

Department of Homeland Security
National Protection and Programs Directorate
Budget Overview



Fiscal Year 2018
Congressional Justification

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National Protection and Programs Directorate

Appropriation Organization Structure

Organization Name	Level	Fund Type (* Includes Defense Funding)
National Protection and Programs Directorate	Component	
Operations and Support	Appropriation	
Mission Support	PPA	Discretionary - Appropriation*
Cybersecurity	PPA	
Cyber Readiness and Response	PPA Level II	
NCCIC Operations	PPA Level III	Discretionary - Appropriation*
NCCIC Planning and Exercises	PPA Level III	Discretionary - Appropriation*
Cyber Infrastructure Resilience	PPA Level II	
Cybersecurity Advisors	PPA Level III	Discretionary - Appropriation*
Enhanced Cybersecurity Services	PPA Level III	Discretionary - Appropriation*
Cybersecurity Education & Awareness	PPA Level III	Discretionary - Appropriation*
Federal Cybersecurity	PPA Level II	
Federal Network Resilience	PPA Level III	Discretionary - Appropriation*
Continuous Diagnostics and Mitigation	PPA Level III	Discretionary - Appropriation*
National Cybersecurity Protection System	PPA Level III	Discretionary - Appropriation*
Infrastructure Protection	PPA	
Infrastructure Capacity Building	PPA Level II	
Sector Risk Management	PPA Level III	Discretionary - Appropriation*
Protective Security Advisors	PPA Level III	Discretionary - Appropriation*
Bombing Prevention	PPA Level III	Discretionary - Appropriation*
Infrastructure Information and Sensitive Data Protection	PPA Level III	Discretionary - Appropriation*
Infrastructure Security Compliance	PPA Level II	Discretionary - Appropriation*
Emergency Communications	PPA	
Emergency Communications Preparedness	PPA Level II	Discretionary - Appropriation*
Priority Telecommunications Services	PPA Level II	
GETS/WPS/SRAS/TSP	PPA Level III	Discretionary - Appropriation*
Next Generation Networks Priority Services	PPA Level III	Discretionary - Appropriation*
Integrated Operations	PPA	
Cyber and Infrastructure Analysis	PPA Level II	
National Infrastructure Simulation Analysis Center (NISAC)	PPA Level III	Discretionary - Appropriation*
Infrastructure Analysis	PPA Level III	Discretionary - Appropriation*
Critical Infrastructure Situational Awareness	PPA Level II	Discretionary - Appropriation*
Stakeholder Engagement and Requirements	PPA Level II	Discretionary - Appropriation*
Strategy, Policy, and Plans	PPA Level II	Discretionary - Appropriation*
Office of Biometric Identity Management	PPA	
Identity and Screening Program Operations	PPA Level II	Discretionary - Appropriation
IDENT/Homeland Advanced Recognition Technology Operations and Maintenance	PPA Level II	Discretionary - Appropriation

Organization Name	Level	Fund Type (* Includes Defense Funding)
Procurement, Construction, and Improvements	Appropriation	
Cybersecurity	PPA	
Continuous Diagnostics and Mitigation	PPA Level II,Investment	Discretionary - Appropriation*
National Cybersecurity Protection System	PPA Level II,Investment	Discretionary - Appropriation*
Emergency Communications	PPA	
Next Generation Networks Priority Services	PPA Level II,Investment	Discretionary - Appropriation*
Biometric Identity Management	PPA	
IDENT/Homeland Advanced Recognition Technology	PPA Level II	Discretionary - Appropriation
Integrated Operations Assets and Infrastructure	PPA	
Infrastructure Protection	PPA	
Research and Development	Appropriation	
Cybersecurity	PPA	Discretionary - Appropriation*
Infrastructure Protection	PPA	Discretionary - Appropriation*
Integrated Operations R&D	PPA	Discretionary - Appropriation*
Federal Protective Service	Appropriation	
FPS Operations	PPA	
Operating Expenses	PPA Level II	Discretionary - Offsetting Fee
Countermeasures	PPA	
Protective Security Officers	PPA Level II	Discretionary - Offsetting Fee
Technical Countermeasures	PPA Level II	Discretionary - Offsetting Fee

National Protection and Programs Directorate Strategic Context

Component Overview

The National Protection and Programs Directorate (NPPD) is comprised of the following mission-oriented programs that support achievement of the DHS strategic missions, goals, and objectives.

Cybersecurity: The Cybersecurity program advances computer security preparedness and the response to cyberattacks and incidents. The program includes activities to secure the federal network, respond to incidents, disseminate actionable information, and collaborate with private sector partners to secure critical infrastructure. This program supports the implementation of government-wide deployment of hardware and software systems to prevent and detect incidents, response to incidents at federal and private entities, and collaboration with the private sector to increase the security and resiliency of critical networks. The program also coordinates cybersecurity education for the federal workforce.

Infrastructure Protection: The Infrastructure Protection program leads and coordinates national programs and policies on critical infrastructure security and resilience and develops strong partnerships across government and the private sector. The program conducts and facilitates vulnerability and consequence assessments to help critical infrastructure owners and operators and state, local, tribal, and territorial partners understand and address risks to critical infrastructure. Additionally, it provides information on emerging threats and hazards and offers tools and training to partners to help them manage risks to critical infrastructure.

Emergency Communications: The Emergency Communications program is responsible for advancing the Nation's interoperable emergency communications capabilities to enable first responders and government officials to continue to communicate in the event of disasters.

Office of Biometric Identity Management: The Office of Biometric Identity Management provides biometric identification services to help federal, state, and local government partners to accurately identify people they encounter to determine if they pose a risk to the U.S. This program supplies the technology for collecting and storing biometric data. The program shares information, provides analyses, updates watchlists, and ensures the integrity of the data.

Federal Protective Service: The Federal Protective Service protects federal facilities, their occupants, and visitors by providing law enforcement and protective security services. The program provides uniformed law enforcement and armed contract security guard presence, conducts facility security assessments, and designs countermeasures for tenant agencies in order to reduce risks to federal facilities and occupants.

Mission Support: The Mission Support program provides enterprise leadership, management, and business administrative services that sustain the day-to-day back office operations. Key capabilities include managing the agency's performance, finances, workforce,

physical and personnel security, acquisition of goods and services, information technology, property and assets, communications, legal affairs, and administration.

Integrated Operations: The Integrated Operations program ensures domain awareness through the sustainment of command and control, coordination, information sharing, and situational awareness in support of multiple mission programs. It also supports occupational health and safety.

Component Contributions to Achieving Departmental Missions

The table below shows the alignment of the NPPD programs to the DHS Missions and Mature and Strengthen Homeland Security.

Programs	DHS Missions					*Mature and Strengthen Homeland Security
	*Prevent Terrorism and Enhance Security	*Secure and Manage Our Borders	*Enforce and Administer Our Immigration Laws	*Safeguard and Secure Cyberspace	*Strengthen National Preparedness and Resilience	
Cybersecurity				100%		
Infrastructure Protection	45%			55%		
Emergency Communications					100%	
Office of Biometric Identity Management		42%	58%			
Federal Protective Service	100%					
Mission Support						100%
Integrated Operations				65%		35%

**Totals account for rounding*

Mission 1: Prevent Terrorism and Enhance Security

Resources Requested

NPPD resources supporting *Prevent Terrorism and Enhance Security* are provided in the table below.

