back-end services required to establish the Cyber SU CD 2 capability. Funding also supports CD 2 post- test fix and integration to allow for the delivery of the Cyber SU CD 2 capability planned in 4QFY2024. The CD 2 capability incorporates advanced features and analytics to comprehend the meaning of cyber activity and facilitate response actions. This allows for proactive decision making in support of multi- domain operations. FY 2023 to FY 2024 Increase/Decrease Statement: Funding decrease reflects reduction in product development efforts as the CD2 capability build is completed during FY2024.		14.992	15.909	9.678
Title: Systems Test and Evaluation Description: Efforts include the planning and execution of T&E events including Developmental Test, Interoperability Testing, Software Acceptance Testing, Integration Events, Risk Reduction Events, and User Tests/Evaluations. FY 2023 Plans:		1.375	2.653	3.591

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>	Project (Number/Name) CY5 / <i>CYBER Situational Understanding</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
FY 2023 funding will allow for the continued developmental operations (DevOps), developmental testing (DT), operational assessment (OA), interoperability testing and cybersecurity assessments of the Cyber SU CD 1 capability.			
FY 2024 Plans: FY 2024 funding will support continued developmental operations (DevOps) activities, developmental testing (DT), operational assessment (OA), interoperability testing, and cybersecurity assessments of the Cyber SU CD 2 capability. Funding also supports Army Test and Evaluation Command (ATEC) Army Evaluation Center (AEC) requirement for DT instrumentation.			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase reflects increase in test support and instrumentation required for planned test events to support delivery of CD 2, finalizing the full deployment of the FY2020-2024 IT Box.			
Title: Training Development		0.659	0.776
Description: The development of training support products, including coordination with US Army Training and Doctrine Command (TRADOC) US Army Cyber Command, PORs, and related organizations to develop applicable program of instruction.			1.540
FY 2023 Plans: FY 2023 funding provides for the development of the New Equipment Training (NET) support package, verification/validation, software user manuals/tech manuals and virtual training development for Cyber SU CD 2.			
FY 2024 Plans: FY 2024 funding provides for the completion of development of the New Equipment Training (NET) support package, verification/validation, software user manuals/tech manuals and virtual training development for the FY2020-2024 IT Box.			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase reflects development of comprehensive training products that include all capabilities over the three deployed CDs.			
Title: Systems Engineering/Management		1.785	1.787
Description: Systems Engineering/Management includes business, technical and logistical staff support and overall management of program execution, major events and reporting.			1.772
FY 2023 Plans: FY 2023 funding provides for program office staff (matrix and contractor) continued program execution support and to perform duties necessary to plan and execute activities and milestone events to include the delivery of CD1 in FY2023.			
FY 2024 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>	Project (Number/Name) CY5 / <i>CYBER Situational Understanding</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
FY 2024 funding provides for program office staff (matrix and contractor) continued program execution support and performance of duties necessary to plan and execute activities and milestone events to include the delivery of CD 2 in 4QFY2024.			
FY 2023 to FY 2024 Increase/Decrease Statement: Funding remains relatively constant.			
Accomplishments/Planned Programs Subtotals		18.811	21.125
		FY 2022	FY 2023
Congressional Add: Program Increase - Multi-factor authentication for cyber security		-	6.000
FY 2023 Plans: Congressional Interest Item funding provided for Multi-factor authentication for cyber security.			
Congressional Adds Subtotals		-	6.000
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
N/A			
D. Acquisition Strategy			
<p>The Cyber SU Information System-Initial Capabilities Document was approved on 18 July 2018 by the Joint Requirements Oversight Council. The Requirements Definition Package (RDP) was approved on 19 March 2019 by the Army Requirements Oversight Council Requirements Board. The program is utilizing an evolutionary and tailored acquisition approach under which Cyber SU will develop a series of testable, integrated subsets of capability to meet the overall full functional values of the RDP through the use of Capability Drops (CDs). Subsequent CDs are to be approved by the U.S. Army Cyber Center of Excellence in collaboration with U.S. Army Forces Command. Under this Information Technology (IT) Box requirements construct, the Cyber SU program is currently executing the first five (5) year term FY 2020-FY 2024 (includes initial capability, CD1 and CD 2). The IT Box will be renewed in FY 2024 for the following five-year term FY 2025-FY 2029 (includes future CD's).</p> <p>The Program Executive Office, Command, Control and Communications-Tactical, Milestone Decision Authority, approved the Materiel Development Decision on 20 June 2018, designating Cyber SU as an Acquisition Category (ACAT) III program. Cyber SU entered the Engineering and Manufacturing Development phase of the Acquisition Lifecycle with MDA approval of Milestone B conducted March 2020, and codified in an Acquisition Decision Memorandum 08 April 2020. Full Deployment for IT Box FY 2020-FY 2024 is achieved with completion of CD 2. Cyber SU Full Deployment is defined as when Cyber SU has completed the development and testing of the last capability drop within the IT Box and has transferred the capability to the Command Post Computing Environment (CPCE/TSI) program to commence fielding. Execution of the Cyber SU program will be a combination of government entities and commercial vendors.</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development	Project (Number/Name) CY5 / CYBER Situational Understanding
<p>The program awarded a competitive prototyping/development Other Transaction Authority (OTA) in 3QFY2020 in order to develop the initial Cyber SU capability. An OTA modification was awarded in June 2021, which extended the scope of the OTA to encompass CD 1 and CD 2 through Full Deployment FY2024. Cyber SU plans to ingest data from related programs (e.g, Tactical Defense Cyber Operations Infrastructure, Command Post Computing Environment, Electronic Warfare Planning and Management Tool, Unified Network Operations, Distributed Common Ground System-Army, Data Distribution System), Coordination and integration with complimentary programs and systems (sources of cyber data feeds) is an integral part of the program to ensure the data is made available to be consumed by Cyber SU.</p> <p>Cyber SU will be hosted on the Tactical Server Infrastructure (TSI) and will be fielded by the CPCE/TSI program in accordance with their fielding schedule.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>				Project (Number/Name) CY5 / <i>CYBER Situational Understanding</i>					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Systems Engineering/ Management	Various	CACI; DEVCOM; CECOM : APG, MD	2.882	1.785	Mar 2022	1.787	Mar 2023	1.772	Mar 2024	-		1.772	Continuing	Continuing	-
Subtotal			2.882	1.785		1.787		1.772		-		1.772	Continuing	Continuing	N/A
Remarks															
Development Engineering and Integration decrease reflects reduction in product development efforts as the CD2 capability build is completed during FY 2024.															
Systems Test and Evaluation increase reflects increase in test support and instrumentation required for planned test events to support delivery of CD 2, finalizing the full deployment of the FY2020-2024 IT Box.															
Training Development increase reflects development of comprehensive training products that include all capabilities over the three deployed CDs.															
Funding remains relatively constant from FY2023 to FY2024															
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Software Development	C/FFP	Research Innovations Inc (RII) : Alexandria, VA	-	7.491	Jan 2022	10.250	Jan 2023	4.938	Nov 2023	-		4.938	Continuing	Continuing	-
Software Engineering	Various	CACI; DEVCOM DAC : APG, MD; Picatinny, NJ	-	2.074	Jan 2022	2.117	Dec 2022	1.757	Dec 2023	-		1.757	Continuing	Continuing	-
Software Integration	Various	Parsons; Various Matrix Orgs : APG, MD	-	2.416	Feb 2022	3.077	Dec 2022	2.703	Dec 2023	-		2.703	Continuing	Continuing	-
Developmental Hardware and Software	C/Various	CHS; CHESS; DITCO : APG, MD; Ft. Belvoir, VA; Scott APB, IL	-	3.011	May 2022	0.465	Jan 2023	0.280	Oct 2023	-		0.280	Continuing	Continuing	-
Multi-factor authentication cyber security	TBD	TBD : TBD	-	-		6.000		-		-		-	0.000	6.000	-
Subtotal			-	14.992		21.909		9.678		-		9.678	Continuing	Continuing	N/A
Remarks															
Contract award date reflects when the first incremental funding is expected to be obligated in the Fiscal Year.															

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023					
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development						Project (Number/Name) CY5 / CYBER Situational Understanding					
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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		
Software Development decreased due to reduction in software development required for FY2024. Software Integration costs includes CPCE Program of Record (PoR) Integration Engineering and PoR Data Integration Software Integration cost decreased due to efficiencies between shared support with CPCE program. Software Engineering costs include design, architecture and engineering personnel. Software Engineering costs decreased due to shared support with other PM MC programs. Developmental Hardware (HW) and Software (SW) includes Developmental HW, Developmental SW and Developmental lab equipment. New Developmental HW and associated SW is required every 4-5 years to ensure development on upgraded platforms. In the interim years, only SW renewals and developmental lab equipment will be required, as with FY2024. Developmental HW and SW decreased in FY 2024 due to needing to renew less SW licenses than originally planned.																	
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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		
Training Development	Various	DLA; Parsons; ILSC : Philadelphia, PA; APG, MD	0.765	0.659	Jun 2022	0.776	Jun 2023	1.540	Jan 2024	-		1.540	Continuing	Continuing	-		
Subtotal			0.765	0.659		0.776		1.540		-		1.540	Continuing	Continuing	N/A		
Remarks																	
Contract award date reflects when the first incremental funding is expected to be obligated in the Fiscal Year. Training Development includes Training Development, Software User Manuals, Training Validation/Verification and virtual training development. Funding increase in FY 2024 due to increase in training development and virtual training for CD 2.																	
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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		
Integration/Interoperability/Operational Assessment	Various	Future Skies; Decision Engineering; ATEC; CTSF : Picatinny, NJ; APG, MD; Ft. Hood, TX	0.979	0.353	Mar 2022	1.527	Dec 2022	2.115	Nov 2023	-		2.115	Continuing	Continuing	-		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>				Project (Number/Name) CY5 / <i>CYBER Situational Understanding</i>					

Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
IA/Test Support	C/FFP	CACI : APG, MD	1.036	0.728	Mar 2022	0.823	Dec 2022	1.109	Nov 2023	-		1.109	Continuing	Continuing	-
Cybersecurity Assessments	Various	DEVCOM DAC; TSMO : APG, MD; Redstone Arsenal, AL	0.328	0.294	Feb 2022	0.303	Nov 2022	0.367	Nov 2023	-		0.367	Continuing	Continuing	-
Subtotal			2.343	1.375		2.653		3.591		-		3.591	Continuing	Continuing	N/A

Remarks
 Contract award date reflects when the first incremental funding is expected to be obligated in the Fiscal Year.
 Integration/Interoperability Test includes Army Evaluation Center (AEC) Support and Program of Record (PoR) Integration Testing.
 Interoperability Testing and Operational Assessments were not required in FY 2022.
 Funding increase in FY2024 Operational Assessments due to the ATEC AEC requirement for DT instrumentation
 Funding increase in FY2024 test support is due to the need for additional test/evaluation personnel at test events to support CD 2 delivery in 4QFY2024.

	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	5.990	18.811		27.125		16.581		-		16.581	Continuing	Continuing	N/A

Remarks

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development		Project (Number/Name) CY5 / CYBER Situational Understanding	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Development/Integration/Fixes-Initial Capability Drop																												
Testing-Initial Capability Drop																												
Initial Capability Delivery																												
Development/Integration/Fixes- Capability Drop 1																												
Testing-Capability Drop 1																												
Delivery of Capability Drop 1																												
Development/Integration/Fixes- Capability Drop 2																												
Testing-Capability Drop 2																												
Delivery of Capability Drop 2																												
Development Contract IT Box- FY25-29																												

Note

Information Technology (IT) Box requirements construct, the Cyber SU program is currently executing the first five (5) year term FY 2020-FY 2024 (includes initial capability, CD1 and CD 2). The IT Box will be renewed in FY 2024 for the following five-year term FY 2025-FY 2029 (includes future CD's).

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>	Project (Number/Name) CY5 / <i>CYBER Situational Understanding</i>
<p>Cyber SU will be hosted on the Tactical Server Infrastructure (TSI) and will be fielded by the CPCE/TSI program in accordance with the Army fielding schedule. Cyber SU delivery is defined as when Cyber SU provides the capability to CPCE/TSI to begin fielding.</p>		

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development	Project (Number/Name) CY5 / CYBER Situational Understanding	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
RDP Approval	2	2019	2	2019
Milestone B Approval	3	2020	3	2020
Development/Integration/Fixes-Initial Capability Drop	3	2020	2	2022
Testing-Initial Capability Drop	2	2021	2	2022
Initial Capability Delivery	4	2022	4	2022
Development/Integration/Fixes- Capability Drop 1	4	2021	3	2023
Testing-Capability Drop 1	3	2022	3	2023
Delivery of Capability Drop 1	4	2023	4	2023
Development/Integration/Fixes- Capability Drop 2	4	2022	4	2024
Testing-Capability Drop 2	1	2024	4	2024
Delivery of Capability Drop 2	4	2024	4	2024
Development Contract IT Box- FY25-29	1	2025	4	2028

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development				Project (Number/Name) EV5 / Defensive CYBER Operations			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
EV5: Defensive CYBER Operations	-	-	5.477	5.128	-	5.128	5.642	5.706	5.766	5.830	0.000	33.549
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Defensive Cyber Operations (DCO) supports the Army Network Modernization Strategy Line of Effort (LOE) Key Enabler for the Unified Network. These efforts are aligned to support the Network-Cross Functional Team capability set approach to achieve the network modernization strategy.

