Department of the Treasury Cybersecurity Enhancement Account

Congressional Justification for Appropriations and Annual Performance Report and Plan

FY 2018

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<u>Section I – Budget Request</u>

A – Mission Statement

Bolster the Department's cybersecurity posture and mitigate cybersecurity threats to the U.S. financial infrastructure.

B – Summary of the Request

Trillions of dollars are accounted for and processed by the Department of the Treasury's information technology (IT) systems and therefore, they are a constant target for sophisticated threat actors. To more proactively and strategically protect Treasury systems against cybersecurity threats, the Budget requests \$27.264 million for the Cybersecurity Enhancement Account (CEA). The account identifies and supports Department-wide investments for critical IT improvements including the systems identified as High Value Assets (HVAs). Furthermore, the centralization of funds allows Treasury to more nimbly respond in the event of a cybersecurity incident as well as leverage enterprise-wide services and capabilities across the components of the Department.

By managing CEA centrally, Treasury elevates the importance of such initiatives and provides Treasury leadership, OMB, and Congress with better transparency into cybersecurity activities across the Department. Enhanced transparency also improves Department-wide coordination of cybersecurity efforts and improves the Department's response and recovery capabilities. With high-level support, the program provides a platform to enhance efficiency, communication, transparency, and accountability around the mission.

The CEA strengthens cybersecurity at Treasury and the nation's financial sector. This request is in addition to current bureau-level cybersecurity activities which remain in the base budgets of each Treasury bureau. As the CEA matures, Treasury will continue to look for targeted opportunities to provide shared and cost-effective enterprise solutions to improve cybersecurity defenses of Treasury and the U.S. financial sector.

1.1 – Appropriations Detail Table

Dollars in Thousands										
Cybersecurity Enhancement Account	FY 2016		FY 2017		FY 2018		FY 2017 to FY 2018			
Appropriated Resources	Enacte d		Annualized CR		Request		Change		% Change	
	FTE A	MOUNT	FTE A	MOUNT	FTE AMOUNT		FTE AMOUNT		FTE AMOUNT	
New Appropriated Resources										
Cybersecurity Enhancement Account	0	\$0	0	\$0	19	\$27,264	19	\$27,264	NA	NA
Subtotal New Appropriated Resources	0	\$0	0	\$0	19	\$27,264	19	\$27,264	NA	NA
Other Resources:										
Offsetting Collections - Reimbursables	0	\$0	0	\$0	0	\$0	0	\$0	NA	NA
Subtotal Other Resources	0	\$0	0	\$0	0	\$0	0	\$0	NA	NA
Total Budgetary Resources	0	\$0	0	\$0	19	\$27,264	19	\$27,264	NA	NA

FY 2016 FTE and Other Resources are Actual

1.2 – Budget Adjustments Table

Dollars in Thousands

Cybersecurity Enhancement Account	FTE	Amount
FY 2017 Annualized CR	0	\$0
FY 2018 Base	0	\$0
Program Changes:		
Program Increases:	19	\$27,264
Malware Content Filter	0	\$2,474
Data Loss Protection at the Fiscal Service Trusted Internet		
Connections (TIC)	0	\$2,135
Enhanced Incident Response and Recovery Capabilities	4	\$5,046
Cybersecurity Enhancements for Classified Networks	3	\$1,050
Encrypted Traffic Inspection at the Fiscal Service Trusted Internet		
Connections (TIC)	0	\$805
Enhancements to the Treasury Secure Data Network	0	\$5,000
Proactive Cyber Risk and Threat Identification	3	\$1,948
Improving the Cybersecurity of High Value Assets (HVA)	1	\$3,537
Enhancements to Cybersecurity Infrastructure	0	\$3,618
Mitigation of Cyber Threats to United States Financial Services		
Sector	8	\$1,651
Subtotal Program Changes	19	\$27,264
Total FY 2018 Request	19	\$27,264

C – Budget Increases and Decreases Description

Treasury will fund web and email traffic inspection in virtual environments at the Treasury Enterprise Trusted Internet Connections. This allows dynamic analysis of potentially harmful email and web traffic in a controlled environment, enabling the Treasury enterprise security operations center to identify and remove malicious attachments and links before they reach the Treasury network. This will reduce the risk of compromise for the entire Treasury network, as well as systems housed on that network, including High Value Assets.