\$ in thousands

Program Name	FY 2016 Revised Enacted		FY 2017 Annualized CR		FY 2018 President's Budget	
	\$	FTE	\$	FTE	\$	FTE
Infrastructure Protection	89,661	251	91,482	251	87,957	274
Federal Protective Service	1,437,935	1,384	1,445,524	1,505	1,470,459	1,505
Total	1,527,596	1,635	1,537,006	1,756	1,558,416	1,779

Performance Measures

For *Prevent Terrorism and Enhance Security*, two types of performance measures are presented. Strategic Measures represent NPPD measures that gauge achievement for this mission area, and are considered to be our Government Performance and Results Act Modernization Act (GPRAMA) performance measures. Additional Management Measures are displayed, as appropriate, to provide a more thorough context of expected performance results.

Strategic Measures

Measure: Percent of Facility Security Committee Chairs (or designated officials) satisfied with the level of security provided at federal facilities						
Description: This measure assesses the effectiveness of protection and security services provided by the Federal Protective Service (FPS) to Facility Security Committee Chairs, or their designated officials, through surveying their overall customer satisfaction. The Facility Security Committee Chairperson is the representative of the primary tenant and is the primary customer of FPS Facility Security Assessments and countermeasure consultation. This will enable FPS to make better informed decisions to enhance the services it provides to its tenants.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	N/A	78%	79%
Result:	N/A	N/A	N/A	N/A	N/A	N/A

Measure: Percent of high-risk facilities that receive a facility security assessment in compliance with the Interagency Security Committee (ISC) schedule						
Description: This measure reports the percentage of high risk (Facility Security Level 3 & 4) facilities that receive a facility security assessment (FSA) in compliance with the ISC schedule. An FSA is a standardized comprehensive risk assessment that examines credible threats to Federal buildings and the vulnerabilities and consequences associated with those threats. Credible threats include crime activity or potential acts of terrorism. Each facility is assessed against a baseline level of protection and countermeasures are recommended to mitigate the gap identified to the baseline or other credible threats and vulnerabilities unique to a facility. Requirements for the frequency of Federal building security assessments are driven by the ISC standards with high risk facility assessments occurring on a three year cycle.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	63%	100%	100%	100%	100%	100%
Result:	34%	93%	100%	96%	N/A	N/A

Measure: Percent of performance standards implemented by the highest risk chemical facilities and verified by DHS						
Description: This measure reports the percent of applicable risk based performance standards (RBPS) that are approved and implemented within site security plans (SSPs) or alternative security programs (ASPs) for Tier 1 and Tier 2 facilities that are compliant with the Chemical Facility Anti-terrorism Standards (CFATS) regulation. Following submission of a proposed SSP/ASP by a covered facility, the CFATS regulatory authority will conduct an “authorization inspection” of the covered facility to verify that the SSP/ASP is compliant with the CFATS regulation. For this measure, SSPs/ASPs determined to meet the RBPS requirements with current and planned measures will be approved. Upon approval of its SSP/ASP, the covered facility is required to fully implement the existing measures that are described in the SSP/ASP.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	57%	97%	95%	95%	95%	95%
Result:	46%	78%	93%	97%	N/A	N/A

Management Measures

Measure: Average response from course participants reporting that the counter-improvised explosive device (IED) training provided by DHS enhances their preparedness to perform their jobs						
Description: This measure provides an indication of the degree to which the Office of Bombing Prevention's (OBP) counter-IED training enhances the preparedness of a diverse array of homeland security stakeholders (Federal, state, local, and private sector partners) to perform their respective role(s) in preventing, protecting against, responding to, and/or mitigating bombing incidents. Training participants complete a voluntary questionnaire at the completion of every training iteration rating the degree to which the training increased their preparedness on a 5-point scale. This ensures that OBP's training effectively contributes to the OBP mission of enhancing national capabilities to prevent, protect against, respond to, and mitigate bombing incidents, in support of departmental and national objectives defined through the DHS Strategic Plan and Presidential Directive.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	N/A	4	4
Result:	N/A	N/A	N/A	N/A	N/A	N/A

Measure: Percent of contract security force evaluations conducted at high-risk facilities resulting in no countermeasure-related deficiencies						
Description: This performance measure provides the percentage of Facility Security Level IV facilities identified with no countermeasure-related deficiencies during contract security force evaluations conducted during each fiscal year quarter. Countermeasure-related deficiencies are the total of covert security testing (investigative operation used to identify deficiencies in security countermeasures, training, procedures, and technology) deficiencies and countermeasure (access control, alarms, barriers, communications, guard force, screening, and surveillance) deficiencies identified during post inspections. Level IV is defined as high risk based on the Interagency Security Committee Standards as having over 450 federal employees; high volume of public contact; more than 150,000 square feet of space; tenant agencies that may include high-risk law enforcement and intelligence agencies, courts, judicial offices, and highly sensitive government records.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	98%	98%	98%	98%	98%	98%
Result:	97%	97%	97%	98%	N/A	N/A

Measure: Percent of performance standards implemented by high risk (Tier 3 and Tier 4) chemical facilities and verified by DHS						
Description: This measure reports the percent of applicable risk based performance standards (RBPS) that are approved and implemented within SSPs or ASPs for Tier 3 and Tier 4 facilities that are compliant with the CFATS regulation. Following submission of a proposed SSP/ASP by a covered facility, the CFATS regulatory authority will conduct an “authorization inspection” of the covered facility to verify that the SSP/ASP is compliant with the CFATS regulation. For this measure, SSPs/ASP determined to meet the RBPS requirements with current and planned measures will be approved. Upon approval of its SSP/ASP, the covered facility is required to fully implement the measures that are described in the SSP/ASP.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	45%	75%	95%	95%
Result:	N/A	N/A	73%	94%	N/A	N/A

Measure: Percent of Rapid Protection Force deployments to enhance federal facility security that occur within the agreed upon timeframe						
Description: This measure reflects the Rapid Protection Force’s (RPF) role in effectively responding quickly and efficiently with an emphasis on protecting government facilities and personnel within 24 hours or an agreed upon time, to mitigate threats, stabilize incidents, and in support of special events. The 24 hour, or agreed upon response time, enables an enhanced FPS presence and rapid protection capabilities at federal facilities.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	N/A	100%	100%
Result:	N/A	N/A	N/A	N/A	N/A	N/A

Measure: Percent of required post inspections completed of federal facilities						
Description: This measure will report the percent achievement by FPS in completing Protective Security Officer (PSO) post inspections. The number of post inspections conducted per year are set annually per directives guiding protective security force performance monitoring. FPS sets policy to ensure that countermeasures are effectively functioning as designed and that the contracted service is in compliance with contract requirements. FPS post inspections review compliance in the operation of the post including identification of the individual on duty, post desk book, cleanliness and orderly operation of the post, PSO knowledge of the post orders, and PSO performance of duties in accordance with the post orders (to include professionalism, proper certifications and licenses). When technical countermeasures are deployed at a post, the effectiveness of that countermeasure is also assessed.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	100%	100%	100%	100%	100%	100%
Result:	79%	74%	100%	100%	N/A	N/A

Measure: Percent of respondents reporting that the counter improvised explosive device information provided by DHS is a valuable resource to support their responsibilities						
Description: This measure provides an indication of the value of information sharing via the Technical Resource for Incident Prevention (TRIPwire) to a diverse array of homeland security stakeholders (federal, state, local, territorial, tribal, and private sector partners) related to IED threats and corresponding preparedness measures. TRIPwire users complete voluntary questionnaires on a quarterly basis rating their satisfaction with the utility of the information provided by TRIPwire. This ensures that TRIPwire’s information sharing capabilities are keeping pace with what users seek and need to support their responsibilities.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	75%	78%	78%	78%
Result:	N/A	N/A	84%	97%	N/A	N/A

Mission 2: Secure and Manage Our Borders

Resources Requested

NPPD resources supporting *Secure and Manage Our Borders* are provided in the table below.

