Fiscal Year 2024 Budget Estimates Defense Threat Reduction Agency Cyber



March 2023

Operation and Maintenance, Defense-Wide Summary (\$ in thousands) Budget Activity (BA) 1: Operating Forces/Combat Development Activities

	FY 2022	Price	Program	FY 2023	Price	Program	FY 2024
	<u>Actuals</u>	<u>Change</u>	<u>Change</u>	Enacted	<u>Change</u>	<u>Change</u>	<u>Estimate</u>
DTRA Cyber	37,208	840	18,004	56,052	1,337	13,159	70,548

I. <u>Description of Operations Financed:</u>

The United States faces a highly competitive security environment characterized by diverse and dynamic weapons of mass destruction (WMD) risks across multiple domains. Moreover, the complexity of state-based chemical, biological, radiological, and nuclear (CBRN) threats is increasing, compounded by advanced and emerging technologies that can provide adversary WMD programs greater speed, lethality, flexibility, accessibility, and deniability. Revisionist powers, primarily China and Russia, seek to degrade international norms while expanding and modernizing their nuclear forces, diversifying advanced conventional systems, and developing CBRN capabilities designed to exploit U.S. and allied vulnerabilities—including in the gray zone short of direct military conflict. While the threat posed by Russia is acute, China—with its rapid strategic military expansion across the CBRN spectrum, integrative approach to advanced technical capabilities, and aggressive regional posture—remains the pacing challenge. Simultaneously, Iran and North Korea are pursuing advanced warfighting capabilities that undermine regional security and global stability in ways that can pose considerable risk to U.S. strategy and priorities. Additionally, the potential for natural or accidental release of biological or chemical threat agents contributes to an ever-evolving CBRN threat environment.

The Defense Threat Reduction Agency (DTRA) Fiscal Year 2024-2028 budget submission invests in the capabilities and expertise necessary to enable the Department of Defense (DoD), the U.S. Government, and international partners to deter and prevent these present and emerging WMD threats, while ensuring U.S. forces prevail in conflict with a WMD-armed adversary.

DTRA's strategic priorities are fully aligned with the priorities of the National Defense Strategy (NDS), the Nuclear Posture Review (NPR), and other strategic guidance documents that direct DoD to meet our national security goals through integrated deterrence, campaigning, and building enduring advantages. As both a Defense Agency and Combat Support Agency, DTRA provides cross-cutting countering weapons of mass destruction (CWMD) solutions. DTRA enables the Department to shape the operating environment and reduce risk to national security objectives, providing technologies and integrated deterrence solutions for the most intractable WMD problems. DTRA supports whole-of-government efforts to prevent the acquisition, proliferation, and use of WMD and associated materials and to confound the decision calculus of WMD-armed adversaries.

The Agency's core missions support and enable DoD's ability to:

- Deter strategic attack against the United States and its allies;
- · Prevent, reduce, and counter WMD and emerging threats; and

I. <u>Description of Operations Financed</u>: (Cont.)

Prevail against WMD-armed adversaries in crisis and conflict.

DTRA's dual roles as a Defense and Combat Support Agency help the Agency provide cross-cutting CWMD solutions to support each of these mission priorities. DTRA is committed to achieving concrete outcomes and strategic effects through its five core functions:

- Ensuring a reliable, resilient strategic deterrent through nuclear surety, mission assurance, and crisis response activities;
- Developing and delivering innovative capabilities to the warfighter across the threat spectrum;
- Preventing, reducing, and eliminating CBRN threats through risk reduction, arms control, partner capacity building, and warfighter support;
- Providing strategic and operational support through subject matter expertise, technical reachback, tailored analysis, and exercise support;
- Supporting the Joint Force with plans, concepts, exercises, and materiel solutions to address CBRN operational and strategic risks.

Over the next five years, DTRA will sustain focus on its vital support to the CCMDs, while applying renewed energy toward our Defense Agency role in both new and traditional ways. Cross-agency integration, proactive posturing, and effective partnering approaches—all in support of a campaign-based approach—will allow DTRA to tackle the toughest problems with whole-of-agency solutions that build enduring advantages across the strategic deterrence and counter-WMD enterprise.