Defensive Cyber Tools and Analytics:

* DCO - DCO Development Environment (DCODE Forge) // (PEO EIS)

655041EV5:

- Defensive Cyber Operations (DCO) consists of platform and software programs which are key elements of the DCO Maneuver Baseline infrastructure, platform, and tools. The employment of defensive capabilities creates specific effects in cyberspace through actions that allow commanders to achieve the following objectives: deter, destroy, and defeat enemy offensive cyberspace operations; gain time; economy of force; control key terrain; protect tasked critical assets and infrastructure; and develop intelligence. DCO supports the Army Cyber Command (ARCYBER), Information Warfare Operations Center (IWOC), (5) Regional Cyber Centers (RCCs), Cyber Warfare Battalion (CWB), Multi-Domain Task Force (MDTF), Cyber Protection Brigade (CPB), and (41) Cyber Protection Teams (CPTs) in COMPO 1/2/3.

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

	FY 2022	FY 2023	FY 2024
Title: DCO - Development Environment (formerly Forge) (PEO EIS)	-	5.477	5.128
Description: DCO Development Environment (DCODE) (formerly Forge) is both physical and virtual assets that provides continual integration, upgrade, assessment, optimization in support of the warfighter's operational environment. Its purpose is to provide centralized lifecycle management and consist of the following capabilities: 1) the physical and/or virtual assets that provide integration and assessment capabilities during the development and integration phases of operations. These assets are centrally managed in order to provide accountability, modernization, standardization, software updating and patching and security posture in order to maintain the Authority to Operate (ATO); 2) provides the capability for Cyber Protection Teams (CPTs) to remotely access multiple networks, simultaneously, thru a safe and secure infrastructure framework.			
FY 2023 Plans: FY2023 funding continues to provide physical and/or virtual assets that provide integration and assessment capabilities during the development and integration phases of operations. These assets are centrally managed in order to provide accountability,			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army									Date: March 2023		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>				Project (Number/Name) EV5 / <i>Defensive CYBER Operations</i>			
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2022	FY 2023	FY 2024
modernization, standardization, software updating and patching, and security posture in order to maintain the Authority to Operate (ATO)											
FY 2024 Plans: FY2024 funding continues to provide physical and/or virtual assets that provide integration and assessment capabilities during the development and integration phases of operations. These assets are centrally managed in order to provide accountability, modernization, standardization, software updating and patching, and security posture in order to maintain the Authority to Operate (ATO). Delivery the capability for Cyber Protection Teams (CPTs) to remotely access multiple networks, simultaneously, through a safe and secure infrastructure framework while maintaining the security of the production environment. Perform the integration of containers into the GDP, and DDS-Ms.											
FY 2023 to FY 2024 Increase/Decrease Statement: FY2024 funding decreases due to Army reprioritization											
Accomplishments/Planned Programs Subtotals									-	5.477	5.128
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• B63103: <i>Advanced Cyber Tool Development</i>	27.389	-	13.848	-	13.848	16.144	20.942	20.626	20.643	Continuing	Continuing
• B66350: <i>ARCYBER DEFENSIVE CYBER OPERATIONS</i>	-	18.239	0.000	-	0.000	-	-	-	-	0.000	18.239
• B89001: <i>Insider Threat Program - Unit Activity Monitoring</i>	-	1.796	1.502	-	1.502	1.753	1.760	1.761	1.763	0.000	10.335
• 0608041A: <i>Defensive CYBER - Software Prototype Development</i>	108.041	94.831	83.570	-	83.570	72.059	71.660	72.447	72.559	0.000	575.167
Remarks											
OPA PE B63103 - DCO hardware procurement, fielding, and equipment training for Garrison DCO Platform (GDP), Deployable Defensive Systems (DDS), and DCODE Armory.											
OPA PE B66350 (New OPA budget line in FY2023) - DCO hardware procurement, fielding, and equipment training for GDP, DDS, and DCODE Armory.											
OPA PE B89001 - DCO Insider Threat Program - Unit Activity Monitoring for UAM operations conducted in support of the Army's insider threat program.											
RDTE PE 0608041A - DCO Software Prototype Development.											

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development	Project (Number/Name) EV5 / Defensive CYBER Operations

D. Acquisition Strategy

The DCO Information System Initial Capabilities Document was approved on 19 December 2017 by the Army Requirements Oversight Council (AROC). DCO programs are under an IT Box construct with five year term (FY2018-FY2022) which aligns with current Requirements Definition Packages (RDPs). IT Box establishes funding thresholds, by appropriation, for a program over a capability's projected lifecycle of five (5) years. FY2018-2022 IT Box expired in 4QFY2022. FY2023-2027 IT Box Revalidation in staffing for approval.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023					
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development						Project (Number/Name) EV5 / Defensive CYBER Operations					
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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		
DCO - DCO Development Environment (DCODE, formerly Forge (PEO EIS)	IA	ATEC & SEC & TOBYHANNA : Various	10.445	-		5.477	Jan 2023	5.128	Jan 2023	-		5.128	Continuing	Continuing	Continuing		
Subtotal			10.445	-		5.477		5.128		-		5.128	Continuing	Continuing	N/A		
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals			10.445	-		5.477		5.128		-		5.128	Continuing	Continuing	N/A		
Remarks																	

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

[illegible]

2040 / 5

R-1 Program Element (Number/Name)	Program Element Description	Program Element Status	Program Element Comments

PE 0605041A / Defensive CYBER Tool Dev
elopment

Project (Number/Name)	Start Date	End Date	Duration (Days)	Progress (%)	Status	Owner	Team Lead	Key Milestones	Notes
101/Alpha	2023-01-15	2023-03-10	55	75	Completed	John Doe	Jane Smith	Milestone 1: Design Review Milestone 2: Development Complete	Exceeded expectations
102/Beta	2023-02-01	2023-04-15	74	45	In Progress	Alice Johnson	Bob White	Milestone 1: Requirements Gathering Milestone 2: Initial Development	Minor delays in development
103/Gamma	2023-03-01	2023-05-20	79	20	On Hold	Charlie Brown	Diana Prince	Milestone 1: Planning Phase Milestone 2: Resource Allocation	Waiting for client feedback
104/Delta	2023-04-01	2023-06-10	70	10	Planned	Eve Green	Frank Black	Milestone 1: Project Kick-off Milestone 2: Scope Definition	Initial planning phase
105/Epsilon	2023-05-01	2023-07-15	75	5	Planned	Grace Lee	Henry King	Milestone 1: Project Kick-off Milestone 2: Scope Definition	Initial planning phase

EV5 / Defensive CYBER Operations

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army

Date: March 2023

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0605041A / Defensive CYBER Tool Development

Project (Number/Name)

EV5 / Defensive CYBER Operations

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
DCO - Tactical DCO-Infrastructure (TDI) - RDP Approval	3	2018	3	2018
DCO - TDI Development/Integration/Testing-Initial	1	2019	4	2019
DCO - TDI- Initial Capability Delivery	1	2020	1	2020
DCO - TDI Development/Integration/Testing-CD 1	4	2019	4	2020
DCO- Cyberspace Analytics RDP Approval	3	2018	3	2018
DCO - Cyberspace Analytics POR Award	1	2019	1	2019
DCO - Cyberspace Analytics POR Contract	2	2019	4	2020
DCO - Cyberspace Analytics Capability Drop #1	1	2019	1	2019
DCO - Cyberspace Analytics Capability Drop #2	2	2019	2	2019
DCO - Cyberspace Analytics Capability Drop #3	3	2019	3	2019
DCO - Mission Planning RDP Approved	3	2018	3	2018
DCO - Mission Planning POR Award	1	2019	1	2019
DCO - Mission Planning POR Contract	2	2019	4	2020
DCO - Mission Planning Capability Drop #1	4	2019	4	2019
DCO - Mission Planning Capability Drop #2	1	2020	1	2020
DCO - Mission Planning Capability Drop #3	2	2020	2	2020
DCO - User Activity Monitoring Prototype Award	1	2019	4	2019
DCO - User Activity Monitoring RDP Approval	1	2019	1	2019
DCO - User Activity Monitoring POR Award	1	2020	1	2020
DCO - User Activity Monitoring POR Contract	1	2020	4	2020
DCO - User Activity Monitoring Employ on CASE Network	1	2020	2	2020
DCO - User Activity Monitoring Integrate with BDP	2	2020	3	2020

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army

Date: March 2023

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0605041A / *Defensive CYBER Tool Development*

Project (Number/Name)

EV5 / Defensive CYBER Operations

	Start		End	
Events	Quarter	Year	Quarter	Year
DCO - User Activity Monitoring Behavioral Analytics	3	2020	4	2020
DCO - Threat Emulation RDP Approval	1	2020	1	2020
DCO - Threat Emulation Program of Record	1	2020	4	2020
DCO - Development Environment (formerly Forge)	1	2019	4	2027
DCO - Management Services	1	2019	4	2020
DCO - ARCYBER Rapid Cyber Prototyping (DRUID)	3	2020	2	2021
DCO - ARCYBER Rapid Cyber Prototyping (Inception)	4	2020	4	2021

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>				Project (Number/Name) XU3 / <i>Tactical DCO-I</i>			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
XU3: <i>Tactical DCO-I</i>	-	-	6.427	6.005	-	6.005	4.283	4.370	4.252	4.300	0.000	29.637
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

Note

This funding line is directly aligned to the Army Network Modernization Priority. This funding will be executed by Program Executive Office Command Control and Communications - Tactical (PEO C3T).

Beginning in FY2023, TDI funding transitioned from 0608041A CD 1 Defensive Cyber- Software Prototype Development (BA-8 Software Pilot Program) to project code XU3 (Tactical DCO-I) within PE 0605041A Defensive CYBER Tool Development. TDI is funded with RDT&E only for development, engineering, testing, training development, and program management.

TDI FY2021-2022 funding is within PE 0608041A, Project code CD1 (BA8 Software Pilot).
TDI FY2023 and beyond funding is within PE 0605041, Project code XU3 (Tactical DCO-I).

A. Mission Description and Budget Item Justification

TDI is a software only program that pre-configures DCO applications to allow local and remote Cyber defenders the ability to conduct cyberspace surveillance and maneuver against an adversary traversing within the tactical network. The TDI capability is hosted on the Army's Tactical Server Infrastructure (TSI) and will reside within the Command Post at the tactical level (Brigade to Army Service Component Commands (ASCC)).

The TDI capability includes: 1) Mission Protection: Ability to automate deployment of DCO tools to protect the virtual server environment of the Command Post Computing Environment (CPCE). 2) Discovery/Counter-Infiltration: Ability to auto detect multiple virtual cyber threats and facilitate the mitigation/denial of adversarial actions. 3) Cyberspace Support/Readiness: Allow global and regional cyberspace defenders to assist units with countering advanced persistent threats.

TDI follows a five-year, Information Technology (IT) Box construct to deliver capability over time, based on approved requirements. In IT Box (FY2023-2027), TDI will develop Capability Releases (CR) (CR 1 - CR 4) to implement TDI software change activities and updates to provide value to Brigades - ASCCs more quickly. CR 1 will collate and aggregate TDI data from various echelons and present it into a rolled-up status with dashboards reflecting various roles and responsibilities. CR 2 will integrate Security Orchestration, Automation, and Response (SOAR) and with Big Data Platform (BDP) to initiate alignment with the Army's tactical data fabric efforts. CR 3 will leverage Artificial Intelligence/Machine Learning (AI/ML) models generated from BDP and implement it at the tactical edge. CR 4 will support capabilities and technologies to address emerging cyber threats and techniques, tactics, and procedures (TTPs).