\$ in thousands

Program Name	FY 2016 Revised Enacted		FY 2017 Annualized CR		FY 2018 President’s Budget	
	\$	FTE	\$	FTE	\$	FTE
Office of Biometric Identity Management	118,007	77	117,706	77	109,318	74
Total	118,007	77	117,706	77	109,318	74

Performance Measures

For *Secure and Manage Our Borders*, Management Measures are displayed to provide a more thorough context of expected performance results.

Management Measures

Measure: Average biometric watch list search times for queries from ports of entry (in seconds)						
Description: This measure reports the average response time of biometric watchlist queries processed through the Automated Biometric Identification System (IDENT) system in response to queries from ports of entry (POE) where fingerprints are captured. The target is less than 10 seconds to provide critical watchlist and identity screening information to inspectors in a timely manner to facilitate traveler processing.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	<10	<10	<10	<10	<10	<10
Result:	6.92	6.54	6.32	6.60	N/A	N/A

Measure: Percent of daily travelers referred to additional screening due to false fingerprint matches						
Description: OBIM will measure the percent of travelers whose biometric information are queried through OBIM's biometric matching systems and are referred to secondary screening because of false matches. This will include travelers whose information was incorrectly matched to somebody on a watchlist ("watchlist false accepts") and travelers whose fingerprints were incorrectly matched to other peoples' fingerprints ("finger print 1-1 mismatches"). This information is collected daily by OBIM based on screenings conducted at ports of entry by Customs and Border Protection.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	<=0.32%	<=0.31%	<=0.30%	<=0.20%	<=0.19%	<=0.19%
Result:	0.12%	0.10%	0.10%	0.11%	N/A	N/A

Mission 3: Enforce and Administer Our Immigration Laws

Resources Requested

NPPD resources supporting *Enforce and Administer Our Immigration Laws* are provided in the table below.

\$ in thousands

Program Name	FY 2016 Revised Enacted		FY 2017 Annualized CR		FY 2018 President’s Budget	
	\$	FTE	\$	FTE	\$	FTE
Office of Biometric Identity Management	163,045	84	162,652	84	150,211	80
Total	163,045	84	162,652	84	150,211	80

Performance Measures

For *Enforce and Administer Our Immigration Laws*, Management Measures are displayed to provide a more thorough context of expected performance results.

Management Measures

Measure: Average biometric watch list search times for queries from U.S. consulates (in minutes)						
Description: This measure is used to determine the average amount of time required to complete an automated search processed through the OBIM IDENT system in response to queries from consular offices worldwide where fingerprints are captured as part of the BioVisa form process. The service level agreement with the Department of State is less than 15 minutes to provide critical identity and watch list information in a timely manner to not impede traveler processing. In light of past performance, the program has set a target of processing BioVisa searches within 5 minutes.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	<5	<5	<5	<5	<5	<5
Result:	0.65	1.06	4.05	1.09	N/A	N/A

Mission 4: Safeguard and Secure Cyberspace

Resources Requested

NPPD resources supporting *Safeguard and Secure Cyberspace* are provided in the table below.

\$ in thousands

Program Name	FY 2016 Revised Enacted		FY 2017 Annualized CR		FY 2018 President’s Budget	
	\$	FTE	\$	FTE	\$	FTE
Cybersecurity	774,938	408	784,604	408	966,561	579
Infrastructure Protection	99,090	248	98,240	248	106,648	299
Federal Protective Service	1,744	2	1,784	2	1,826	2
Integrated Operations	71,012	207	73,300	207	84,840	259
Total	946,784	865	957,928	865	1,159,875	1,139

Performance Measures

For *Safeguard and Secure Cyberspace*, two types of performance measures are presented. Strategic Measures represent NPPD measures that gauge achievement for this mission area, and are considered to be our GPRAMA performance measures. Additional Management Measures are displayed, as appropriate, to provide a more thorough context of expected performance results.

Strategic Measures

Measure: Percent of annual risk and vulnerability assessments completed for twenty-three cabinet level agencies and one-third of all non-cabinet level agencies						
Description: This measure assesses how many risk and vulnerability assessments (RVAs) DHS provides each year and compares that result to the total number of targeted Federal, civilian Executive Branch agencies for that year. Each year, DHS will target twenty-three cabinet level agencies and one-third of the remaining 102 Federal, civilian Executive Branch agencies. Therefore, each of the targeted cabinet level agencies will receive an annual RVA, and the other targeted agencies will receive triennial RVAs. DHS leverages cybersecurity assessment methodologies, commercial best practices and threat intelligence integration to conduct the RVAs that enables cybersecurity stakeholders to better develop decision making and risk management guidance.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	50%	60%	80%
Result:	N/A	N/A	N/A	42%	N/A	N/A

Measure: Percent of facilities that are likely to integrate vulnerability assessment or survey information into security and resilience enhancements						
Description: This measure demonstrates the percent of facilities that are likely to enhance their security and resilience by integrating Infrastructure Protection vulnerability assessment or survey information. Providing facilities with vulnerability information allows them to understand and reduce risk of the Nation's critical infrastructure.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	65%	80%	80%	80%	80%
Result:	N/A	89%	90%	90%	N/A	N/A

Measure: Percent of federal, civilian executive branch personnel for whom EINSTEIN intrusion prevention system coverage has been deployed						
Description: This measure gauges the intrusion prevention coverage provided by EINSTEIN 3 Accelerated (E3A) that is currently operating on civilian executive branch networks. E3A has the capacity to both identify and block known malicious traffic. This performance measure assesses the extent to which DHS has deployed at least one E3A countermeasure to protect federal, civilian executive branch Chief Financial Officer (CFO) Act agencies. This measure calculates the percentage of CFO Act personnel that are protected by at least one E3A countermeasure.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	86%	100%	100%
Result:	N/A	N/A	N/A	80%	N/A	N/A

Measure: Percent of incidents detected by the U.S. Computer Emergency Readiness Team for which targeted agencies are notified within 30 minutes						
Description: The United States Computer Emergency Readiness Team (US-CERT) detects malicious cyber activity targeting Federal agencies. This measure assesses the percent of incidents directed at Federal agencies and detected by the US-CERT for which agencies are informed of this malicious activity within 30 minutes. This measure demonstrates the US-CERT's ability to share situational awareness of malicious activity with its Federal agency stakeholders through the EINSTEIN intrusion detection systems and other tools. The numerator for this measure is the number of notifications within 30 minutes and the denominator is the total of incidents detected.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	86%	90%	92%	94%	96%	98%
Result:	89%	87.2%	96.6%	97%	N/A	N/A