For CCMDs and other Joint Force partners, DTRA remains focused on developing and delivering the methodologies and capabilities required to address WMD threats—specifically those posed by China, Russia, North Korea, and Iran. Such counter-WMD capabilities reinforce integrated deterrence by compounding the adversaries' threat calculus while also reducing risks to the Joint Warfighter. Given the CBRN-related operational risks posed by China and Russia, as well as by North Korea and Iran, DTRA must be ready to rapidly respond in crisis and retain its ability to posture sustainable effective support for crisis and conflict, both at home and abroad.

DTRA will strengthen relationships within DoD and with key interagency partners to produce whole-of-government solutions, with renewed emphasis on our efforts to collaborate and integrate with allies and partners in ways that create enduring advantages for DoD. DTRA will emphasize risk reduction initiatives that include future arms control implementation, nuclear deterrence support, partner capacity-building, and technological solution development. Through continuous and proactive engagement with DoD, interagency and international partners, DTRA will build the campaigning approaches necessary to prevent and deter WMD threats and, if necessary, prevail against WMD-armed adversaries.

DTRA will be proactive in sharing information, anticipating threats within the information environment, and supporting activities that allow the DoD and its allies and partners to characterize and attribute WMD-related events and disinformation campaigns. Increasing transparency and anticipating potential vulnerabilities within our strategic message will build resiliency, counter disinformation efforts from our adversaries, and strengthen current and future U.S. alliances.

I. <u>Description of Operations Financed</u>: (Cont.)

DTRA must fully leverage and empower the rich talent and expertise across this Agency to put tools, resources, and capabilities into the hands of policy makers and operators. A renewed emphasis on recruiting and retaining a diverse and highly skilled workforce will ensure the Agency can sustain the human capital advantage for meeting the CWMD challenges of the future.

DTRA's Operation and Maintenance (O&M) Cyber programs strengthen support to the Nuclear Deterrent by providing visibility on mission assurance risk across the DoD enterprise; conducting integrated threat-based mission assurance assessments that provide risk mitigation strategies for Defense Critical Assets and Infrastructure; and executing assessments to test strategies to defend critical missions against emulated adversarial disruption.

Narrative Explanation of Changes:

The FY 2024 O&M Cyber budget request reflects an overall increase of \$14.5 million when compared to the FY 2023 current estimate. This net increase includes a price adjustment of +\$1.3 million, program increases of +\$17.2 million, and a program decrease of -\$4.0 million.

\$ in thousands

	FY 2022	FY 2023	FY 2024
	<u>Actuals</u>	Enacted	Request
A. Cyber Activities	37,208	56,052	70,502

This Sub-Activity Group (SAG) provides resource transparency into DTRA's cyber activities. It includes a range of programs, including the Mission Assurance program and represents an integrated combination of robust protections for Information Technology (IT) assets through the Agency's Cybersecurity and Information Assurance programs. Activities include:

- Protecting and defending the Agency's cyberspace and area of operations by providing 24x7 detect, protect, respond, and sustain cybersecurity services and defense.
- Monitoring and analyzing network activity for external threats via the Agency Cybersecurity Service Provider.
- Providing capability to monitor, alert, report and respond to, and recover from, unauthorized cyber events.
- Providing cyber-based situational awareness to Agency senior leadership, Agency stakeholders, DoD Cybersecurity community, and U.S. Cyber Command.

I. <u>Description of Operations Financed</u>: (Cont.)

Ensuring both Cybersecurity and Information Assurance compliance in support of DoD regulations, initiatives, and tasks.

Cybersecurity and Information Assurance

Protects the Agency's mission systems and data. Supports mission partners' ability to execute mission essential functions and tasks. Protects and sustains DTRA's information networks and systems through the implementation of cybersecurity services and defense-in-depth strategies. Manages and tracks the cybersecurity workforce to ensure they are fully trained. Provides pertinent information to the Insider Threat Program and protects the network from exfiltration of data. Enables continuous operations and situational awareness of the network security posture. Maintains certification as a designated DoD Cyber Security Service Provider.