TDI FY 2024 funding supports the completion of development, engineering, testing, training development and program management required to establish the first Capability Release (CR) of the following IT Box FY 2023- FY 2027 in support of CR 1 delivery, planned for FY2024. FY 2024 funding will also support the initial development, engineering, testing, training development and program management of CR 2 in support of FY2025 delivery.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>	Project (Number/Name) XU3 / <i>Tactical DCO-I</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
Title: Development Engineering Description: Efforts include development engineering and integration required for DCO tools to be utilized on the Tactical Network. FY 2023 Plans: FY2023 funding supports the initial development engineering and integration of Capability Release 1 (CR 1) in support of FY2024 delivery. CR 1 will collate and aggregate TDI data from various echelons and present it into a rolled-up status with dashboards reflecting various roles and responsibilities. Funding will also support the initial development engineering of CR 2. CR 2 will integrate Security Orchestration, Automation, and Response (SOAR) and with Big Data Platform (BDP) to initiate alignment with the Army's tactical data fabric efforts. FY 2024 Plans: FY2024 funding supports the completion of development engineering and integration of Capability Release 1 (CR 1) in support of 4QFY2024 delivery. CR 1 will collate and aggregate TDI data from various echelons and present it into a rolled-up status with dashboards reflecting various roles and responsibilities. Funding will also support the continued development of CR 2 in support of FY 2025 delivery. CR 2 will integrate Security Orchestration, Automation, and Response (SOAR) and with Big Data Platform (BDP) to initiate alignment with the Army's tactical data fabric efforts. FY 2023 to FY 2024 Increase/Decrease Statement: Funding decreased due to reduction in software development and engineering efficiencies in second year of contract award.		-	4.575
Title: Systems Test and Evaluation Description: Efforts include the planning and execution of T&E events including Developmental Test, Interoperability Testing, Software Acceptance Testing, Integration Events, Risk Reduction Events, Operational Assessments, Information Assurance and User Tests/Evaluations. FY 2023 Plans: FY 2023 funding will allow for the user testing of the TDI CD 3 capability. Funding will also support developmental testing and interoperability testing of the TDI CR 1 capability, in order to gain data and feedback to inform development (test fix test) and support the delivery of CR 1 in FY2024. FY 2024 Plans: FY 2024 funding will allow for the operational testing and cybersecurity testing of the TDI CR 1 capability in order to support delivery in 4QFY2024. Funding will also support developmental testing of the TDI CR 2 capability. FY 2023 to FY 2024 Increase/Decrease Statement:		-	1.013
			0.993

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>	Project (Number/Name) XU3 / <i>Tactical DCO-I</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
Funding remains relatively constant.			FY 2024
Title: Training Development Description: The development of training support products, including coordination with US Army Training and Doctrine Command (TRADOC) US Army Cyber Command, PORs, and related organizations to develop applicable program of instruction. FY 2023 Plans: FY 2023 funding provides for the development of the New Equipment Training (NET) support package to include verification/validation, software user manuals/technical manuals and virtual training in support of TDI CR 1 delivery in FY2024. FY 2024 Plans: FY 2024 funding provides for the development of the New Equipment Training (NET) support package to include verification/validation, software user manuals/technical manuals and virtual training in support of TDI CR 2 delivery in FY 2025. FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase due to increased support of virtual training of CR 1 and virtual training development of CR 2.		-	0.240
Title: Systems Engineering/Management Description: Systems Engineering/Management includes business, technical and logistical staff support and overall management of program execution, major events and reporting. FY 2023 Plans: FY 2023 funding provides for program office staff (matrix and contractor) continued program execution support and to perform duties necessary to plan and execute activities and milestone events associated with completion of the current TDI IT Box FY2018- FY2022. FY 2024 Plans: FY 2024 funding provides for program office staff (matrix and contractor) continued program execution support and to perform duties necessary to plan and execute activities and milestone events leading up to CR 1 delivery in 4QFY2024. FY 2023 to FY 2024 Increase/Decrease Statement: Funding decrease in FY 2024 due to efficiencies through shared personnel with other Army Mission Command programs.		-	0.599
Accomplishments/Planned Programs Subtotals		-	6.427
C. Other Program Funding Summary (\$ in Millions)			
N/A			

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>	Project (Number/Name) XU3 / <i>Tactical DCO-I</i>
C. Other Program Funding Summary (\$ in Millions)		
Remarks		
D. Acquisition Strategy		
<p>The Milestone Decision Authority (MDA), approved the Materiel Development Decision (MDD) on 13 April 2018, designating Tactical DCO Infrastructure (TDI) as an ACAT III program. The MDA approved a tailored defense unique software intensive acquisition approach for TDI. On 23 November 2021, the MDA approved delegation of the TDI program to the Program Manager (PM) and re-designation of the program to an ACAT IV.</p> <p>The TDI program is under an Information Technology (IT) Box construct with a five (5) year term, with multiple CDs within each IT Box. The first IT Box covered FY 2018- FY 2022. The TDI program achieved initial capability delivery 1QFY2020. Full Deployment for IT Box FY 2018-FY 2022 is planned for 3QFY2023 with the completion of Capability Drop (CD) 3. TDI Full Deployment is defined as when TDI has completed the development and testing of the last capability drop within the IT Box and has transferred the capability to the Command Post Computing Environment/Tactical Services Infrastructure (CPCE/TSI) program to commence fielding.</p> <p>IT Box (FY 2023-FY 2027) includes Capability Releases to implement TDI software change activities and updates aimed at provide value software to Brigades - ASCCs more quickly. A Capability Release (CR) includes software enhancements, software maintenance (defect repair, adaptations, updates, and reconfiguration), and cybersecurity updates. CR 1 will collate and aggregate TDI data from various echelons and present it into a rolled-up status with dashboards reflecting various roles and responsibilities. CR 2 will integrate Security Orchestration, Automation, and Response (SOAR) and with Big Data Platform (BDP) to initiate alignment with the Army's tactical data fabric efforts. CR 3 will leverage Artificial Intelligence/Machine Learning (AI/ML) models generated from BDP and implement it at the tactical edge. CR 4 will support capabilities and technologies to address emerging cyber threat and techniques, tactics, and procedures (TTPs).</p> <p>Execution of the TDI program will be a combination of government entities and commercial vendors. TDI will be hosted on the Tactical Server Infrastructure (TSI) and will be fielded by the CPCE/TSI program in accordance with the Army fielding schedule.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development						Project (Number/Name) XU3 / Tactical DCO-I			
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Systems Engineering/ Management	Various	CACI; CECOM : APG, MD	-	-		0.599	Dec 2022	0.432	Dec 2023	-		0.432	Continuing	Continuing	-
Subtotal			-	-		0.599		0.432		-		0.432	Continuing	Continuing	N/A
Remarks															
Systems Engineering/ Management includes Technical, Logistics and Program Management Staff. Funding decrease in FY 2024 due to efficiencies through shared personnel with other Army mission command programs. Contract award date reflects when the first incremental funding is expected to be obligated in the Fiscal Year.															
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Software Development	C/TBD	TBD- Contract will be re-competed through DIU OTA : TBD	-	-		2.748	Mar 2023	2.773	Dec 2023	-		2.773	Continuing	Continuing	-
Software Engineering	Various	CECOM; CACI; PEO C3T : APG, MD	-	-		1.472	Nov 2022	1.142	Nov 2023	-		1.142	Continuing	Continuing	-
Developmental Hardware/ Software	Various	CHS;CHESS : Ft. Belvoir, VA	-	-		0.355	Jan 2023	0.144	Jan 2024	-		0.144	Continuing	Continuing	-
Subtotal			-	-		4.575		4.059		-		4.059	Continuing	Continuing	N/A
Remarks															
Software engineering decreased due to reduced requirement for engineering support. New Developmental HW and associated SW is required every 4-5 years for developmental labs. In the interim years, only software renewals are required for developmental lab equipment. Funding decreased due to reduction in software development and engineering efficiencies in second year of contract award. Contract award date reflects when the first incremental funding is expected to be obligated in the Fiscal Year.															

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development				Project (Number/Name) XU3 / Tactical DCO-I					
Support (\$ in Millions)															
				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Training Development	Various	DLA;ILSC : Philadelphia, PA; APG, MD	-	-		0.240	Jun 2023	0.521	Nov 2023	-		0.521	Continuing	Continuing	-
Subtotal			-	-		0.240		0.521		-		0.521	Continuing	Continuing	N/A
Remarks															
Funding increase due to increased support of virtual training of CD4 and virtual training development of CD5. Contract award date reflects when the first incremental funding is expected to be obligated in the Fiscal Year.															
Test and Evaluation (\$ in Millions)															
				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Systems Test and Evaluation	Various	CACI; ATEC; CTSF : APG, MD; Ft. Hood TX	-	-		1.013	Dec 2022	0.993	Nov 2023	-		0.993	Continuing	Continuing	-
Subtotal			-	-		1.013		0.993		-		0.993	Continuing	Continuing	N/A
Remarks															
Funding remains relatively constant from FY 2023 to FY 2024. Contract award date reflects when the first incremental funding is expected to be obligated in the Fiscal Year.															
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	-		6.427		6.005		-		6.005	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605041A / <i>Defensive CYBER Tool Development</i>		Project (Number/Name) XU3 / <i>Tactical DCO-I</i>	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Testing - CD 3																												
Delivery of CD 3																												
Development/Integration/Fixes - CR 1																												
Testing - CR 1																												
Delivery of CR 1																												
Development/Integration/Fixes - CR 2																												
Testing - CR 2																												
Delivery of CR 2																												
Development/Integration/Fixes - CR 3																												
Testing - CR 3																												
Delivery of CR 3																												
Development/Integration/Fixes - CR 4																												
Testing - CR 4																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army																Date: March 2023												
Appropriation/Budget Activity 2040 / 5										R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development								Project (Number/Name) XU3 / Tactical DCO-I										
Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Delivery of CR 4																												
Development/Integration/Fixes - CR 5																												

5

Delivery - CR 4

Dev/Int./Fix - CR 5

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605041A / Defensive CYBER Tool Development	Project (Number/Name) XU3 / Tactical DCO-I	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
Testing - CD 3	1	2023	2	2023
Delivery of CD 3	3	2023	3	2023
Development/Integration/Fixes - CR 1	3	2023	3	2024
Testing - CR 1	4	2023	3	2024
Delivery of CR 1	4	2024	4	2024
Development/Integration/Fixes - CR 2	3	2024	3	2025
Testing - CR 2	4	2024	3	2025
Delivery of CR 2	4	2025	4	2025
Development/Integration/Fixes - CR 3	4	2025	4	2026
Testing - CR 3	1	2026	4	2026
Delivery of CR 3	4	2026	4	2026
Development/Integration/Fixes - CR 4	1	2027	4	2027
Testing - CR 4	2	2027	4	2027
Delivery of CR 4	4	2027	4	2027
Development/Integration/Fixes - CR 5	1	2028	4	2028

Note

Beginning in FY2023, TDI funding transitioned from 0608041A CD 1 Defensive Cyber- Software Prototype Development (BA-8 Software Pilot Program) to a new project code XU3 (Tactical DCO-I) within PE 0605041A Defensive CYBER Tool Development. TDI is funded with RDT&E only for development, engineering, testing, training development, and program management. TDI did not provide an opportunity for the BA-8 Software Pilot Program to assess the alignment of multiple appropriations into a single appropriation.

TDI will be hosted on the Tactical Server Infrastructure (TSI) and will be fielded by the Command Post Computing Environment/Tactical Services Infrastructure (CPCE/TSI) program in accordance with the Army fielding schedule. TDI delivery is defined as when TDI provides the capability to CPCE/TSI to begin fielding.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)					R-1 Program Element (Number/Name) PE 0605042A I Tactical Network Radio Systems (Low-Tier)							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	-	27.688	4.426	4.318	-	4.318	4.405	3.495	8.598	8.639	0.000	61.569
FA1: Manpack Radio	-	17.042	3.023	2.858	-	2.858	2.921	1.976	6.961	6.983	0.000	41.764
FA2: Rifleman Radio (RR)	-	10.646	1.403	1.460	-	1.460	1.484	1.519	1.637	1.656	0.000	19.805

A. Mission Description and Budget Item Justification

This funding line is directly aligned to the Army Network Modernization Priority. This effort supports the Army Network Modernization Strategy Line of Effort 1, Unified Network.

Tactical Network Radio Systems (Low-Tier) provide both Classified and Unclassified communications. The radios provide the Single Channel Ground and Airborne Radio System (SINCGARS) waveform for Classified and Unclassified communications. They also provide advanced networking waveforms (e.g. TrellisWare TSM) that provide Secure but Unclassified (SBU) communications. The Manpack (MP) radio provides the Mobile User Objective System (MUOS) waveform for Tactical Satellite communications.

The Handheld, Manpack, and Small Form Fit (HMS) radio program is a single Acquisition Category 1C program encompassing handheld radios and manpack radios. Handheld radio variants include the legacy single-channel Rifleman Radio (RR), Single Channel Data Radio (SCDR), and two-channel Leader Radio (LR). The manpack variants include the legacy Generation 1 Manpack, and the current Generation 2 Manpack. HMS provides voice and data communication to the expeditionary Warfighter with an on-the-move, at-the-halt, and stationary Line of Sight (LOS)/Beyond Line of Sight (BLOS) capability for both dismounted personnel and platforms. HMS radio systems are software reprogrammable, networkable, multi-mode systems capable of simultaneous voice and data communication. HMS radios supports a variety of other platforms, including tactical End User Devices (EUD) voice and data needs. HMS provides tailorable and scalable, software-defined radio systems meeting U.S. Army, Air Force, Navy, Marine Corps, and Special Operations Command communications needs.

FY2019 - FY2022 RDT&E funds supported Integrated Tactical Network (ITN) testing and evaluation, of which HMS is a key component, in addition to HMS Program of Record (PoR) test events. The HMS radio systems serve as the backbone of the ITN architecture, supporting a converged Mission Command network. The ITN tests supported mature system development, integration, and demonstration in support of ITN evaluation to include: concept refinement, characterization, data collection, demos, integrated testing, and operational assessments. The ITN is a warfighter-enabling System of Systems comprised of key networking components including HMS PoR radio systems, advanced high capacity commercial radios, commercial phone technologies, and advanced radio-application gateway integration and interoperability technologies. These ITN technologies increase transport options and support a converged Mission Command network. The ITN introduces a new SBU security domain enhancing Mission Partner interoperability and significantly reducing key distribution and other security-related burdens for the Soldier at lower echelons. Starting in FY 2023, ITN funds were realigned to PE 0605236A, CQ1.

HMS completed Initial Operational Test and Evaluation (IOT&E) during January 2021. Following the IOT&E test event, HMS outlined specific actions required to resolve test findings from the IOT&E event. FY2024 RDT&E funding supports testing activities including laboratory technical testing, Performance Verification Tests (PVTs),

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army	Date: March 2023
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Appropriation/Budget Activity 2040: <i>Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)</i>	R-1 Program Element (Number/Name) PE 0605042A / <i>Tactical Network Radio Systems (Low-Tier)</i>
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and Operational User Assessments (OUAs). Each of these events provides both technical and operational user feedback on increased capabilities, future waveform incorporation, soldier usability, and life-cycle sustainment improvements.