Measure: Percent of organizations that have implemented at least one cybersecurity enhancement after receiving a cybersecurity vulnerability assessment or survey						
Description: This measure addresses the extent to which critical infrastructure owners and operators use the results of cybersecurity vulnerability and resiliency assessments to improve their cybersecurity posture. This measure demonstrates the percent of assessed asset owners and operators that are not only developing a better understanding of their cybersecurity posture, but also implementing at least one cybersecurity enhancement to improve that posture.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	50%	55%	60%	100%	100%	100%
Result:	100%	63%	100%	100%	N/A	N/A

Measure: Percent of participating federal, civilian executive branch agencies for which Phase 3 continuous diagnostics and mitigation tools have been delivered to monitor their networks						
Description: This performance measure assesses the extent to which DHS has contractually delivered Continuous Diagnostics and Mitigation (CDM) Phase 3 (event management) services and tools to participating federal civilian executive branch agencies. Once DHS has delivered the tools through contract award, agencies must still take action to deploy and operate CDM on their networks. By making event management available to agencies, they will now be able to more effectively manage coordinated threats to their network.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	N/A	97%	100%
Result:	N/A	N/A	N/A	N/A	N/A	N/A

Measure: Percent of respondents indicating that operational cybersecurity information products provided by DHS are helpful						
Description: This measure assesses whether the products that the DHS National Cybersecurity and Communications Integration Center (NCCIC) provides are helpful for its customers. A customer survey will be used to acquire data on how helpful information provided by the NCCIC is for its stakeholders.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	N/A	78%	78%
Result:	N/A	N/A	N/A	N/A	N/A	N/A

Measure: Percent of respondents reporting that DHS critical infrastructure information will inform their decision making on risk mitigation and resilience enhancements						
Description: This measure will report the percent of critical infrastructure partners who participated in education, training, exercise, and information sharing activities developed or coordinated by the Office of Infrastructure Protection and indicated that the information and products received are useful for informing their risk management programs and influencing future decision-making regarding safety and/or security improvements and/or resilience enhancements at their facilities. Active outreach efforts and effective public-private partnerships on critical infrastructure issues help to reduce risk and increase resilience across the country.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	71%	74%	77%
Result:	N/A	N/A	N/A	92%	N/A	N/A

Measure: Percent of survey respondents that were satisfied or very satisfied with the timeliness and relevance of cyber and infrastructure analysis based products						
Description: The Office of Cyber and Infrastructure Analysis (OCIA) produces infrastructure analytic products for DHS customers to make meaningful risk investment and resource allocation decisions in both crisis and steady state environments in order to reduce the impacts of infrastructure disruptions. In order for our customers to apply the knowledge gained from our products they must have the right information in a timely manner to inform decisions. Survey respondents comment on their level of satisfaction with both timeliness and relevance (two separate questions) of OCIA’s analytic products which, in turn, provides OCIA with feedback that will be used to improve future products. OCIA averages the two responses for one metric. This is relevant to OCIA achieving its mission since the purpose of OCIA’s analytic products are to inform decision-makers. Their feedback matters to the core of OCIA’s purpose and is important to help OCIA gauge its progress toward accomplishing its mission.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	80%	90%	92%
Result:	N/A	N/A	N/A	93%	N/A	N/A

Measure: Percent of traffic monitored for cyber intrusions at civilian Federal Executive Branch agencies						
Description: This measure assesses DHS's scope of coverage for malicious activity across those non-DOD Chief Financial Officers (CFO) Act and Trusted Internet Connection Access Provider (TICAP) Federal Executive Branch civilian agency networks. Federal Executive branch network monitoring uses EINSTEIN 2 intrusion detection system sensors, which are deployed to Trusted Internet Connections locations at agencies or Internet Service Providers. These sensors capture network flow information and provide alerts when signatures, indicative of malicious activity, are triggered by inbound or outbound traffic. The federal government's situational awareness of malicious activity across its systems will increase as more networks are monitored and the methodology will require data normalization to account for the addition of large numbers of networks.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	70%	85%	89%	95%	95%	95%
Result:	82.4%	88.5%	94.3%	98.7%	N/A	N/A

Management Measures

Measure: Percent of malware submissions for which a report is generated within 15 minutes						
Description: This performance measure assesses how quickly the National Cybersecurity and Communications Integration Center analyzes and generates a report for malware submitted through automated processes to the United States Computer Emergency Readiness Team's (US-CERT) Advanced Malware Analysis Center (AMAC).						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	75%	80%	100%	100%	100%
Result:	N/A	94%	100%	100%	N/A	N/A

Measure: Percent of targeted stakeholders participating in National Cyber Exercise and Planning Program cyber exercises per year						
Description: This measure is calculated by dividing the number of cybersecurity exercises per year by 65, which is the number required to exercise each priority stakeholder once every two years. The primary stakeholders, totaling 130, include: all CFO Act Federal Departments and Agencies (24), the 54 States and Territories; members of the 16 critical infrastructure sectors; and members of the International Watch and Warning Network, European Commission, plus two other bilateral countries.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	70%	80%	85%
Result:	N/A	N/A	N/A	94%	N/A	N/A

Mission 5: Strengthen National Preparedness and Resilience

Resources Requested

NPPD resources supporting *Strengthen National Preparedness and Resilience* are provided in the table below.

\$ in thousands

Program Name	FY 2016 Revised Enacted		FY 2017 Annualized CR		FY 2018 President’s Budget	
	\$	FTE	\$	FTE	\$	FTE
Emergency Communications	179,101	103	179,377	103	162,826	108
Total	179,101	103	179,377	103	162,826	108

Performance Measures

Strategic Measures

For *Strengthen National Preparedness and Resilience*, strategic performance measures are presented. Strategic Measures represent measures that gauge achievement for this mission area, and are considered to be our GPRAMA performance measures.

Measure: Percent of calls made by National Security/Emergency Preparedness users during emergency situations that DHS ensured were connected						
Description: This measure gauges the GETS call completion rate. The GETS call completion rate is the percent of calls that a National Security/Emergency Preparedness (NS/EP) user completes via public telephone network, landline, or wireless, to communicate with the intended user/location/system/etc, under all-hazard scenarios. Hazard scenarios include terrorist attacks or natural disasters such as a hurricane or an earthquake.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	100%	100%	97%	97.5%	98%	98.5%
Result:	96.8%	99.3%	99.3%	99%	N/A	N/A
Measure: Percent of States and Territories with operational communications capabilities at the highest levels relative to Threat						

and Hazard Identification and Risk Assessment (THIRA) preparedness targets						
Description: This measure uses the THIRA and State Preparedness Report (SPR) process, conducted by FEMA on an annual basis, to identify the level of Operational Communications capabilities reported by the 56 States and Territories inclusive of applicable Urban Areas. The measure reflects the level of increase or decrease in those capabilities relative to targets established through the THIRA. The result is calculated by identifying the number of States and Territories scoring a “4” or “5” on a 5-point scale where 1 indicates little-to-no capability and 5 indicates that they have all or nearly all of the Operational Communications capabilities required to meet their targets. That number forms the numerator, which is divided by 56 and multiplied by 100 to achieve the percentage.						
Fiscal Year:	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Target:	N/A	N/A	N/A	55%	56%	57%
Result:	N/A	N/A	N/A	55%	N/A	N/A

Mature and Strengthen Homeland Security

Resources Requested

NPPD resources supporting *Mature and Strengthen Homeland Security* are provided in the table below.