<u>Data Loss Protection at the Fiscal Service Trusted Internet Connections (TIC) +\$2,135,000 / +0 FTE</u>

Funds will expand and accelerate implementation of Data Loss Protection at Treasury's Enterprise TICs and at select High Value Assets, enabling Treasury to detect the exfiltration of sensitive information by either threat actors or malicious insiders. This will allow Treasury to directly counter the threat of data loss through episodic/coordinated exfiltration. This will enhance Treasury's ability to detect, investigate, and respond to unauthorized attempts to access and remove sensitive taxpayer and financial data from the Treasury and bureau networks.

Enhanced Incident Response and Recovery Capabilities +\$5,046,000 / +4 FTE

This request funds enhancements to response and recovery capabilities at Treasury's enterprise security operations center (SOC), the lead entity for Department-wide cybersecurity incident

response and recovery actions, resulting in a faster response and recovery time. Traditionally this entails: retroactive examination of network traffic; assessment of adversarial movement within the network; determination of the level of information compromise; implementation of mitigations and countermeasures; and reconstitution/resurrection of damaged systems. This request also includes funding for deployment of an endpoint incident response capability, giving the enterprise SOC the ability to respond to incidents at the workstation level throughout the Department in a matter of minutes and hours rather than days and weeks.

Cybersecurity Enhancements for Classified Networks +\$1,050,000 / +3 FTE

This request supports enhanced monitoring for the Treasury-wide collateral classified network, including security controls testing, monitoring of system security to include detection of and response to unauthorized user or anomalous network activity, as well as the secure implementation of identity and credential access management that provides a more secure environment for processing highly sensitive information. Funding also improves Treasury's ability to continuously monitor the network and detect and remediate security vulnerabilities, thereby reducing the risk of security incidents.

Encrypted Traffic Inspection at the Fiscal Service Trusted Internet Connections (TIC) +\$805,000 / +0 FTE

Encryption is required to protect the confidentiality of sensitive network transactions. However, adversaries use encryption to conceal their command/control traffic and exfiltration activity. Treasury must be able to inspect encrypted network traffic for these threats. Enterprise TICs, housed at Fiscal Service, enhance Treasury's ability to detect, investigate, and respond to unauthorized attempts to access and remove sensitive data from the enterprise-wide Treasury network.

Enhancements to the Treasury Secure Data Network +\$5,000,000 / +0 FTE

Funding will be allocated to the Treasury-wide SECRET collateral network to: increase overall stability; increase the timeliness of incident response and recovery; enhance security monitoring by the Government Security Operations Center; and provide advanced toolsets for automated monitoring, as well as analyst review of outputs from these toolsets.

Proactive Cyber Risk and Threat Identification +\$1,948,000 / +3 FTE

The foundation of a strong cybersecurity program is proper identification of risk and threat vectors, and appropriate documentation of those risks and threats to enable decision making. This will be accomplished in part through strong security assessment and authorization of enterprise systems. Treasury will also establish a dedicated group of security experts to validate that systems across Treasury have been engineered and developed securely from the outset. Additionally, this group will carry out penetration tests to uncover vulnerabilities in systems throughout Treasury, including High Value Assets, before they are discovered or exploited by adversaries.

Improving the Cybersecurity of High Value Assets (HVA) +\$3,537,000 / + 1 FTE

HVAs are information systems that Treasury has systematically designated as mission-critical and are the most common targets for computer network attacks. Cybersecurity improvements include the implementation of encryption for data in-transit—including public-facing web traffic in accordance with OMB M-15-13— and data at-rest. For FY 2018, this request includes

funding to increase the resiliency of Treasury's HVA population through Risk and Vulnerability Assessments and Security Architecture Reviews. Funding will also be used to validate that, in the event of an intrusion, the affected HVAs have been properly cleaned and secured.

Enhancements to Cybersecurity Infrastructure +\$3,618,000 / +0 FTE

Treasury will implement user access controls for sensitive applications and High Value Assets, including greater use of multi-factor authentication through Personal Identity Verification (PIV) cards. This funds operation and maintenance for those activities, and includes funding for improved security architecture design in conjunction with the Department of Homeland Security's Continuous Diagnostics and Mitigation program, Phase II. This design will result in enhanced security for privileged users across the Department, as well as identify and reduce operational risks in Treasury's access control architecture.