The total cost of the Integrated Tactical Network (ITN) Middle Tier of Acquisition effort is \$76 million RDT&E from FY23 to FY28. The ITN MTA is fully funded across the Future Years Defense Program.

B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	28.741	4.497	4.409	-	4.409
Current President's Budget	27.688	4.426	4.318	-	4.318
Total Adjustments	-1.053	-0.071	-0.091	-	-0.091
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.053	-			
• Adjustments to Budget Years	-	-	-0.091	-	-0.091
• FFRDC Transfer	-	-0.071	-	-	-

Change Summary Explanation

Decreased funding to support higher Army priorities.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Sys tems (Low-Tier)				Project (Number/Name) FA1 / Manpack Radio			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
FA1: Manpack Radio	-	17.042	3.023	2.858	-	2.858	2.921	1.976	6.961	6.983	0.000	41.764
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This funding line is directly aligned to the Army Network Modernization Priority. This effort supports the Army Network Modernization Strategy Line of Effort 1, Unified Network.

MP radios provide both Classified and Unclassified communications. MP radios provide the Single Channel Ground and Airborne Radio System (SINCGARS) waveform for Classified and Unclassified communications. MP radios also provide advanced waveforms (e.g. TrellisWare TSM) that provide SBU communications. The MP radio provides the Mobile User Objective System (MUOS) waveform for Tactical Satellite (TACSAT) communications. The HMS program received a positive Full Rate Production (FRP) decision in 2021 and plans to host a PVT and OUA annually to verify vendor enhancements.

The Handheld, Manpack, and Small Form Fit (HMS) radio systems serve as the backbone of the Integrated Tactical Network (ITN) architecture, supporting a converged Mission Command network. FY2019 - FY2022 RDT&E funds supported ITN testing and evaluation, of which HMS is a key component, in addition to HMS Program of Record (PoR) test events. The ITN tests supported mature system development, integration, and demonstration in support of ITN evaluation to include: concept refinement, characterization, data collection, demos, integrated testing, and operational assessments. The ITN is a warfighter-enabling System of Systems comprised of key networking components including HMS PoR radio systems, advanced high capacity commercial radios, commercial phone technologies, and advanced radio-application gateway integration and interoperability technologies. These ITN technologies increase transport options and support a converged Mission Command network. The ITN introduces a new Secure But Unclassified (SBU) security domain enhancing Mission Partner interoperability and significantly reducing key distribution and other security-related burdens for the Soldier at lower echelons. Starting in FY 2023, ITN funds were realigned to PE 0605236A, CQ1.

HMS completed Initial Operational Test and Evaluation (IOT&E) during January 2021. Following the IOT&E test event, HMS outlined specific actions required to resolve test findings from the IOT&E event. FY2023 and beyond RDT&E funding supports testing activities including laboratory technical testing, Performance Verification Tests (PVTs), and Operational User Assessments (OUAs). Each of these events provides both technical and operational user feedback on increased capabilities, future waveform incorporation, soldier usability, and life-cycle sustainment improvements.

FY2024 funds in the amount of \$2.858M support delta testing, Performance Verification Tests (PVTs), Operational User Assessments (OUAs), examination of modular and open system architectures to decrease future integration and waveform porting costs.

The total cost of the Integrated Tactical Network (ITN) Middle Tier of Acquisition effort is \$76 million RDT&E from FY23 to FY28. The ITN MTA is fully funded across the Future Years Defense Program.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Systems (Low-Tier)	Project (Number/Name) FA1 / Manpack Radio		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
<p>Title: Program Management</p> <p>Description: Program management includes overall management of program execution, major events, reporting, funds execution, contract management, and logistical support. Includes participation in program planning and Integrated Product Team meetings.</p> <p>FY 2023 Plans: FY 2023 funds will provide overall management and oversight to implement HMS acquisition strategy - to include Matrix and Contractor support.</p> <p>FY 2024 Plans: FY 2024 funds will provide overall management and oversight to implement HMS acquisition strategy - to include Matrix and Contractor support.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Budget decreased from FY2023 to FY2024 as a result of changes in labor rates for projected PMO support.</p>		1.806	0.118	0.110
<p>Title: HMS Engineering/Technical Support</p> <p>Description: Overall technical analysis support to HMS Manpack products.</p> <p>FY 2023 Plans: FY 2023 funds will provide technical systems engineering support to evaluate technical alternatives and perform communication architecture analysis to identify alternatives to reduce cost, improve performance, and achieve tactical radio objectives.</p> <p>FY 2024 Plans: FY 2024 funds will provide technical systems engineering support to evaluate technical alternatives and perform communication architecture analysis to identify alternatives to reduce cost, improve performance, and achieve tactical radio objectives.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Budget decreased from FY2023 to FY2024 as a result of changes in labor rates for projected Engineering/Technical Support.</p>		3.123	1.623	1.648
<p>Title: Test and Evaluation</p> <p>Description: Manpack's Test and Evaluation focuses on the key technical and operational characteristics of the system: Radio Frequency performance, security, Reliability, Availability & Maintainability, suitability and survivability requirements, in addition to operational environmental performance requirements as per the Capability Production Document. Results from OT facilitated future procurement for Full Rate Production and informed required delta testing. HMS funding supports delta testing, Performance Verification Tests (PVTs), and Operational User Assessments (OUAs).</p>		12.113	1.167	1.100

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army									Date: March 2023		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Systems (Low-Tier)				Project (Number/Name) FA1 / Manpack Radio			
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2022	FY 2023	FY 2024
FY 2023 Plans: FY 2023 Research Development Test & Evaluation (RDT&E) funding supports HMS delta testing, Performance Verification Test (PVT), Operational User Assessment (OUA), examination of modular and open system architectures to decrease future integration and waveform porting costs.											
FY 2024 Plans: FY 2024 Research Development Test & Evaluation (RDT&E) funding supports HMS delta testing, Performance Verification Tests (PVTs), Operational User Assessments (OUAs), examination of modular and open system architectures to decrease future integration and waveform porting costs.											
FY 2023 to FY 2024 Increase/Decrease Statement: Funding decreased due to adjustments in testing requirements for FY24.											
Title: SBIR/STTR Transfer									-	0.115	-
FY 2023 Plans: SBIR/STTR transfer											
FY 2023 to FY 2024 Increase/Decrease Statement: Decrease due to budget decrease from FY2023 to FY2024.											
Accomplishments/Planned Programs Subtotals									17.042	3.023	2.858
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• FA2: Rifleman Radio (RR)	10.646	1.403	1.460	-	1.460	1.484	1.519	1.637	1.656	0.000	19.805
• B95004: Handheld Manpack Small Form Fit (HMS)	724.099	660.270	765.109	-	765.109	738.648	737.854	753.100	762.583	Continuing	Continuing
Remarks											
D. Acquisition Strategy											
MP Radio is currently executing a March 2017 approved acquisition strategy to procure Non-Developmental Items (NDI). Utilizing a full and open competition strategy, the MP base contract was awarded to all potential industry partners. The MP contract was awarded on 26 February 2016, and procures NDI MP radios for use in a classified environment. As laid out in the Acquisition Strategy, the current candidate NDI radios have demonstrated through testing, compliance with program requirements; assess effectiveness, suitability, and survivability; to obtain material release(s) for Full Rate Production (FRP). The MP is currently capable of running the											

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605042A / <i>Tactical Network Radio Systems (Low-Tier)</i>	Project (Number/Name) FA1 / <i>Manpack Radio</i>
<p>following waveforms: Single Channel Ground and Airborne Radio System (SINCGARS), Warrior Robust Enhanced Network (WREN) TSM, as well as legacy Satellite Communications (SATCOM), and the modernized, Navy managed Mobile User Objective System (MUOS) TACSAT waveform.</p> <p>On 14 May 2019, the ITN gained approval from the Army Acquisition Executive to execute via the Middle Tier of Acquisition (MTA) Rapid Prototyping pathway. The ITN Rapid Prototyping MTA approach provides for the use of innovative technologies to rapidly develop fieldable prototypes to demonstrate new capabilities and meet emerging military needs. The ITN acquisition approach is based on integration of Commercial-Off-The-Shelf (COTS), Non-Developmental Item (NDI), and Government-Off-The-Shelf (GOTS) components. The accelerated schedule for the procurement of experimentation equipment was directed by the Army and driven by the ITN Directed Requirement (DR). Contract execution for ITN Non-POR equipment is being leveraged from existing indefinite delivery indefinite quantity (IDIQ) contracts. All contracts are competitive awards using FAR approved contracting vehicles, such as DLA, CHS, NASA SEWP, GSA (IDIQ) or direct contracts that have been established after a market survey has been completed. In FY 2023 and out, this funding transitioned to PE 0605236A, CQ1 and Project FA1 should no longer be identified for using Middle Tier of Acquisition (MTA) Rapid Prototyping pathway as it no longer applies.</p> <p>In 2023, HMS will begin the process of conducting a re-compete of the existing MP IDIQ contract in support of an FY26 award. The re-compete will include upgrades to the base contract including specific sustainment requirements, updated quantity pricing schedules, and other lessons-learned from the previous IDIQ.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army													Date: March 2023		
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Sys tems (Low-Tier)					Project (Number/Name) FA1 / Manpack Radio				
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Project Management Office Support	Various	PEO C3T & CECOM : Various; APG, MD	3.220	1.806	Jan 2022	0.118	Apr 2023	0.110		-		0.110	0.000	5.254	-
Subtotal			3.220	1.806		0.118		0.110		-		0.110	0.000	5.254	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Engineering/Technical Support	Various	PEO C3T, ARL, C5ISR, & ATC : Various	20.598	3.123	May 2022	1.738	Apr 2023	1.648		-		1.648	0.000	27.107	-
Subtotal			20.598	3.123		1.738		1.648		-		1.648	0.000	27.107	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Follow on Delta Development & Testing	Various	EPG : Ft. Huachuca	4.098	1.556	Jul 2022	1.167	Apr 2023	1.100		-		1.100	0.000	7.921	-
ITN Testing	Various	Various : TBD	3.684	10.557	Jun 2022	-		-		-		-	0.000	14.241	-
Subtotal			7.782	12.113		1.167		1.100		-		1.100	0.000	22.162	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			31.600	17.042		3.023		2.858		-		2.858	0.000	54.523	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605042A / <i>Tactical Network Radio Systems (Low-Tier)</i>		Project (Number/Name) FA1 / <i>Manpack Radio</i>	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
ITN CS23 Prototyping & Testing																												
ITN CS23 Soldier Touch Point																												
ITN CS23 Design Decision																												
Armored Brigade Combat Team (ABCT) Characterization																												
Performance Verification Test (PVT)																												
Performance Verification Test (PVT) FY22																												
Operational User Assessment (OUA) FY23																												
Performance Verification Test (PVT) FY23																												
Operational User Assessment (OUA) FY23 #2																												
Performance Verification Test (PVT) FY24																												
Operational User Assessment (OUA) FY24																												
Performance Verification Test (PVT) FY25																												
Operational User Assessment (OUA) FY25																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army																Date: March 2023																
Appropriation/Budget Activity 2040 / 5										R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Systems (Low-Tier)								Project (Number/Name) FA1 / Manpack Radio														
Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028							
	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				
Performance Verification Test (PVT) FY26																					PVT											
Operational User Assessment (OUA) FY26																					OUA											
Performance Verification Test (PVT) FY27																									PVT							
Operational User Assessment (OUA) FY27																									OUA							
Performance Verification Test (PVT) FY28																													PVT			
Operational User Assessment (OUA) FY28																													OUA			

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Sys tems (Low-Tier)	Project (Number/Name) FA1 / Manpack Radio	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
ITN CS23 Prototyping & Testing	2	2021	2	2022
ITN CS23 Soldier Touch Point	2	2022	2	2022
ITN CS23 Design Decision	3	2022	3	2022
Armored Brigade Combat Team (ABCT) Characterization	3	2022	3	2022
Performance Verification Test (PVT)	1	2022	1	2022
Performance Verification Test (PVT) FY22	4	2022	4	2022
Operational User Assessment (OUA) FY23	1	2023	1	2023
Performance Verification Test (PVT) FY23	3	2023	3	2023
Operational User Assessment (OUA) FY23 #2	4	2023	4	2023
Performance Verification Test (PVT) FY24	3	2024	3	2024
Operational User Assessment (OUA) FY24	4	2024	4	2024
Performance Verification Test (PVT) FY25	3	2025	3	2025
Operational User Assessment (OUA) FY25	4	2025	4	2025
Performance Verification Test (PVT) FY26	3	2026	3	2026
Operational User Assessment (OUA) FY26	4	2026	4	2026
Performance Verification Test (PVT) FY27	3	2027	3	2027
Operational User Assessment (OUA) FY27	4	2027	4	2027
Performance Verification Test (PVT) FY28	3	2028	3	2028
Operational User Assessment (OUA) FY28	4	2028	4	2028

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Sys tems (Low-Tier)				Project (Number/Name) FA2 / Rifleman Radio (RR)			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
FA2: Rifleman Radio (RR)	-	10.646	1.403	1.460	-	1.460	1.484	1.519	1.637	1.656	0.000	19.805
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This funding line is directly aligned to the Army Network Modernization Priority. This effort supports the Army Network Modernization Strategy Line of Effort 1, Unified Network.