\$ in thousands

Program Name	FY 2016 Revised Enacted		FY 2017 Annualized CR		FY 2018 President’s Budget	
	\$	FTE	\$	FTE	\$	FTE
Federal Protective Service	3,770	-	3,770	-	3,770	-
Mission Support	89,995	356	75,590	356	87,517	349
Integrated Operations	47,540	58	47,399	58	45,556	63
Total	141,305	414	126,759	414	136,843	412

Performance Measures

NPPD contributes to this mission, but does not have performance measure in this area.

**National Protection and Programs Directorate
Budget Comparison and Adjustments**
Comparison of Budget Authority and Request
Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Operations and Support	2,275	1,792	\$1,292,747	2,275	1,792	\$1,291,354	2,557	2,085	\$1,455,275	282	293	\$163,921
Procurement, Construction, and Improvements	-	-	\$333,523	-	-	\$332,889	-	-	\$335,033	-	-	\$2,144
Research and Development	-	-	\$6,119	-	-	\$6,107	-	-	\$11,126	-	-	\$5,019
Federal Protective Service	1,481	1,386	\$1,443,449	1,602	1,507	\$1,451,078	1,602	1,507	\$1,476,055	-	-	\$24,977
Total	3,756	3,178	\$3,075,838	3,877	3,299	\$3,081,428	4,159	3,592	\$3,277,489	282	293	\$196,061
Subtotal Discretionary - Appropriation	2,275	1,792	\$1,632,389	2,275	1,792	\$1,630,350	2,557	2,085	\$1,801,434	282	293	\$171,084
Subtotal Discretionary - Offsetting Fee	1,481	1,386	\$1,443,449	1,602	1,507	\$1,451,078	1,602	1,507	\$1,476,055	-	-	\$24,977

The National Protection and Programs Directorate (NPPD) leads the efforts to protect the nation’s critical infrastructure against cyber and physical threats, including terrorist attacks, cyber incidents, natural disasters, and other catastrophic incidents. In support of these activities, the FY 2018 President’s Budget provides \$1.8 billion in discretionary funds, including \$971 million to improve security of U.S. cyber infrastructure through collaboration with public, private, and international partners; \$197 million to protect infrastructure; \$163 million to ensure emergency communications are available to Federal, State, local, tribal, and territorial entities, and \$263 million for the office of Biometric Identity Management. Highlights from the FY 2018 request include:

- \$397 million for the National Cybersecurity Protection System/EINSTIEN to continue deploying new intrusion prevention, information sharing, and analytic capabilities to Federal civilian departments and agencies.
- \$279 million for Continuous Diagnostics and Mitigation (CDM), which will allow DHS and Federal agencies to continuously manage their boundaries, security events, build security into system lifecycles, and enhance data protection.
- \$57 million for Next Generation Networks to maintain the number of wireless carriers deploying Priority Telecommunications Services, enabling the solution to maintain the same coverage across the U.S. regardless of the network technology.
- An additional \$49 million and 56 FTE for the National Cybersecurity and Communications Integration Center to provide additional threat assessment capabilities, support the growth in demand for analytical products and 24x7x365 operational staffing, and maintain readiness to execute national security/emergency preparedness.
- Continued support for Federal Protective Service’s Rapid Protection Force (RPF), a professionally trained and equipped cadre of experienced law enforcement personnel that can respond to heightened threat situations.

National Protection and Programs Directorate
Comparison of Obligations
Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$3,079,054		
Transfers & Reprogrammings	(\$3,000)		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	(\$216)		
Revised Enacted/Request	\$3,075,838	\$3,081,428	\$3,277,489
Carryover and/or Recoveries (Actual/Estimates/Projections)	\$384,501	\$272,722	\$85,422
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$3,460,339	\$3,354,150	\$3,362,911
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$3,460,339	\$3,354,150	\$3,362,911
Obligations (Actual/Projections/Estimates)	\$2,945,586	\$3,049,636	\$1,739,354
Personnel: Positons and FTE			
Enacted/Request Positions	3,756	3,877	4,159
Enacted/Request FTE	3,178	3,299	3,592
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	3,257	3,877	4,159
FTE (Actual/Estimates/Projections)	3,088	3,299	3,592

**National Protection and Programs Directorate
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Operations and Support	2,275	1,792	\$279,466	\$155.92	2,275	1,792	\$288,134	\$160.76	2,557	2,085	\$343,601	\$164.77	282	293	\$55,467	\$4.01
Federal Protective Service	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67
Total	3,756	3,178	\$471,860	\$148.45	3,877	3,299	\$484,376	\$146.8	4,159	3,592	\$548,389	\$152.65	282	293	\$64,013	\$5.85
Discretionary - Appropriation	2,275	1,792	\$279,466	\$155.92	2,275	1,792	\$288,134	\$160.76	2,557	2,085	\$343,601	\$164.77	282	293	\$55,467	\$4.01
Discretionary - Offsetting Fee	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67

* The FTE Rate calculation does not include Object Class 11.8-Special Personal Services Payments or 13.0-Benefits for Former Personnel.

Please refer to Operations and Support (O&S) and Federal Protective Service (FPS) chapters for all personnel compensation and benefits discussion.

Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$320,026	\$328,104	\$372,866	\$44,762
11.3 Other than Full-Time Permanent	\$9,116	\$9,320	\$10,181	\$861
11.5 Other Personnel Compensation	\$26,283	\$26,892	\$28,731	\$1,839
11.8 Special Personal Services Payments	\$58	\$58	\$59	\$1
12.1 Civilian Personnel Benefits	\$116,355	\$119,979	\$136,528	\$16,549
13.0 Benefits for Former Personnel	\$22	\$23	\$24	\$1
Total - Personnel Compensation and Benefits	\$471,860	\$484,376	\$548,389	\$64,013
Positions and FTE				
Positions - Civilian	3,756	3,877	4,159	282
FTE - Civilian	3,178	3,299	3,592	293

**National Protection and Programs Directorate
Non Pay Budget Exhibits**

Non Pay summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Operations and Support	\$1,013,281	\$1,003,220	\$1,111,674	\$108,454
Procurement, Construction, and Improvements	\$333,523	\$332,889	\$335,033	\$2,144
Research and Development	\$6,119	\$6,107	\$11,126	\$5,019
Federal Protective Service	\$1,251,055	\$1,254,836	\$1,271,267	\$16,431
Total	\$2,603,978	\$2,597,052	\$2,729,100	\$132,048
Discretionary - Appropriation	\$1,352,923	\$1,342,216	\$1,457,833	\$115,617
Discretionary - Offsetting Fee	\$1,251,055	\$1,254,836	\$1,271,267	\$16,431

Please refer to O&S, Procurement, Construction, and Improvements (PC&I), and Research and Development (R&D) chapters for all non-pay discussion.