Mission Assurance

DTRA serves as a Mission Assurance Center of Excellence performing assessments that identify vulnerabilities in critical systems, networks, and architecture that could be exploited well below the level of armed conflict by state or non-state threat networks or could be impacted by natural or accidental hazardous events. This analysis is accomplished through the utilization of the Defense Critical Infrastructure Vulnerability Analysis process, which includes:

• Advanced Cyber Assessments: Consist of both "Blue" and "Red" audits, vulnerability assessments, and penetration tests that evaluate the strengths or weaknesses of software, hardware, processes, and channels over valuable DoD Information flows.

All assessments provide recommendations to mitigate identified risks to critical infrastructure. This analysis is narrowed to specific key missions identified by DoD leadership (most commonly, Defense Critical Missions) and through strategic analysis, identifies mission impacts, trends, and lessons learned. This information is provided to DoD senior leaders, who will then decide the best courses of action for vulnerability remediation, mitigation, or acceptance.

II. Force Structure Summary: N/A

III. Financial Summary (\$ in Thousands):

			Cor	ngressional			
	FY 2022	Budget				Current	FY 2024
A. BA Subactivities	<u>Actuals</u>	Request	<u>Amount</u>	<u>Percent</u>	Appropriated	Enacted	Estimate
Cyber Activities	<u>\$37,208</u>	\$56,052	<u>\$0</u>	0.00%	<u>\$56,052</u>	<u>\$56,052</u>	\$70,548
Total	\$37,208	\$56,052	\$0	0.00%	\$56,052	\$56,052	\$70,548

III. Financial Summary (\$ in Thousands): (Cont.)

	Change	Change
B. Reconciliation Summary	FY 2023/FY 2023	FY 2023/FY 2024
BASELINE FUNDING	\$56,052	\$56,052
Congressional Adjustments (Distributed)	0	
Congressional Adjustments (Undistributed)	0	
Adjustments to Meet Congressional Intent	0	
Congressional Adjustments (General Provisions)	0	
SUBTOTAL APPROPRIATED AMOUNT	56,052	
Fact-of-Life Changes (2023 to 2023 Only)	0	
SUBTOTAL BASELINE FUNDING	56,052	
Supplemental	0	
Reprogrammings	0	
Price Changes		1,337
Functional Transfers		0
Program Changes		13,159
CURRENT ESTIMATE	56,052	70,548
Less: Supplemental	0	
NORMALIZED CURRENT ESTIMATE	\$56,052	\$70,548

III. Financial Summary (\$ in Thousands): (Cont.)

FY 2023 President's Budget Request (Amended, if applicable)	\$56,052
1. Congressional Adjustments	\$0
a) Distributed Adjustments	\$0
b) Undistributed Adjustments	\$0
c) Adjustments to Meet Congressional Intent	\$0
d) General Provisions	\$0
FY 2023 Appropriated Amount	\$56,052
2. Supplemental Appropriations	\$0
a) Supplemental Funding	\$0
3. Fact-of-Life Changes	\$0
a) Functional Transfers	\$0
b) Technical Adjustments	\$0
c) Emergent Requirements	\$0
FY 2023 Baseline Funding	\$56,052
4. Reprogrammings (Requiring 1415 Actions)	\$0
a) Increases	\$0

III. Financial Summary (\$ in Thousands): (Cont.)

b) Decreases	\$0
Revised FY 2023 Estimate	\$56,052
5. Less: Item 2, Supplemental Appropriation and Item 4, Reprogrammings	\$0
a) Less: Supplemental Funding	\$0
FY 2023 Normalized Current Estimate	\$56,052
6. Price Change	\$1,337
7. Functional Transfers	\$0
a) Transfers In	\$0
b) Transfers Out	\$0
8. Program Increases	\$17,164
a) Annualization of New FY 2023 Program	\$0
b) One-Time FY 2024 Increases	\$0
c) Program Growth in FY 2024	\$17,164
1) DTRA Cyber Activities - Civilian Personnel The funding increase from FY 2023 to FY 2024 funds: • An increase of 9 FTE (+\$1 881 thousand) to expand the Mission Assurance program's Advanced.	\$1,903

 An increase of 9 FTE (+\$1,881 thousand) to expand the Mission Assurance program's Advanced Cyber Assessment capacity and capability. This expansion will increase the assessment capacity from 35 advanced cyber assessments in FY 2023 to 65 advanced cyber assessments in FY 2024. As the DoD's Mission Assurance Center of Excellence for Vulnerability Assessments, the Joint Chiefs of Staff Office and the Office of the Under Secretary of Defense for Policy (OUSD(P))

III. Financial Summary (\$ in Thousands): (Cont.)

formally requested DTRA provide a holistic vulnerability assessment approach to the evaluation of mission critical infrastructure. This approach incorporates both blue and red advanced cyber assessments, thus expanding DTRA's cyber assessment support to all DoD's Mission Assurance Coordination Board (MACB) directed 65 assessment locations annually.