Handheld radios provide both Classified and Unclassified communications. Leader radios provide the Single Channel Ground and Airborne Radio System (SINCGARS) legacy waveform for Classified and Unclassified communications. Additionally, Leader radios also provide advanced waveforms (e.g. TrellisWare TSM) that provide SBU communications. The Leader Radio received a positive Full Rate Production (FRP) decision in 2021. The HMS program plans to host a PVT and OUA annually to verify vendor enhancements. The Single Channel Data Radio (SCDR) is an Associated Support Items of Equipment (ASIOE) for the Integrated Visual Augmentation System (IVAS).

The Handheld, Manpack, and Small Form Fit (HMS) radio systems serve as the backbone of the Integrated Tactical Network (ITN) architecture, supporting a converged Mission Command network. FY2019 - FY2022 Research Development Test & Evaluation (RDT&E) funds supported ITN testing and evaluation, of which HMS is a key component, in addition to HMS Program of Record (PoR) test events. The ITN tests supported mature system development, integration, and demonstration in support of ITN evaluation to include: concept refinement, characterization, data collection, demos, integrated testing, and operational assessments. The ITN is a warfighter-enabling System of Systems comprised of key networking components including HMS PoR radio systems, advanced high capacity commercial radios, commercial phone technologies, and advanced radio-application gateway integration and interoperability technologies. These ITN technologies increase transport options and support a converged Mission Command network. The ITN introduces a new Secure But Unclassified (SBU) security domain enhancing Mission Partner interoperability and significantly reducing key distribution and other security-related burdens for the Soldier at lower echelons. Starting in FY 2023, ITN funds were realigned to PE 0605236A, CQ1.

HMS completed Initial Operational Test and Evaluation (IOT&E) during January 2021. Following the IOT&E test event, HMS outlined specific actions required to resolve test findings from the IOT&E event. FY2023 and beyond RDT&E funding supports testing activities including laboratory technical testing, Performance Verification Tests (PVTs), and Operational User Assessments (OUAs). Each of these events provides both technical and operational user feedback on increased capabilities, future waveform incorporation, soldier usability, and life-cycle sustainment improvements. Handheld radios provide voice/data communication to the expeditionary Warfighter with an on-the-move, at-the-halt, and stationary Line of Sight (LOS)/Beyond Line of Sight (BLOS) capability for both dismounted personnel and platforms. Handheld radio systems are software reprogrammable, networkable, multi-mode systems capable of simultaneous voice and data communication. Handheld radios will support a variety of other platforms, including tactical End User Devices (EUD) voice and data needs. HMS provides tailorable and scalable, software-defined radio systems meeting U.S. Army, Air Force, Navy, Marine Corps, and Special Operations Command communications needs.

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023		
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Systems (Low-Tier)	Project (Number/Name) FA2 / Rifleman Radio (RR)		
FY2024 funds in the amount of \$1.460M support delta testing, Performance Verification Tests (PVTs), Operational User Assessments (OUAs), examination of modular and open system architectures to decrease future integration and waveform porting costs.				
The total cost of the Integrated Tactical Network (ITN) Middle Tier of Acquisition effort is \$76 million RDT&E from FY23 to FY28. The ITN MTA is fully funded across the Future Years Defense Program.				
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023	FY 2024
Title: Program Management		1.268	0.058	0.058
Description: Program management includes overall management of program execution, major events, reporting, funds execution, contract management, and logistical support. Includes participation in program planning and Integrated Product Team meetings.				
FY 2023 Plans: FY 2023 funds will provide overall management and oversight to implement HMS acquisition strategy - to include Matrix and Contractor support.				
FY 2024 Plans: FY 2024 funds will provide overall management and oversight to implement HMS acquisition strategy - to include Matrix and Contractor support.				
Title: HMS Engineering/Technical Support		1.725	0.917	1.019
Description: Overall technical analysis support to HMS Handheld products.				
FY 2023 Plans: FY 2023 funds will provide technical systems engineering support to evaluate technical alternatives and perform communication architecture analysis to identify alternatives to reduce cost, improve performance, and achieve tactical radio objectives. Funds will facilitate technical test support for candidate products utilized within ITN's iterative evaluation and capability implementation strategy to include LR.				
FY 2024 Plans: FY 2024 funds will provide technical systems engineering support to evaluate technical alternatives and perform communication architecture analysis to identify alternatives to reduce cost, improve performance, and achieve tactical radio objectives.				
FY 2023 to FY 2024 Increase/Decrease Statement: Budget increased from FY2023 to FY2024 as a result of changes in labor rates for projected Engineering/Technical Support.				
Title: Test and Evaluation		7.653	0.374	0.383

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army								Date: March 2023					
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Sys tems (Low-Tier)				Project (Number/Name) FA2 / Rifleman Radio (RR)					
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2022		FY 2023		FY 2024	
<p>Description: Handheld's Test and Evaluation focuses on the evaluation of key technical and operational characteristics of the system: Radio Frequency performance, security, Reliability, Availability & Maintainability, and survivability requirements, in addition to operational environmental performance requirements as per the Capability Production Document. All previous testing on the Leader Radio, served as risk reduction and Operational Test (OT) preparations in support of FRP. Results from the OT facilitated future procurement for Full Rate Production and informed required delta testing. HMS funding supports delta testing, Performance Verification Tests (PVTs), and Operational User Assessments (OUAs).</p> <p>FY 2023 Plans: FY 2023 Research Development Test & Evaluation (RDT&E) funding supports HMS delta testing, Performance Verification Tests (PVTs), Operational User Assessments (OUAs), examination of modular and open system architectures to decrease future integration and waveform porting costs.</p> <p>FY 2024 Plans: FY 2024 Research Development Test & Evaluation (RDT&E) funding supports HMS delta testing, Performance Verification Tests (PVTs), Operational User Assessments (OUAs), examination of modular and open system architectures to decrease future integration and waveform porting costs.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Budget increased from FY2023 to FY2024 as a result of changes in labor rates for projected Test and Evaluation support.</p>													
<p>Title: SBIR/STTR Transfer</p> <p>Description: Funding transferred in accordance with Title 15 USC §638</p> <p>FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638</p>								-		0.054		-	
Accomplishments/Planned Programs Subtotals								10.646		1.403		1.460	
C. Other Program Funding Summary (\$ in Millions)													
Line Item		FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost	
• FA1: Manpack Radio		17.042	3.023	2.858	-	2.858	2.921	1.976	6.961	6.983	0.000	41.764	

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023	
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Systems (Low-Tier)				Project (Number/Name) FA2 / Rifleman Radio (RR)			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
• B95004: Handheld Manpack Small Form Fit (HMS)	724.099	660.270	765.109	-	765.109	738.648	737.854	753.100	762.583	Continuing	Continuing
Remarks											
D. Acquisition Strategy											
<p>On 13 September 2016 the Army Acquisition Executive approved a decrease to the Basis of Issue (BOI) for the single channel RR, increase the BOI for the two channel LR and move forward with acquisition activities for the two channel LR. An acquisition strategy addendum adding LR was approved in March 2017. The addendum continued the multi-vendor approach utilizing the existing Indefinite Delivery Indefinite Quantity (IDIQ) RR base contract (awarded 29 April 2015) to on-ramp LR capabilities (18 September 2018). The LR effort is a separate competition under the Handheld radio suite. As laid out in the acquisition strategy, these candidate non-developmental radios will need to demonstrate through testing, compliance with program requirements; assess effectiveness, suitability, and survivability; to obtain material release for Full Rate Production (FRP).</p>											
<p>The LR will simultaneously run Single Channel Ground and Airborne Radio System (SINCGARS) and other advanced networking waveforms, in one radio with both handheld and mounted configurations, for fixed and mobile sites.</p>											
<p>In 2022, HMS began the process of conducting a re-compete of the existing LR IDIQ contract in support of an FY25 award. The re-compete will include upgrades to the base contract including specific sustainment requirements, updated quantity pricing schedules, and other lessons-learned from the previous IDIQ.</p>											
<p>In 2021, SCDR transitioned to the HMS program. SCDR utilizes an Other Transaction Authority (OTA) from an existing IDIQ.</p>											
<p>On 14 May 2019, the ITN gained approval from the Army Acquisition Executive to execute via the Middle Tier of Acquisition (MTA) Rapid Prototyping pathway. The ITN Rapid Prototyping MTA approach provides for the use of innovative technologies to rapidly develop fieldable prototypes to demonstrate new capabilities and meet emerging military needs. The ITN acquisition approach is based on integration of Commercial-Off-The-Shelf (COTS), Non-Developmental Item (NDI), and Government-Off-The-Shelf (GOTS) components. The accelerated schedule for the procurement of experimentation equipment was directed by the Army and driven by the ITN Directed Requirement (DR). Contract execution for ITN Non-POR equipment is being leveraged from existing indefinite delivery indefinite quantity (IDIQ) contracts.</p>											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Systems (Low-Tier)						Project (Number/Name) FA2 / Rifleman Radio (RR)			
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Project Management Office Support	Various	PEO C3T & CECOM : Various; APG, MD	3.031	1.268	Jan 2022	0.058	Apr 2023	0.058		-		0.058	0.000	4.415	Continuing
Subtotal			3.031	1.268		0.058		0.058		-		0.058	0.000	4.415	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
HMS Engineering/ Technical Support	Various	PEO C3T, ARL, C5ISR, & ATC : Various	7.567	1.725	Jan 2022	0.971	Apr 2023	1.019		-		1.019	0.000	11.282	-
Subtotal			7.567	1.725		0.971		1.019		-		1.019	0.000	11.282	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Follow on Delta Development & Testing	Various	EPG : Fort Huachuca	5.738	1.064	Jul 2022	0.374	Apr 2023	0.383		-		0.383	0.000	7.559	-
ITN Testing	Various	Various : TBD	17.310	6.589	Mar 2022	-		-		-		-	0.000	23.899	-
Subtotal			23.048	7.653		0.374		0.383		-		0.383	0.000	31.458	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			33.646	10.646		1.403		1.460		-		1.460	0.000	47.155	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Sys tems (Low-Tier)	Project (Number/Name) FA2 / Rifleman Radio (RR)	

Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
ITN CS23 Soldier Touch Point																												
ITN CS23 Prototyping & Testing																												
ITN CS23 Design Decision																												
Armored Brigade Combat Team (ABCT) Characterization																												
Performance Verification Test (PVT) FY22																												
Operational User Assessment (OUA) FY23																												
Performance Verification Test (PVT) FY23																												
Operational User Assessment (OUA) FY23 #2																												
Performance Verification Test (PVT) FY24																												
Operational User Assessment (OUA) FY24																												
Performance Verification Test (PVT) FY25																												
Operational User Assessment (OUA) FY25																												
Performance Verification Test (PVT) FY26																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army																Date: March 2023												
Appropriation/Budget Activity 2040 / 5										R-1 Program Element (Number/Name) PE 0605042A / Tactical Network Radio Systems (Low-Tier)								Project (Number/Name) FA2 / Rifleman Radio (RR)										
Event Name	FY 2022				FY 2023				FY 2024				FY 2025				FY 2026				FY 2027				FY 2028			
	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
Operational User Assessment (OUA) FY26																												
Performance Verification Test (PVT) FY27																												
Operational User Assessment (OUA) FY27																												
Performance Verification Test (PVT) FY28																												
Operational User Assessment (OUA) FY28																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605042A / <i>Tactical Network Radio Systems (Low-Tier)</i>	Project (Number/Name) FA2 / <i>Rifleman Radio (RR)</i>	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
ITN CS23 Soldier Touch Point	2	2022	2	2022
ITN CS23 Prototyping & Testing	2	2021	2	2022
ITN CS23 Design Decision	3	2022	3	2022
Armored Brigade Combat Team (ABCT) Characterization	3	2022	3	2022
Performance Verification Test (PVT) FY22	4	2022	4	2022
Operational User Assessment (OUA) FY23	1	2023	1	2023
Performance Verification Test (PVT) FY23	3	2023	3	2023
Operational User Assessment (OUA) FY23 #2	4	2023	4	2023
Performance Verification Test (PVT) FY24	3	2024	3	2024
Operational User Assessment (OUA) FY24	4	2024	4	2024
Performance Verification Test (PVT) FY25	3	2025	3	2025
Operational User Assessment (OUA) FY25	4	2025	4	2025
Performance Verification Test (PVT) FY26	3	2026	3	2026
Operational User Assessment (OUA) FY26	4	2026	4	2026
Performance Verification Test (PVT) FY27	3	2027	3	2027
Operational User Assessment (OUA) FY27	4	2027	4	2027
Performance Verification Test (PVT) FY28	3	2028	3	2028
Operational User Assessment (OUA) FY28	4	2028	4	2028

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army	Date: March 2023
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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 0605047A / <i>Contract Writing System</i>							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	0.000	20.195	13.742	16.355	0.000	16.355	0.000	0.000	0.000	0.000	Continuing	Continuing
FA7: <i>Contract Writing System</i>	-	20.195	13.742	16.355	-	16.355	-	-	-	-	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Army Contract Writing System (ACWS) will be the Army's next-generation, enterprise-wide contract writing, management, execution, and close-out software system. ACWS will facilitate the standardization of Army Procurement business processes and streamline the integration with Army Enterprise Resource Planning (ERP) systems. As a financial feeder system, ACWS will meet the full scope of Army contracting requirements, including those in secure and non-secure locations, those supporting combat or noncombat contingencies, those within or outside the borders of the Continental United States, those supporting grants and assistance agreements, and those performing weapons systems, construction, installation, other specialized contracting activities, and the Federal Financial Management Improvement Act of 1996.