National Protection and Programs Directorate

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$21,417	\$22,869	\$22,101	(\$768)
22.0 Transportation of Things	\$9,837	\$11,740	\$11,506	(\$234)
23.1 Rental Payments to GSA	\$35,693	\$39,088	\$40,187	\$1,099
23.2 Rental Payments to Others	\$2,370	\$2,377	\$2,618	\$241
23.3 Communications, Utilities, and Misc. Charges	\$24,140	\$25,034	\$30,870	\$5,836
24.0 Printing and Reproduction	\$212	\$233	\$232	(\$1)
25.1 Advisory and Assistance Services	\$513,836	\$516,366	\$527,165	\$10,799
25.2 Other Services from Non-Federal Sources	\$1,174,540	\$1,161,720	\$1,260,947	\$99,227
25.3 Other Goods and Services from Federal Sources	\$359,761	\$358,789	\$418,283	\$59,494
25.4 Operation and Maintenance of Facilities	\$5,651	\$5,640	\$6,506	\$866
25.5 Research and Development Contracts	\$8,501	\$8,474	\$6,971	(\$1,503)
25.6 Medical Care	\$3,912	\$3,879	\$4,089	\$210
25.7 Operation and Maintenance of Equipment	\$225,495	\$230,804	\$237,817	\$7,013
25.8 Subsistence & Support of Persons	\$3,301	\$3,241	\$6,630	\$3,389
26.0 Supplies and Materials	\$3,433	\$3,974	\$3,998	\$24
31.0 Equipment	\$164,780	\$166,479	\$110,805	(\$55,674)
32.0 Land and Structures	\$18,400	\$20,726	\$21,184	\$458
41.0 Grants, Subsidies, and Contributions	\$15,390	\$15,350	\$16,921	\$1,571
42.0 Insurance Claims and Indemnities	\$262	\$268	\$270	\$2
94.0 Financial Transfers	\$13,047	\$1	-	(\$1)
Total - Non Pay Object Classes	\$2,603,978	\$2,597,052	\$2,729,100	\$132,048

**National Protection and Programs Directorate
Supplemental Budget Justification Exhibits**

Working Capital Fund

Dollars in Thousands

Appropriation and PPA	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Operations and Support	\$81,518	\$80,136	\$66,627
Mission Support	\$9,718	\$9,533	\$8,663
Cybersecurity	\$31,169	\$30,577	\$23,606
Infrastructure Protection	\$12,538	\$12,301	\$16,978
Emergency Communications	\$5,761	\$5,651	\$7,919
Integrated Operations	\$12,524	\$12,285	\$4,357
Office of Biometric Identity Management	\$9,808	\$9,789	\$5,104
Federal Protective Service	\$19,763	\$13,490	\$11,474
FPS Operations	\$19,763	\$13,490	\$11,474
Total Working Capital Fund	\$101,281	\$93,626	\$78,101

The DHS WCF provides those shared services that the components rely on to execute their missions, such as contracting officers and the DHS-wide IT infrastructure. Funds provided within the Mission Support PPA are used to acquire DHS WCF services, which include: IT services, human resources, and financial systems. The WCF also provides consolidated subscriptions, government-wide mandated services, and DHS crosscutting activities.

National Protection and Programs Directorate Status of Congressionally Requested Studies, Reports and Evaluations

Fiscal Year	Due Date	Reference/Citation	Requirement	Status
FY 2016	2/1/2016	Public Law 114-113 Joint Explanatory Statement, p. 15	Component Obligation Plans – Q1 Obligation plans from each DHS component shall be provided to the Committees within 45 days of the date of enactment of this Act, with updates provided not later than 30 days after the end of each quarter.	Submitted
FY 2016	5/2/2016	Public Law 114-113 Joint Explanatory Statement, p. 15	Component Obligation Plans – Q2 Obligation plans from each DHS component shall be provided to the Committees within 45 days of the date of enactment of this Act, with updates provided not later than 30 days after the end of each quarter.	Submitted
FY 2016	7/30/2016	Public Law 114-113 Joint Explanatory Statement, p. 15	Component Obligation Plans – Q3 Obligation plans from each DHS component shall be provided to the Committees within 45 days of the date of enactment of this Act, with updates provided not later than 30 days after the end of each quarter.	Submitted
FY 2016	10/30/2016	Public Law 114-113 Joint Explanatory Statement, p. 15	Component Obligation Plans – Q4 Obligation plans from each DHS component shall be provided to the Committees within 45 days of the date of enactment of this Act, with updates provided not later than 30 days after the end of each quarter.	Submitted
FY 2016	2/9/2016	Public Law 114-113 Joint Explanatory Statement, p. 60 Senate Report 114-68, p. 101	FPS Strategic Human Capital Plan JES: A provision is included requiring that a strategic human capital plan be submitted with the President's fiscal year 2017 budget proposal. Senate Report: The Committee, as in previous years, includes a provision requiring a strategic human capital plan. It is noted that the first strategic plan was submitted on March 12, 2014, and GAO is currently reviewing it as required in the joint explanatory statement accompanying the Consolidated Appropriations Act, 2014. Should the review be completed and find no outstanding issues before enactment of the fiscal year 2016 act, it is possible the requirement will not need to be continued.	Submitted
FY 2016	2/16/2016	House Report 114-215, p. 78	FPS Certification of Full Funding The Secretary and the Director of OMB shall certify in writing to the Committees, not later than 60 days after the date of enactment of this Act, that the operations of the Federal Protective Service will be fully funded in fiscal year 2016 through revenues and collection of security fees. Should sufficient revenue not be collected to fully fund operations, an expenditure plan is required describing how security risks will be adequately addressed. Within this recommended funding level, FPS shall align staffing resources with mission requirements.	Submitted
FY 2016	3/17/2016	Senate Report 114-68, p. 96	CFATS Implementation Semiannual Report - First Half - FY 2016 The Under Secretary of NPPD is directed to provide a report on the implementation of CFATS to the relevant Committees of jurisdiction on a semiannual basis that includes the number of: facilities covered, inspectors, completed inspections, inspections	Submitted

			completed by region, pending inspections, days inspections are overdue, enforcements resulting from inspections, and enforcements overdue for resolution. This data should be delineated by tier. The first report shall be submitted not later than 90 days after the date of enactment of this act.	
FY 2016	3/17/2016	Senate Report 114-68, p. 98	<p>Enhanced Cybersecurity Services The Enhanced Cybersecurity Services [ECS] program is another DHS-sponsored protection and information sharing capability between selected Commercial Service Providers and validated critical infrastructure companies as well as State and local customers. While the relationship between ECS and the private sector has been utilized since this program began as a pilot in 2010, the addition of State and local partners is relatively new. Since these governments oversee the safety of, and in some cases directly operate elements of the electrical grid, water utilities, public transportation, communications systems, and other key assets, it is critical they have access to the latest tools. The Committee expects NPPD to ensure ECS stakeholders are engaged in the development of requirements and process improvements. Overall, the ECS program must be scalable and integrated with other programs within the Directorate. Not later than 90 days after the date of enactment of this act, NPPD is to report to the Committee on its strategy to integrate State and local stakeholders in the ECS process, develop a strategy to make the ECS program scalable, and the strategic priorities moving forward.</p>	Submitted
FY 2016	3/17/2016	Public Law 114-113 Joint Explanatory Statement, p. 59	<p>Rural Emergency Medical Communications Demonstration Project Of the total provided, \$34,205,000 is for the Office of Emergency Communications (OEC), of which \$2,000,000 is to establish a demonstration project to aid in developing the National Emergency Communications Plan. The demonstration project shall leverage existing technologies and engage non-medical professionals to help establish or sustain statewide medical communications systems and utilize existing infrastructures to improve the delivery of rural medical care. OEC shall submit a plan for establishing this demonstration project to the Committees within 90 days of the date of enactment of this Act.</p>	Submitted
FY 2016	4/16/2016	Senate Report 114-68, p. 100	<p>National Emergency Communications Plan Status Report The Committee notes the publication of the second National Emergency Communications Plan in November 2014. The Plan highlights that the goals of reaching interoperability in specific geographical areas, as set forth in the first Plan (published in 2008), have been completed. Further, the update explains the communications operating environment has changed with new technologies, modernization, and demands from public safety and citizens. Several recommendations and objectives are included in the Plan which is broad-reaching and more complex than the initial plan but it lacks specific timeframes and metrics to evaluate progress. OEC shall provide a report to the Committee no later than 120 days after the date of enactment of this act outlining the measures that will be used to evaluate fulfillment of the goals. Additionally, the report shall include a description of how DHS and OEC work with Federal agencies to ensure</p>	Submitted