 One extra day of compensation for civilian employees (+\$22 thousand). (Number of compensable days in FY 2024 - 261 days, FY 2023 - 260 days)

(FY 2023 Baseline: \$3,659 thousand; 18 FTEs; +9 FTEs)

The funding increase reflects the contracted procurement of technical specialists to expand the Mission Assurance program's Advanced Cyber Assessment capacity and capability. This expansion will increase the assessment capacity from 35 advanced cyber assessments in FY 2023 to 65 advanced cyber assessments in FY 2024. As the DoD's Mission Assurance Center of Excellence for Vulnerability Assessments, the Joint Chiefs of Staff Office and OUSD(P) formally requested DTRA provide a holistic vulnerability assessment approach to the evaluation of mission critical infrastructure. This approach incorporates both blue and red advanced cyber assessments, thus expanding DTRA's cyber assessment support to all DoD's Mission Assurance Coordination Board (MACB) directed 65 assessment locations annually. DTRA's support to the MACB, facilitates the boards efforts to reduce risk and boost resiliency of defense critical missions and infrastructure as outlined in the National Defense Strategy, Nuclear Posture Review, DoD Cyber Strategy, DoDD 3020.40 and DoDI 3020.45.

(FY 2023 Baseline: \$38,061 thousand)

9. Program Decreases	\$-4,005
a) Annualization of FY 2023 Program Decreases	\$0
b) One-Time FY 2023 Increases	\$0

III. Financial Summary (\$ in Thousands): (Cont.)

1) DTRA Cyber Activities - Mission Assurance	\$-4,005
The funding decrease reflects a one-time increase in FY 2023 for IT contract support services to expand	. ,
advanced cyber operations. The Mission Assurance program will continue to provide recommended	
mitigation strategies against intelligent adversaries through a combination of integrated methodologies:	
adversarial emulation (Red), risk-based vulnerability assessments (Blue), and advanced cyber	
assessments.	
(FY 2023 Baseline: \$38,061 thousand)	

IV. Performance Criteria and Evaluation Summary:

A. Cyber Activities

Cybersecurity and Information Assurance:

	FY 2022	FY 2023	FY 2024
Ability to meet DoD CJCSI 6510 Incident Reporting Timelines for High	100%	100%	100%
Priority Incidents (CAT 1's – 2's).			
Acceptable Threshold = 100%			
Agency Certification and Accreditation Rate of Systems and Enclaves.	95%	95%	95%
Acceptable Threshold = >90%			
Agency Self Assessed Command Cyber Readiness Inspection (CCRI)	84%	84%	84%
Score.			
Acceptable Threshold = >80%			

The Defense Threat Reduction Agency summarizes its extensive cybersecurity efforts in to three (3) primary activities to which it measures its performance and effectiveness.

- 1) Ability to rapidly respond to cybersecurity events. DTRA maintains a comprehensive cybersecurity tool suite, it is a fully certificated and accredited Department of Defense (DoD) Cyber Security Service Provider (CSSP) Tier 2, and promotes a continuous cybersecurity awareness campaign ensuring its workforce remains aware and vigilant. Understanding that not all cybersecurity attacks can be defended, possessing the ability to quickly respond to cybersecurity events is critical.
- 2) Maintaining compliance with DoD Cybersecurity Taskings and Requirements. DTRA has developed a robust cybersecurity compliance program to ensure the Agency's Information Technology (IT) environment remains compliant with DoD IT taskings and security baselines. Ensuring DTRA's IT systems undergo continuous monitoring, and maintain an Authorization to Operate (ATO) is essential to remain in good standing and protecting its portion of the Global Information Grid (GIG).
- 3) Self Assessed Command Cyber Readiness Inspection (CCRI) Score. U.S. Cyber Command and JFHQ-DODIN, use the results of CCRI's as a key measure to help assess the overall security posture of Department of Defense Information Networks (DODIN). DTRA historically performs well during these JHFQ-DODIN inspections and contributes much of its success to an in-house Self Assessed CCRI dashboard providing near real-time CCRI compliance status, POC's and action plans for compliance.