Army pivoted to a Portfolio Approach that leverages existing Appian-based contract writing technology, maximizes share-ability and reuse across the DoD which minimizes the development effort, and includes iterative design, development and testing for the remaining Army-unique capability. The development portion of the approach includes on boarding USDA resources to act as the system integrator (SI) and leveraging Interagency Agreements (IAA). The existing capabilities that the Army intends to leverage include Virtual Contracting Enterprise (VCE), functionality within the Procurement Integrated Enterprise Environment (PIEE), System for Award Management (SAM), and other existing Robotic Process Automation (RPA) programs. The Army will also leverage the PIEE for ACWS hosting, with other DoD Service contract writing systems.

In FY2024 the program will continue ramping up resources to develop installation contracting capability for sites supporting General Funds Enterprise Business System (GFEBS) customers, non-FAR functionality (Grants, Cooperative Agreements, and Other Transaction Authority (OTAs)) and construction contracting capability. This effort is enabled by the development on the GFEBS interface and the Corps of Engineers Financial Management System (CEFMS) interface. This capability is necessary to displace the Standard Procurement System (SPS) and the Procurement Automated Data and Document System (PADDS).

FY2023 RDTE funding supports accreditation of the software and hosting environment, release of a Minimum Viable Product (MVP) which provides users current Contracting Information Technology capability (CON-IT) that enables the user to generate a solicitation, award, and modify documents in Uniform Contract Format (UCF). Initial deployment includes a sub-set of users from the National Guard Bureau and 411th Contracting Support Brigade. This funding also supports on-board of USDA resources and development of capabilities aligned to FY2023.

FY2024 RDTE Funding supports development of required functionality for contract administration and contract award, systems integration with CEFMS, Resident Management System (RMS), Logistics Modernization Program (LMP) and audit compliance. The system will add additional capability for complex weapons system contracting. This development is required to expand system use to remaining National Guard Users and Joint Base Activities, Corps of Engineers, Army Contracting Centers, as well as Depot users in FY2025. This funding also supports the implementation of a Continuous Integration Continuous Delivery (CI/CD) pipeline with automated testing capability.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army				Date: March 2023		
Appropriation/Budget Activity 2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)		R-1 Program Element (Number/Name) PE 0605047A / Contract Writing System				
B. Program Change Summary (\$ in Millions)		FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget		20.960	23.487	0.000	-	0.000
Current President's Budget		20.195	13.742	16.355	-	16.355
Total Adjustments		-0.765	-9.745	16.355	-	16.355
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-9.745			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-0.765	-			
• SBIR/STTR Transfer		-	-			
• Adjustments to Budget Years		-	-	16.355	-	16.355
Change Summary Explanation						
FY2022 RDTE of \$7.162M rescinded as part of the FY2023 Appropriation language and not available for execution.						
In FY2024 the program will continue ramping up resources to develop installation contracting capability for sites supporting General Funds Enterprise Business System (GFEBS) customers, non-FAR functionality (Grants, Coopertive Agreements, and Other Transaction Authority (OTAs)) and construction contracting capability. This effort is enabled by the development on the GFEBS interface and the Corps of Engineers Financial Management System (CEFMS) interface. This capability is necessary to displace the Standard Procurement System (SPS) and the Procurement Automated Data and Document System (PADDS).						

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605047A / Contract Writing System				Project (Number/Name) FA7 / Contract Writing System			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
FA7: Contract Writing System	-	20.195	13.742	16.355	-	16.355	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Army Contract Writing System (ACWS) will be the Army's next-generation, enterprise-wide contract writing, management, execution, and close-out software system. ACWS will facilitate the standardization of Army Procurement business processes and streamline the integration with Army Enterprise Resource Planning (ERP) systems. As a financial feeder system, ACWS will meet the full scope of Army contracting requirements, including those in secure and non-secure locations, those supporting combat or noncombat contingencies, those within or outside the borders of the Continental United States, those supporting grants and assistance agreements, and those performing weapons systems, construction, installation, other specialized contracting activities, and the Federal Financial Management Improvement Act of 1996.

Army pivoted to a Portfolio Approach that leverages existing Appian-based contract writing technology, maximizes share-ability and reuse across the DoD which minimizes the development effort, and includes iterative design, development and testing for the remaining Army-unique capability. The development portion of the approach includes on boarding USDA resources to act as the system integrator (SI) and leveraging Interagency Agreements (IAA). The existing capabilities that the Army intends to leverage include Virtual Contracting Enterprise (VCE), functionality within the Procurement Integrated Enterprise Environment (PIEE), System for Award Management (SAM), and other existing Robotic Process Automation (RPA) programs. The Army will also leverage the PIEE for ACWS hosting, with other DoD Service contract writing systems.

In FY2024 the program will continue ramping up resources to develop installation contracting capability for sites supporting General Funds Enterprise Business System (GFEBS) customers, non-FAR functionality (Grants, Cooperative Agreements, and Other Transaction Authority (OTAs)) and construction contracting capability. This effort is enabled by the development on the GFEBS interface utilizing the Global Exchange (GEX) and the Corps of Engineers Financial Management System (CEFMS) interface. This capability is necessary to displace the Standard Procurement System (SPS) and the Procurement Automated Data and Document System (PADDS).

FY2024 RDTE Funding supports development of required functionality for contract administration and contract award, systems integration with CEFMS, Resident Management System (RMS), Logistics Modernization Program (LMP) and audit compliance. The system will add additional capability for complex weapons system contracting. This development is required to expand system use to remaining National Guard Users and Joint Base Activities, Corps of Engineers, Army Contracting Centers, as well as Depot users in FY2025. This funding also supports the implementation of a Continuous Integration Continuous Delivery (CI/CD) pipeline with automated testing capability.

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

	FY 2022	FY 2023	FY 2024
Title: Program Office	3.203	2.732	2.660

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605047A / <i>Contract Writing System</i>		Project (Number/Name) FA7 / <i>Contract Writing System</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2022	FY 2023	FY 2024
<p>Description: These resources in the ACWS Program Management Office include Government, matrixed, and SETA contractor support for capability development, enterprise architecture, contract management, management analysis, capital/ financial planning, life cycle planning, risk management, and schedule management.</p> <p>For FY2023, Program Office also includes SIBR \$0.523M funding transferred in accordance with Title 15 U.S. Code 638. SIBR value represents a percentage of the program's funding for that fiscal year.</p> <p>FY 2023 Plans: Program management support in the ACWS Government Program Management Office includes contractor support, CECOM, and DASA(P) efforts for resource planning, capability development, life cycle planning, risk management, schedule management, and facilities. FY2023 will continue to focus on planning and execution of the solution implementation.</p> <p>FY 2024 Plans: FY2024 funding for program management support in the ACWS Government Program Management Office includes contractor support, and CECOM for resource planning, capability development, life cycle planning, risk management, schedule management, and facilities. FY2024 will continue to focus on planning and execution of the solution implementation.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Funding decrease in FY2024 from FY2023 is a reflection of shifting functions to the appropriate areas of product development, including functions for audit support and system integrator management staff.</p>					
<p>Title: Product Development</p> <p>Description: Product development is responsible for design and development of the solution for Army contract writing. This cross-functional team of Government and contractor staff analyzes and designs the requirements to efficiently ensure completeness in satisfying system requirements and in accordance with Army standards. Efforts required by system interface partners, hosting infrastructure and managed services are also included as a requirement of the solution for Army contract writing.</p> <p>FY 2023 Plans: FY2023 RDTE funding supports accreditation of the software and hosting environment, release of a Minimum Viable Product (MVP) which provides users current Contracting Information Technology capability (CON-IT) that enables the user to generate a solicitation, award, and modify documents in Uniform Contract Format (UCF).</p> <p>FY 2024 Plans: FY2024 RDTE funding builds required functionality leveraging the IAA with USDA, including grants and agreements capabilities, continues on-board of USDA resources, furthers construction contracting, financial system integration and standards, contract administration and contract award, systems integration with CEFMS, Resident Management System (RMS), Logistics</p>			11.120	8.527	11.937

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605047A / <i>Contract Writing System</i>	Project (Number/Name) FA7 / <i>Contract Writing System</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<p>Modernization Program (LMP) and audit compliance. The system will add additional capability for complex weapons system contracting. This area also includes functional support for business process re-engineering and resources to support agile software development.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: Increase in FY2024 funding reflects development of required functionality in an incremental fashion and implementation of a Continuous Integration Continuous Development (CI/CD) pipeline.</p>			
<p>Title: Security</p> <p>Description: Security related costs include Information Assurance (IA)/ Risk Management Framework (RMF) activities, and cyber security support for the Cloud Solution Provider's government approved hosting environment complementing the Interim Authorization to Test (IATT) and Authority to Operate (ATO) controls.</p> <p>FY 2023 Plans: FY2023 funding supports the development and completion of controls associated with accreditation and cyber security regulations for the new strategy,</p> <p>FY 2024 Plans: FY2024 funding supports the maintenance of the accreditation and compliance with cyber security regulations for the new strategy.</p> <p>FY 2023 to FY 2024 Increase/Decrease Statement: FY2023 to FY2024 decrease reflects economies of scale gained from a shared hosting environment with the Defense Logistics Agency (DLA).</p>		2.450	0.892
<p>Title: Test & Evaluation</p> <p>Description: Costs associated with the test and evaluation function to validate and inspect capability requirements ensuring they are satisfactorily addressed through design analysis and development of test scripts. This funding also supports the implementation of a CI/CD pipeline with automated testing capability.</p> <p>FY 2023 Plans: FY2023 resources support the planning and test of the new solution through Army partners, including interface partners, ATEC, JITC, and other users from the field.</p> <p>FY 2024 Plans:</p>		3.422	1.089
			0.264
			1.494

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5				R-1 Program Element (Number/Name) PE 0605047A / Contract Writing System				Project (Number/Name) FA7 / Contract Writing System				
B. Accomplishments/Planned Programs (\$ in Millions)										FY 2022	FY 2023	FY 2024
FY2024 resources supports continuous testing and deployment of the new solution, including facilitating operational assessments in coordination with field users. This funding also supports the implementation of a CI/CD pipeline with automated testing capability.												
FY 2023 to FY 2024 Increase/Decrease Statement: Funding increase in FY2024 from FY2023 is a reflection of shifting from a waterfall methodology leveraging independent test agencies to an agile development framework using product owners for functional acceptance.												
Title: SBIR/STTR										-	0.502	-
Description: Funding transferred in accordance with Title 15 USC §638												
FY 2023 Plans: Funding transferred in accordance with Title 15 USC §638												
FY 2023 to FY 2024 Increase/Decrease Statement: Funding transferred in accordance with Title 15 USC §638												
Accomplishments/Planned Programs Subtotals										20.195	13.742	16.355
C. Other Program Funding Summary (\$ in Millions)												
Line Item	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost	
• B66001: Contract Writing System	14.957	4.075	6.061	-	6.061	14.226	9.858	10.064	10.274	0.000	69.515	
• OMA - ERPB / 423612000 / 5T0: ACWS Sustainment OMA	12.826	6.602	11.426	-	11.426	9.134	9.472	10.250	10.250	0.000	69.960	
Remarks												
FY2022 OPA of \$12.626M rescinded as part of the FY23 Appropriation language and not available for execution.												
FY2024 OPA funds support training material development, dedicated training support personnel, and software licenses.												
FY2024 OMA funds will be used for sustainment of sites that have already been deployed, license maintenance, hosting, sustainment, cyber security posture activities, and service desk activities.												
D. Acquisition Strategy												
Based on Army Senior leadership direction, the Army pivoted to a Portfolio Approach that leverages existing technologies, maximizes share-ability and reuse across the DoD, and includes iterative design, development and testing for the remaining capability required for Army users. The overall approach includes on boarding USDA resources to act as the system integrator (SI), leveraging an Interagency Agreement (IAA) and using existing capabilities across DoD in order to minimize the												