			current and future programs such as FEMA preparedness grants, FirstNet, and other programs work together to meet the needs of national emergency communications.	
FY 2016	11/29/2016	Senate Report 114-68, p. 96	CFATS Implementation Semiannual Report - Second Half - FY 2016 The Under Secretary of NPPD is directed to provide a report on the implementation of CFATS to the relevant Committees of jurisdiction on a semiannual basis that includes the number of: facilities covered, inspectors, completed inspections, inspections completed by region, pending inspections, days inspections are overdue, enforcements resulting from inspections, and enforcements overdue for resolution. This data should be delineated by tier. The first report shall be submitted not later than 90 days after the date of enactment of this act.	Submitted
FY 2016	3/31/2017	Public Law 114-113 Joint Explanatory Statement, p. 56 Senate Report 114-68, p. 83	Three-Year Strategic Plan for Assessment Programs JES: As described in the Senate report, \$1,500,000 is provided above the request for the Office of Infrastructure Protection and the Office of Cyber Infrastructure and Analysis to develop and submit a three-year strategic plan to guide vulnerability assessments, analytic assessments, and the Regional Resiliency Assessment Program. The plan will guide this suite of programs with a focus on comprehensive assessments of critical lifeline infrastructure dependencies and interdependencies, assisting FEMA in risk assessments that support grant allocation decisions, and enhancing state and local preparedness and resiliency. Included shall be a set of performance metrics against which effectiveness can be measured and reported to Congress on an annual basis. Senate Report: Through the Infrastructure Analysis and Planning PPA, NPPD manages a suite of assessment programs including analytic assessments, vulnerability assessments, and the Regional Resiliency Assessment Program [RRAP]... Therefore, the Committee includes an additional \$1,500,000 and directs IP to develop and submit a 3-year strategic plan that will guide this suite of programs with a specific, priority focus on completing comprehensive assessments of critical lifeline infrastructure dependencies and interdependencies; how to assist FEMA in planning assumptions and support grant allocations including development of the Threat Hazard Identification and Risk Assessments [THIRA]; and enhance the ability of State and local officials to understand and address the physical consequences of a cyber-event. The plan shall outline a process by which IP will conduct a comprehensive assessment in at least 10 of the Urban Area Security Initiative regions. This strategic plan shall include a detailed set of performance metrics against which program effectiveness can be measured and reported to Congress on an annual basis.	With Component

**National Protection and Programs Directorate
Authorized/Unauthorized Appropriations**

Dollars in Thousands

Budget Activity	Last year of Authorization	Authorized Level	Appropriation in Last Year of Authorization	FY 2018 President's Budget
	Fiscal Year	Amount	Amount	Amount
Operations and Support	N/A	N/A	N/A	\$1,455,275
Mission Support				\$87,517
Cybersecurity				\$720,557
Infrastructure Protection				\$187,955
Emergency Communications				\$113,921
Integrated Operations				\$125,896
Biometric Identity Management				\$219,429
Procurement, Construction, and Improvements	N/A	N/A	N/A	\$335,033
Cybersecurity				\$241,309
Infrastructure Protection				\$4,219
Emergency Communications				\$48,905
Integrated Operations Assets and Infrastructure				\$500
Biometric Identity Management				\$40,100
Research and Development	N/A	N/A	N/A	\$11,126
Cybersecurity				\$4,695
Infrastructure Protection				\$2,431

Integrated Operations R&D				\$4,000
Federal Protective Service	N/A	N/A	N/A	\$1,476,055
Federal Protective Service Operations				\$360,079
Countermeasures				\$1,115,976
Total Direct Authorization/Appropriation	N/A	N/A	N/A	\$1,801,434
Fee Accounts				\$1,476,055

National Protection and Programs Directorate Proposed Legislative Language

Operation and Support

For necessary expenses [for]of the National Protection and Programs Directorate *for operations and support*, as authorized by title II of the Homeland Security Act of 2002 (6 U.S.C. 121 et seq.), [including minor procurements, construction and improvements, \$1,152,502,000]\$1,455,275,000, of which [\$12,993,000]\$8,912,000 shall remain available until September 30, [2018]2019: *Provided*, That not to exceed \$3,825 shall be for official reception and representation expenses.

Language Provision	Explanation
[for]of the National Protection and Programs Directorate <i>for operations and support</i>	Updated language for consistency.
[including minor procurements, construction and improvements, 1,152,502,000]\$1,455,275,000	Removed unnecessary language for consistency. Dollar change.
[\$12,993,000]\$8,912,000	Dollar change only.
[2018]2019; <i>Provided</i> ,	Updated period of availability.

Procurement, Construction, and Improvements

For [the procurement, construction, and improvement] *necessary* expenses of the National Protection and Programs Directorate, as authorized by title II of the Homeland Security Act of 2002 (6 U.S.C. 121 et seq.), *for procurement, construction, and improvements*, [\$436,797,000]\$335,033,000[,]; *of which \$294,933,000 shall [to] remain available until September 30, [2018]2019; and of which \$40,100,000 shall remain available until September 30, 2020.*

Language Provision	Explanation
[the procurement, construction, and improvement] <i>necessary</i>	Updated language for consistency.
<i>for procurement, construction, and improvements</i> ,	Updated language for consistency.
[\$436,797,000]\$335,033,000	Dollar change only.
<i>of which \$294,933,000 shall [to] remain available until September 30, [2018]2019</i>	Updated period of availability.

<i>and of which \$40,100,000 shall remain available until September 30, 2020.</i>	Added language for Biometric Identity Management funds that were requested in CBP budget in FY 2017.
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Research and Development

For [research and development] *necessary* expenses of the National Protection and Programs Directorate, as authorized by the Homeland Security Act of 2002 (6 U.S.C. 121 et seq.) *for research and development*, [\$4,469,000]*\$11,126,000*, to remain available until September 30, [2018]*2019*.