Mission Assurance (While previously funded, FY 2023 is the first submission to include metrics for this program)

IV. Performance Criteria and Evaluation Summary:

	FY 2023	FY 2024
Pre-site Surveys (Total)	<u>165</u>	<u>195</u>
Advanced Cyber Assessments	35	65
Red Team Cyber Assessments	38	38
Control System Assessments	32	32
Level I Cyber Assessments	60	60
Total Assessments	<u>165</u>	<u>195</u>
Customers	<u>18</u>	<u>18</u>

V. Personnel Summary:

	FY 2022	FY 2023	FY 2024	Change FY 2022/ FY 2023	Change FY 2023/ FY 2024
Civilian End Strength (Total)	15	18	27	3	9
U.S. Direct Hire	15	18	27	3	9
Total Direct Hire	15	18	27	3	9
Civilian FTEs (Total)	15	18	27	3	9
U.S. Direct Hire	15	18	27	3	9
Total Direct Hire	15	18	27	3	9
Average Annual Civilian Salary (\$ in thousands)	191.1	203.3	212.8	12.1	9.5
Contractor FTEs (Total)	44	93	115	49	22

Personnel Summary Explanations:

Between FY 2023 and FY 2024, civilian Full-Time Equivalents (FTEs) increase by 9 and contractor FTEs increase by 22 to expand the Mission Assurance program's Advanced Cyber Assessment capacity and capability. This expansion will increase the assessment capacity from 35 advanced cyber assessments in FY 2023 to 65 advanced cyber assessments in FY 2024. As the DoD's Mission Assurance Center of Excellence for Vulnerability Assessments, the Joint Chiefs of Staff Office and OUSD(P) formally requested DTRA provide a holistic vulnerability assessment approach to the evaluation of mission critical infrastructure. This approach incorporates both blue and red advanced cyber assessments, thus expanding DTRA's cyber assessment support to all DoD's Mission Assurance Coordination Board (MACB) directed 65 assessment locations annually. DTRA's support to the MACB, facilitates the board's efforts to reduce risk and boost resiliency of defense critical missions and infrastructure as outlined in the National Defense Strategy, Nuclear Posture Review, DoD Cyber Strategy, DoDD 3020.40 and DoDI 3020.45.

Note: The average annual civilian salary costs include all costs that DTRA incurs associated with civilian personnel pay to include benefits.

VI. OP 32 Line Items as Applicable (Dollars in thousands):

		Change from FY 2022 to FY 2023		Change from FY 2023 to FY 2024		2023 to FY 2024		
		FY 2022	Price	Program	FY 2023	Price	Program	FY 2024
		<u>Program</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>	<u>Growth</u>	<u>Growth</u>	<u>Program</u>
101	EXEC, GEN'L & SPEC SCHEDS	2,867	118	674	3,659	184	1,903	5,746
0199	TOTAL CIVILIAN PERSONNEL COMPENSATION	2,867	118	674	3,659	184	1,903	5,746
308	TRAVEL OF PERSONS	9	0	-9	0	0	100	100
0399	TOTAL TRAVEL	9	0	-9	0	0	100	100
914	PURCHASED COMMUNICATIONS (NON-FUND)	6,110	128	-6,238	0	0	0	0
925	EQUIPMENT PURCHASES (NON-FUND)	3,425	72	2,439	5,936	131	1,064	7,131
934	ENGINEERING & TECH SVCS	2,026	43	11,778	13,847	305	14,945	29,097
987	OTHER INTRA-GOVT PURCH	4,091	86	-1,757	2,420	53	21	2,494
989	OTHER SERVICES	132	3	1	136	3	0	139
990	IT CONTRACT SUPPORT SERVICES	18,548	390	11,116	30,054	661	-4,874	25,841
0999	TOTAL OTHER PURCHASES	34,332	722	17,339	52,393	1,153	11,156	64,702
9999	GRAND TOTAL	37,208	840	18,004	56,052	1,337	13,159	70,548