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605047A / <i>Contract Writing System</i>	Project (Number/Name) FA7 / <i>Contract Writing System</i>
<p>development effort. These capabilities include use of functionality within Virtual Contracting Enterprise (VCE), Procurement Integrated Enterprise Environment (PIEE), System for Award Management (SAM), and other existing Robotic Process Automation (RPA) programs for an integrated system to begin decommissioning of SPS and PADDs and enables contracting business intelligence analysis.</p> <p>The Army is collaborating with the United States Department of Agriculture's (USDA) Enterprise Application Services using Interagency Agreements (IAAs) to support development and delivery. The program has transitioned to the Scaled Agile development Framework (SAFe) and conducted a discovery (risk reduction) effort in 2022, which informed development and resource requirements. The pivot implements Continuous Integration Continuous Delivery (CI/CD) to support iterative development, testing and deployment to provide a flexible system responsive to warfighter needs.</p> <p>In FY2022, the program refined its acquisition plan following the risk reduction to include epic development based on existing requirements, program staff training and realignment for agile execution, establishment of a schedule for incremental delivery, training and deployment, user license procurement, and cloud infrastructure selection and stand-up.</p> <p>In FY2023, the Army established an IAA with Defense Logistics Agency (DLA) to deliver an Army instance of ACWS software in the PIEE which supported efficiencies for cloud hosting, accreditation, and Identity Credential Access Management (ICAM) requirements. Additionally, the program procured an Appian core contract writing license to support developer and user access. The Army will establish a separate IAA with USDA to support long term sustainment.</p> <p>The ACWS program is executing two parallel activities: (1) deploying current Contracting-Information Technology (CON-IT) capability to support a MVP release in FY2023 and (2) using the current CON-IT capability as a technical baseline executing agile development of Army unique capability targeted for delivery in FY2024.</p> <p>In FY2024, the program will continue development of required functionality for contract administration and contract award, systems integration with CEFMS, Resident Management System (RMS), Logistics Modernization Program (LMP) and audit compliance. The system will add additional capability for complex weapons system contracting. This development is required to expand system use to remaining National Guard Users and Joint Base Activities, Corps of Engineers, Army Contracting Centers, as well as Depot users in FY2025. The program intends to implement a CI/CD pipeline with automated testing capability.</p>		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army													Date: March 2023		
Appropriation/Budget Activity 2040 / 5						R-1 Program Element (Number/Name) PE 0605047A / Contract Writing System				Project (Number/Name) FA7 / Contract Writing System					
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Program Office	Various	PdM ACWS : Arlington, VA	31.464	3.203	Oct 2021	2.732	Oct 2023	2.660		-		2.660	0.000	40.059	-
SBIR/STTR	TBD	Various : Various	-	-		0.502		-		-		-	0.000	0.502	-
Subtotal			31.464	3.203		3.234		2.660		-		2.660	0.000	40.561	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Product Development	Various	PdM ACWS : Arlington, VA	77.426	11.120	Oct 2021	8.527	Oct 2023	11.937		-		11.937	0.000	109.010	-
Subtotal			77.426	11.120		8.527		11.937		-		11.937	0.000	109.010	N/A
Support (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Security	MIPR	PdM ACWS : Arlington, VA	4.966	2.450	Oct 2021	0.892	May 2023	0.264		-		0.264	0.000	8.572	-
Subtotal			4.966	2.450		0.892		0.264		-		0.264	0.000	8.572	N/A
Test and Evaluation (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
Test and Evaluation	MIPR	ATEC & JTIC & PdM ACWS : Arlington, VA	4.331	3.422	Oct 2021	1.089	Aug 2023	1.494		-		1.494	0.000	10.336	-
Subtotal			4.331	3.422		1.089		1.494		-		1.494	0.000	10.336	N/A

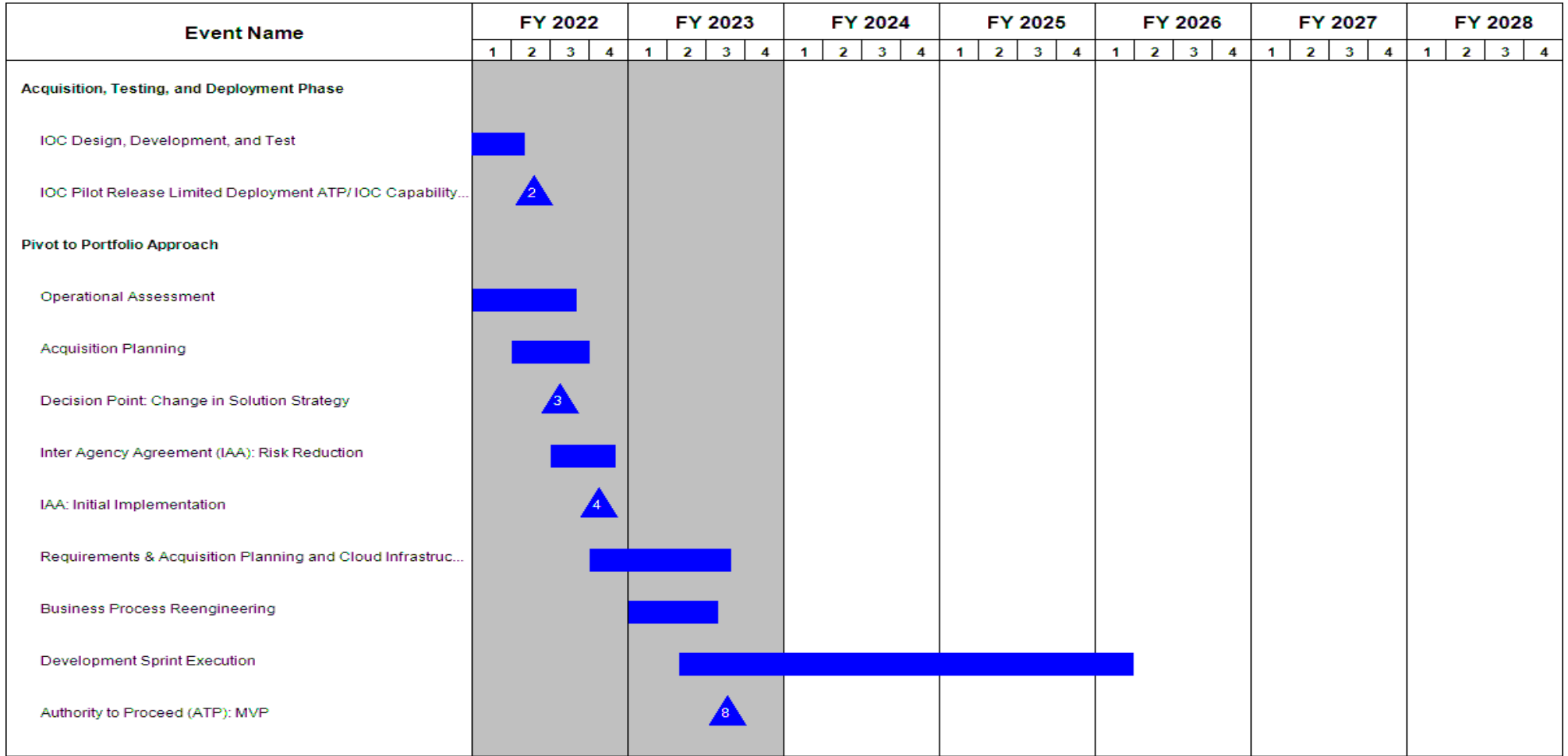
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army											Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605047A / Contract Writing System					Project (Number/Name) FA7 / Contract Writing System			
	Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	118.187	20.195		13.742		16.355		-		16.355	0.000	168.479	N/A

Remarks

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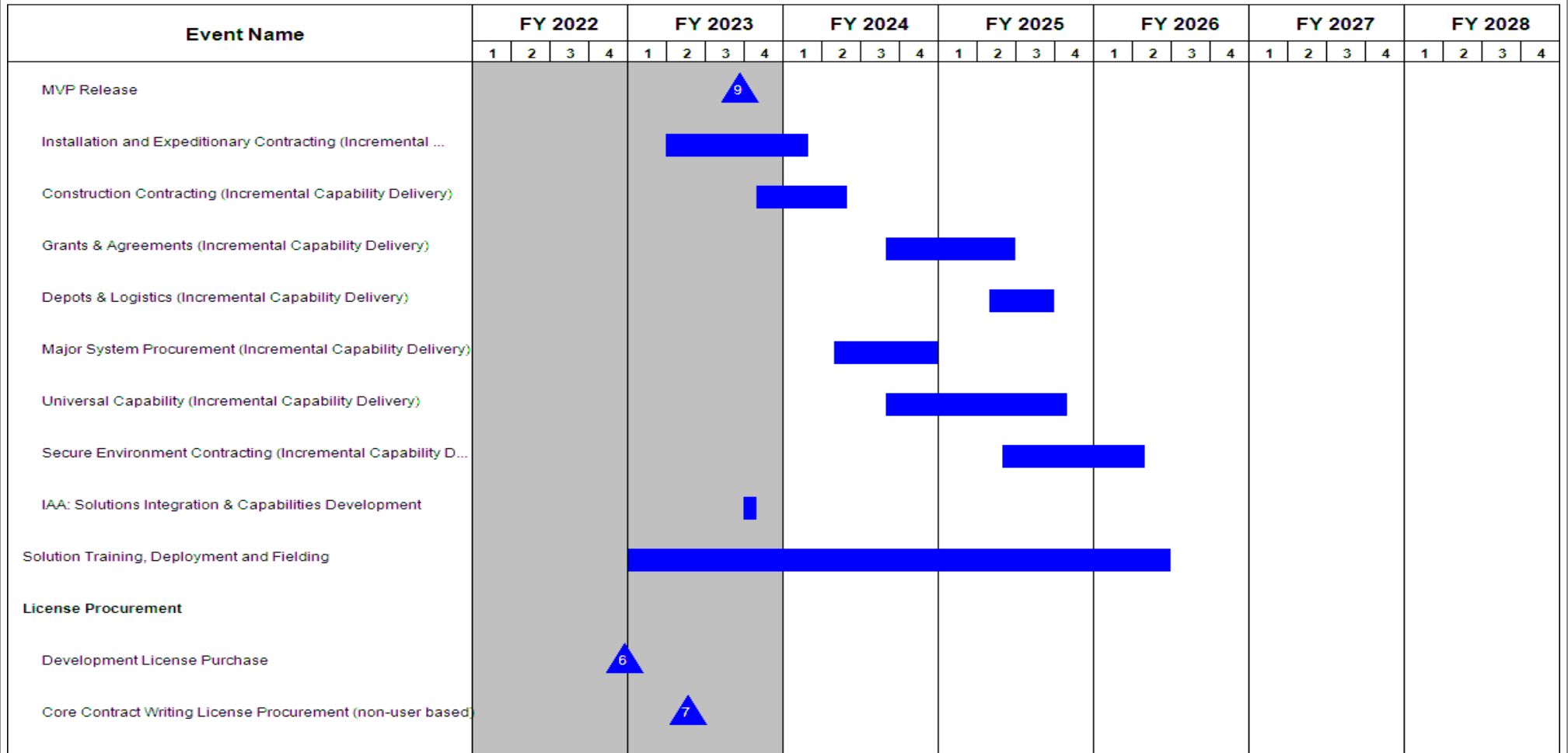
Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army			Date: March 2023		
Appropriation/Budget Activity 2040 / 5		R-1 Program Element (Number/Name) PE 0605047A / Contract Writing System		Project (Number/Name) FA7 / Contract Writing System	



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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army	Date: March 2023
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Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605047A / <i>Contract Writing System</i>	Project (Number/Name) FA7 / <i>Contract Writing System</i>
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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

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2040 / 5

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PE 0605047A / Contract Writing System

Project (Number/Name)	Start Date	End Date	Duration (Days)	Progress (%)	Status	Owner	Team Lead	Team Members	Notes
101	2023-01-01	2023-01-15	14	100	Completed	John Doe	Jane Smith	Mike Johnson	Project completed ahead of schedule.
102	2023-01-15	2023-02-01	16	75	In Progress	Jane Smith	John Doe	Alice Brown	Minor delays due to resource allocation.
103	2023-02-01	2023-02-15	14	20	On Hold	John Doe	John Doe	Bob White	Project paused until further notice.
104	2023-02-15	2023-03-01	15	50	In Progress	Jane Smith	Jane Smith	Charlie Green	Progressing well, on track for completion.
105	2023-03-01	2023-03-15	14	0	Not Started	John Doe	John Doe	Diana Prince	Project initiated, pending approval.

FA7 / Contract Writing System

[illegible]

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army

Date: March 2023

Appropriation/Budget Activity

2040 / 5

R-1 Program Element (Number/Name)

PE 0605047A / Contract Writing System

Project (Number/Name)

FA7 / Contract Writing System

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
RFP Release ADM (Material Solution Analysis Phase)	3	2016	3	2016
ATP-1 (MS A) / Contract Award - Task Order 0001	3	2017	3	2017
Risk Reduction Activities	3	2017	4	2018
Acquisition, Testing, and Deployment Phase	3	2016	3	2023
IOC Design, Development, and Test	4	2018	2	2022
Baseline ATP / Contract Award - MVS/IOC Release Task Order	4	2018	4	2018
MVS Pilot Release Limited Deployment ATP	1	2021	1	2021
MVS/IOC User Acceptance Testing (UAT) Events Complete	4	2020	4	2020
IOC Pilot Release Limited Deployment ATP/ IOC Capability Evaluation	2	2022	2	2022
Pivot to Portfolio Approach	2	2022	2	2022
Operational Assessment	1	2022	3	2022
Acquisition Planning	2	2022	3	2022
Decision Point: Change in Solution Strategy	3	2022	3	2022
Inter Agency Agreement (IAA): Risk Reduction	3	2022	4	2022
IAA: Initial Implementation	4	2022	4	2022
Requirements & Acquisition Planning and Cloud Infrastructure Development	4	2022	3	2023
Business Process Reengineering	1	2023	3	2023
Development Sprint Execution	2	2023	1	2026
Authority to Proceed (ATP): MVP	3	2023	3	2023
MVP Release	3	2023	3	2023
Installation and Expeditionary Contracting (Incremental Capability Delivery)	2	2023	1	2024
Construction Contracting (Incremental Capability Delivery)	4	2023	2	2024
Grants & Agreements (Incremental Capability Delivery)	3	2024	2	2025

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605047A / Contract Writing System		Project (Number/Name) FA7 / Contract Writing System	
	Start		End	
Events	Quarter	Year	Quarter	Year
Depots & Logistics (Incremental Capability Delivery)	2	2025	3	2025
Major System Procurement (Incremental Capability Delivery)	2	2024	4	2024
Universal Capability (Incremental Capability Delivery)	3	2024	4	2025
Secure Environment Contracting (Incremental Capability Delivery)	2	2025	2	2026
IAA: Solutions Integration & Capabilities Development	4	2023	4	2023
Solution Training, Deployment and Fielding	1	2023	2	2026
License Procurement	4	2022	4	2022
Development License Purchase	4	2022	4	2022
Core Contract Writing License Procurement (non-user based)	2	2023	2	2023
Core Contract Writing License	2	2023	2	2027
Continuous Integration / Continuous Deployment (CI/CD) Pipeline Execution	3	2023	2	2032

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)					PE 0605049A I Missile Warning System Modernization (MWSM)							
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
Total Program Element	0.000	0.000	0.000	27.571	0.000	27.571	0.000	0.000	0.000	0.000	0.000	27.571
XT4: Advanced Threat Detection System (ATDS)	-	-	-	27.571	-	27.571	-	-	-	-	0.000	27.571

Note

Advanced Threat Detection System (ATDS) is a new start within the Missile Warning System Modernization program in FY 2024.