Mitigation of Cyber Threats to United States Financial Services Sector +\$1,651,000 / +8 FTE Increasing cyber-attacks against financial institutions could lead to a loss in confidence in these institutions and to significant economic impacts. As the government agency charged with coordinating with the financial sector on cybersecurity issues, Treasury seeks to expand its role as the Sector Specific Agency for the financial services sector under Executive Order 13636 Improving Critical Infrastructure Cybersecurity. The goal is to improve the public-private sharing of cybersecurity information, promote the use of best practices, and respond to cybersecurity incidents. In contrast with other initiatives in this budget request that support cybersecurity enhancements to Treasury Information Technology systems, this initiative seeks to mitigate cybersecurity threats to the U.S. financial infrastructure.

1.3 – Operating Levels Table

Dollars in Thousands

Cybersecurity Enhancement Account Object Classification	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request
11.1 - Full-time permanent	0	0	2,480
11.5 - Other personnel compensation	0	0	38
11.9 - Total personnel compensation	0	0	2,518
12.0 - Personnel benefits	0	0	727
Total Personnel and Compensation Benefits	\$0	\$0	\$3,245
21.0 - Travel and transportation of persons	0	0	24
23.3 - Communication, utilities, and misc charges	0	0	55
25.1 - Advisory and assistance services	0	0	6,271
25.2 - Other services from non-Federal sources	0	0	1,836
25.3 - Other goods and services from Federal sources	0	0	2,503
25.7 - Operation and maintenance of equipment	0	0	500
26.0 - Supplies and materials	0	0	173
31.0 - Equipment	0	0	12,657
Total Non-Personnel	\$0	\$0	\$24,019
Total Budgetary Resources	\$0	\$0	\$27,264
FTE	0	0	19

D – Appropriations Language and Explanation of Changes

Appropriations Language	Explanation of Changes
DEPARTMENT OF THE TREASURY	
DEPARTMENTAL OFFICES	
Federal Funds	
CYBERSECURITY ENHANCEMENT ACCOUNT	
(INCLUDING TRANSFER OF FUNDS)	
For salaries and expenses for enhanced cybersecurity for	
systems operated by the Department of the Treasury,	
\$27,264,000, to remain available until September 30, 2020:	
Provided, That amounts made available under this heading shall	
be in addition to other amounts available to Treasury offices and	
bureaus for cybersecurity.	

E – Legislative Proposals

The Cybersecurity Enhancement Account has no legislative proposals.

<u>Section II – Annual Performance Plan and Report</u>

A – Strategic Alignment

The FY 2018-2022 strategic plan is currently under development. The annual performance plan will be updated in the FY 2019 budget to reflect the new priorities.

B – Budget and Performance by Budget Activity

2.1 Cybersecurity Enhancement Account Resources and Measures

Dollars in Thousands

Resource Level	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
	Actual	Actual	Actual	Actual	Actual	Annualized CR	Request
Appropriated Resources	0	0	0	0	0	0	\$27,264
Budget Activity Total	0	0	0	0	0	0	\$27,264
FTE	0	0	0	0	0	0	19

Cybersecurity Enhancement Account (CEA) Budget and Performance

(\$27,264,000 from direct appropriations):

The purpose of CEA is to strategically mitigate cybersecurity risks through a centralized program with Department-wide impact. Due to the increasing number and sophistication of cyberattacks, Treasury leadership has prioritized cybersecurity and supports the centralization of department-wide cybersecurity initiatives through the CEA account and budget activity. Current bureau-level cybersecurity spending remains in the base budgets of each bureau.

With the exception of the project to mitigate cybersecurity threats to the U.S. financial infrastructure, all projects have the common purpose of strengthening the security of Treasury's IT assets. Additionally, these projects will ensure compliance with both OMB and Executive Orders involving the security of government IT assets. To achieve these objectives, Treasury is deploying a multi-pronged approach of strategically procuring hardware and software, streamlining business processes while expanding security monitoring, and ensuring accountability at all levels. Treasury will work with OMB to select performance measures.

Section III – Additional Information

A – Summary of Capital Investments

A summary of capital investment resources, including major information technology and non-technology investments can be found at:

http://www.treasury.gov/about/budget-performance/Pages/summary-of-capital-investments.aspx This website also contains a digital copy of this document.