A. Mission Description and Budget Item Justification

The Missile Warning System Modernization (MWSM) budget line includes funding to support the development and integration of improved Aircraft Survivability Equipment (ASE) products onto current US Army Aviation platforms as well as Future Vertical Lift (FVL) Future Attack Reconnaissance Aircraft (FARA) and Future Long Range Assault Aircraft (FLRAA) and future platforms.

On 14 March 2022 a Material Development Decision (MDD) request for the Improved Threat Detection System (ITDS) was issued by the Deputy Chief of Staff of the Army (DCS), G-8. ITDS is a new start in FY2024, and will provide the capability to detect, classify, cue, and declare on existing and emerging Electro-Optical/Infra-red (EO/IR) guided Man Portable Air Defense Systems (MANPADS), Rocket Propelled Grenades (RPG)/unguided rockets, Anti-Tank Guided Missiles (ATGM), Ballistic, and Lasers. ITDS will provide a cue, based on the threat classification, to the appropriate countermeasure system (Directable Infrared Countermeasure and/or expendable countermeasure). ITDS will improve the expendable countermeasure system.

Justification:

FY2024 BASE RDTE dollars in the amount of \$27.571 million will fund pathway initiation and oversee a robust development effort including program management, technical oversight for an ITDS milestone decision, and execution of contract(s) to initiate Product Development.

Funding was placed on the ATDS funding line because none currently exists for ITDS. A new funding line is expected to be created for ITDS.

References:

- Rescission of Advanced Threat Detection System Request for Materiel Development Decision, DCS, G-8, 17 December 2018.
- MDD Request for the ITDS Program of Record, Aviation Capability Development and Integration Directorate (Aviation CDID), 6 July 2021.
- MDD Request for the ITDS Program of Record, DCS, G-8, 14 March 2022.
- Assignment of an Army Office of Primary Responsibility (OPR) for the ITDS Capability, Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA(ALT)), 18 April 2022.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2024 Army				Date: March 2023	
Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
2040: Research, Development, Test & Evaluation, Army / BA 5: System Development & Demonstration (SDD)		PE 0605049A / Missile Warning System Modernization (MWSM)			
B. Program Change Summary (\$ in Millions)	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	0.000	0.000	27.571	-	27.571
Total Adjustments	0.000	0.000	27.571	-	27.571
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Adjustments to Budget Years	-	-	27.571	-	27.571
Change Summary Explanation					
Addition of FY2024 funds for initiation of the ITDS program.					

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army										Date: March 2023		
Appropriation/Budget Activity 2040 / 5					R-1 Program Element (Number/Name) PE 0605049A / Missile Warning System Modernization (MWSM)				Project (Number/Name) XT4 / Advanced Threat Detection System (ATDS)			
COST (\$ in Millions)	Prior Years	FY 2022	FY 2023	FY 2024 Base	FY 2024 OCO	FY 2024 Total	FY 2025	FY 2026	FY 2027	FY 2028	Cost To Complete	Total Cost
XT4: Advanced Threat Detection System (ATDS)	-	-	-	27.571	-	27.571	-	-	-	-	0.000	27.571
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note Advanced Threat Detection System (ATDS) is a new start within the Missile Warning System Modernization (MWSM) program in FY 2024.												
A. Mission Description and Budget Item Justification The Missile Warning System Modernization (MWSM) budget line includes funding to support the development and integration of improved Aircraft Survivability Equipment (ASE) products onto current US Army Aviation platforms as well as Future Vertical Lift (FVL) Future Attack Reconnaissance Aircraft (FARA) and Future Long Range Assault Aircraft (FLRAA) and future platforms. On 14 March 2022 a Material Development Decision (MDD) request for the Improved Threat Detection System (ITDS) was issued by the Deputy Chief of Staff of the Army (DCS), G-8. ITDS is a new start in FY2024, and will provide the capability to detect, classify, cue, and declare on existing and emerging Electro-Optical/Infra-red (EO/IR) guided Man Portable Air Defense Systems (MANPADS), Rocket Propelled Grenades (RPG)/unguided rockets, Anti-Tank Guided Missiles (ATGM), Ballistic, and Lasers. ITDS will provide a cue, based on the threat classification, to the appropriate countermeasure system (Directable Infrared Countermeasure and/or expendable countermeasure). ITDS will improve the expendable countermeasure system. Justification: FY2024 BASE RDTE dollars in the amount of \$27.571 million will fund pathway initiation and oversee a robust development effort including program management, technical oversight for an ITDS milestone decision, and execution of contract(s) to initiate Product Development. Funding was placed on the ATDS funding line because none currently exists for ITDS. A new funding line is expected to be created for ITDS. References: -Rescission of Advanced Threat Detection System Request for Materiel Development Decision, DCS, G-8, 17 December 2018. -MDD Request for the ITDS Program of Record, Aviation Capability Development and Integration Directorate (Aviation CDID), 6 July 2021. -MDD Request for the ITDS Program of Record, DCS, G-8, 14 March 2022. -Assignment of an Army Office of Primary Responsibility (OPR) for the ITDS Capability, Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA(ALT)), 18 April 2022.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2022	FY 2023	FY 2024	
Title: ITDS Product Development and Management Services									-	-	27.571	

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Exhibit R-2A, RDT&E Project Justification: PB 2024 Army		Date: March 2023	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605049A / <i>Missile Warning System M odernization (MWSM)</i>	Project (Number/Name) XT4 / <i>Advanced Threat Detection System (ATDS)</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2022	FY 2023
<i>FY 2024 Plans:</i> FY2024 BASE RDTE dollars in the amount of \$27.571 million will fund program management and technical oversight for an ITDS milestone decision and execution of contract/s to initiate Product Development.			
<i>FY 2023 to FY 2024 Increase/Decrease Statement:</i> Addition of FY2024 funds for initiation of the ITDS program. Advanced Threat Detection System (ATDS) is a new start within the Missile Warning System Modernization program in FY 2024.			
Accomplishments/Planned Programs Subtotals		-	-
C. Other Program Funding Summary (\$ in Millions) N/A Remarks D. Acquisition Strategy Subsequent to Aviation CDID issuance of the MDD Request for the ITDS Program of Record, the Program Manager, Aircraft Survivability Equipment (PM ASE) submitted initial requirements for the FY2024-2028 Program Objective Memorandum (POM) period. PM ASE is currently following the ASA(ALT) directed Acquisition Shaping Panel (ASP) process in preparation for the ITDS MDD. The results of the ASP and MDD will direct the formal acquisition and contracting strategies for ITDS. The Aviation Enablers-Requirements Determination Division at the US Army Aviation Center of Excellence is developing a draft of the ITDS Capabilities Development Document (CDD) to support future milestone decisions.			

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2024 Army												Date: March 2023			
Appropriation/Budget Activity						R-1 Program Element (Number/Name)					Project (Number/Name)				
2040 / 5						PE 0605049A / Missile Warning System Modernization (MWSM)					XT4 / Advanced Threat Detection System (ATDS)				
Management Services (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
ITDS SEPM	TBD	Various : Various	-	-		-		14.647		-		14.647	0.000	14.647	Continuing
Subtotal			-	-		-		14.647		-		14.647	0.000	14.647	N/A
Product Development (\$ in Millions)				FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 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
ITDS Development Engineering	TBD	PM ASE : HSV, AL	-	-		-		12.924		-		12.924	0.000	12.924	Continuing
Subtotal			-	-		-		12.924		-		12.924	0.000	12.924	N/A
			Prior Years	FY 2022		FY 2023		FY 2024 Base		FY 2024 OCO		FY 2024 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	-		-		27.571		-		27.571	0.000	27.571	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2024 Army

Date: March 2023

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R-1 Program Element (Number/Name)

PE 0605049A / Missile Warning System M
odernization (MWSM)

Project (Number/Name)	Start Date	End Date	Duration (Days)	Actual Cost	Budgeted Cost	Variance	Performance Index (CPI)	Performance Index (SPI)
101	2023-01-01	2023-01-15	15	10000	10000	0	1.0	1.0
102	2023-01-16	2023-01-31	15	12000	10000	2000	0.8	0.9
103	2023-02-01	2023-02-15	15	8000	10000	-2000	1.2	1.1
104	2023-02-16	2023-02-28	13	15000	10000	5000	0.7	0.8
105	2023-03-01	2023-03-15	15	9000	10000	-1000	1.1	1.0
106	2023-03-16	2023-03-31	15	11000	10000	1000	0.9	0.9
107	2023-04-01	2023-04-15	15	7000	10000	-3000	1.3	1.2
108	2023-04-16	2023-04-30	15	13000	10000	3000	0.8	0.8
109	2023-05-01	2023-05-15	15	6000	10000	-4000	1.4	1.3
110	2023-05-16	2023-05-31	15	14000	10000	4000	0.7	0.7
111	2023-06-01	2023-06-15	15	5000	10000	-5000	1.5	1.4
112	2023-06-16	2023-06-30	15	16000	10000	6000	0.6	0.6
113	2023-07-01	2023-07-15	15	4000	10000	-6000	1.6	1.5
114	2023-07-16	2023-07-31	15	17000	10000	7000	0.5	0.5
115	2023-08-01	2023-08-15	15	3000	10000	-7000	1.7	1.6
116	2023-08-16	2023-08-31	15	18000	10000	8000	0.4	0.4
117	2023-09-01	2023-09-15	15	2000	10000	-8000	1.8	1.7
118	2023-09-16	2023-09-30	15	19000	10000	9000	0.3	0.3
119	2023-10-01	2023-10-15	15	1000	10000	-9000	1.9	1.8
120	2023-10-16	2023-10-31	15	20000	10000	10000	0.2	0.2
121	2023-11-01	2023-11-15	15	500	10000	-9500	2.0	1.9
122	2023-11-16	2023-11-30	15	21000	10000	11000	0.1	0.1
123	2023-12-01	2023-12-15	15	0	10000	-10000	2.1	2.0
124	2023-12-16	2023-12-31	15	22000	10000	12000	0.0	0.0
125	2024-01-01	2024-01-15	15	0	10000	-10000	2.2	2.1
126	2024-01-16	2024-01-31	15	23000	10000	13000	-0.1	-0.1
127	2024-02-01	2024-02-15	15	0	10000	-10000	2.3	2.2
128	2024-02-16	2024-02-28	13	24000	10000	14000	-0.2	-0.2
129	2024-03-01	2024-03-15	15	0	10000	-10000	2.4	2.3
130	2024-03-16	2024-03-31	15	25000	10000	15000	-0.3	-0.3
131	2024-04-01	2024-04-15	15	0	10000	-10000	2.5	2.4
132	2024-04-16	2024-04-30	15	26000	10000	16000	-0.4	-0.4
133	2024-05-01	2024-05-15	15	0	10000	-10000	2.6	2.5
134	2024-05-16	2024-05-31	15	27000	10000	17000	-0.5	-0.5
135	2024-06-01	2024-06-15	15	0	10000	-10000	2.7	2.6
136	2024-06-16	2024-06-30	15	28000	10000	18000	-0.6	-0.6
137	2024-07-01	2024-07-15	15	0	10000	-10000	2.8	2.7
138	2024-07-16	2024-07-31	15	29000	10000	19000	-0.7	-0.7

XT4 / Advanced Threat Detection System (ATDS)

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Exhibit R-4A, RDT&E Schedule Details: PB 2024 Army			Date: March 2023
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0605049A / Missile Warning System M odernization (MWSM)	Project (Number/Name) XT4 / Advanced Threat Detection System (ATDS)	

Schedule Details

Events	Start		End	
	Quarter	Year	Quarter	Year
PEO Acquisition Decision Memorandum (ADM)	1	2019	1	2019
Enhanced Market Research	2	2019	2	2020
Enhanced Market Research Report	2	2020	2	2020
ITDS MDD	1	2024	1	2024
ITDS Development Engineering	2	2024	4	2028