Language Provision	Explanation
[research and development] <i>necessary</i>	Updated language for consistency.
<i>for research and development</i>	Updated language for consistency.
[\$4,469,000] <i>\$11,126,000</i>	Dollar change only.
[2018] <i>2019</i> .	Updated period of availability.

Federal Protective Service

The revenues and collections of security fees credited to this account shall be available until expended for necessary expenses related to the protection of federally owned and leased buildings and for the operations of the Federal Protective Service.

Language Provision	Explanation
N/A	No Changes.

Department of Homeland Security
National Protection and Programs Directorate
Operations and Support



Fiscal Year 2018
Congressional Justification

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Operations and Support
Budget Comparison and Adjustments
Comparison of Budget Authority and Request
Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Mission Support	418	356	\$89,995	418	356	\$75,590	435	349	\$87,517	17	(7)	\$11,927
Cybersecurity	603	408	\$583,735	603	408	\$593,765	743	579	\$720,557	140	171	\$126,792
Infrastructure Protection	624	499	\$184,662	624	499	\$185,641	681	573	\$187,955	57	74	\$2,314
Emergency Communications	126	103	\$100,551	126	103	\$100,976	137	108	\$113,921	11	5	\$12,945
Integrated Operations	334	265	\$118,552	334	265	\$120,699	391	322	\$125,896	57	57	\$5,197
Office of Biometric Identity Management	170	161	\$215,252	170	161	\$214,683	170	154	\$219,429	-	(7)	\$4,746
Total	2,275	1,792	\$1,292,747	2,275	1,792	\$1,291,354	2,557	2,085	\$1,455,275	282	293	\$163,921
Subtotal Discretionary - Appropriation	2,275	1,792	\$1,292,747	2,275	1,792	\$1,291,354	2,557	2,085	\$1,455,275	282	293	\$163,921

*FTE reported in this table differ from MAX A-11 due to adjusted Prior Year (PY) totals and Current Year (CY) estimates reported at a later date than the MAX A-11 PY and CY lock dates.

Overview

NPPD requests \$1.5 billion and 2,557 Positions/2,085 FTE for the Operations & Support appropriation.

The NPPD Operations & Support (O&S) appropriation funds NPPD core operations to enhance the security and resilience of infrastructure against terrorist attacks, cyber events, natural disasters, and other large-scale incidents. Secure and resilient infrastructure is essential for national security, economic vitality, and public health and safety. Critical infrastructure security and resilience efforts must address all hazards—from terrorism and other criminal activities to natural disasters and cyber threats.

The O&S appropriation funds the costs of necessary operations, mission support, and associated management and administration to execute these programs. Activities are organized according to the following program/project/activity (PPA) structure:

- **Mission Support:** The Mission Support program provides enterprise leadership, management, and business administrative services that sustain the day-to-day management and back office operations. Key capabilities include conducting agency planning and performance management, managing finances, managing agency workforce, providing physical and personnel security, acquiring goods and services, managing information technology, managing agency property and assets, managing legal affairs, and providing general management and administration.

- **Cybersecurity:** The Cybersecurity program advances computer security preparedness and the response to cyberattacks and incidents. The program includes activities to secure the federal network, respond to incidents, disseminate actionable information, and collaborate with private sector partners to secure critical infrastructure. This program supports the implementation of government-wide deployment of hardware and software systems to prevent and detect incidents, response to incidents at federal and private entities, and collaboration with the private sector to increase the security and resiliency of critical networks. The program also coordinates cybersecurity education for the federal workforce.
- **Infrastructure Protection:** The Infrastructure Protection program leads and coordinates national programs and policies on critical infrastructure security and resilience and develops strong partnerships across government and the private sector. The program conducts and facilitates vulnerability and consequence assessments to help critical infrastructure owners and operators and state, local, tribal, and territorial partners understand and address risks to critical infrastructure. Additionally, it provides information on emerging threats and hazards and offers tools and training to partners to help them manage risks to critical infrastructure.
- **Emergency Communications:** The Emergency Communications program is responsible for advancing the Nation's interoperable emergency communications capabilities to enable first responders and government officials to continue to communicate in the event of disasters.
- **Integrated Operations:** The Integrated Operations program ensures domain awareness through the sustainment of command and control, coordination, information sharing, and situational awareness in support of multiple mission programs. This program includes various organizations that carry out functions such as consequence analysis, decision support and modeling, 24x7 critical infrastructure watch operations, continuity of operations, stakeholder engagement, external affairs, privacy, and policy development, implementation, and strategic planning.
- **Office of Biometric Identity Management:** The Office of Biometric Identity Management provides biometric identification services to help federal, state, and local government partners to accurately identify people they encounter to determine if they pose a risk to the U.S. This program supplies the technology for collecting and storing biometric data. The program shares information, provides analyses, updates watchlists, and ensures the integrity of the data.

Operations and Support Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$1,295,963		
Transfers & Reprogrammings	(\$3,000)		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	(\$216)		
Revised Enacted/Request	\$1,292,747	\$1,291,354	\$1,455,275
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$1,292,747	\$1,291,354	\$1,455,275
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$1,292,747	\$1,291,354	\$1,455,275
Obligations (Actual/Projections/Estimates)	\$1,291,297	\$1,290,044	\$1,453,424
Personnel: Positions and FTE			
Enacted/Request Positions	2,275	2,275	2,557
Enacted/Request FTE	1,792	1,792	2,085
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	1,776	2,275	2,557
FTE (Actual/Estimates/Projections)	1,702	1,792	2,085

Operations and Support
Summary of Budget Changes
Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	2,275	1,792	\$1,295,963
TSA Transfer	-	-	(\$3,000)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$3,000)
FY16 Rescission	-	-	(\$216)
Total Rescissions	-	-	(\$216)
FY 2016 Revised Enacted	2,275	1,792	\$1,292,747
FY 2017 Annualized CR	2,275	1,792	\$1,291,354
FY 2018 Base Budget	2,275	1,792	\$1,291,354
Transfer of CDM from PC&I to O&S to align budget to CAS policy	-	-	\$31,011
Transfer of I.A. from O&S to PC&I Aligning Budget with CAS Policy	-	-	(\$500)
Transfer of NGN-PS from PC&I to O&S Aligning Budget with CAS Policy	-	-	\$5,980
Transfer to USM/CHCO from OBIM due to CHCO WCF Activity Costs Removal	-	-	(\$5)
Transfer to USM/CIO from OBIM due to CIO WCF Activity Costs Removal	-	-	(\$1)
Transfer to USM/CRSO from OBIM due to CRSO WCF Activity Costs Removal	-	-	(\$74)
Transfer to USM/CSO from OBIM due to CSO WCF Activity Costs Removal	-	-	(\$9)
Transfers of NISAC from O&S to R&D to Align Budget with CAS Policy	-	-	(\$4,000)
Total Transfers	-	-	\$32,402
2018 Pay Raise	-	-	\$4,108
Annualization of 2017 Pay Raise	-	-	\$1,511
Balanced Workforce Adjustment FTP/FTE - Salaries and Benefits	42	37	\$6,130
Rightsize FTP/FTE & Salaries and Benefits	(8)	137	\$25,871
Total, Pricing Increases	34	174	\$37,620
Adjust for Acquisition O&M	-	-	(\$25,040)
Balanced Workforce Adjustment Program	-	-	(\$6,159)
Efficiency to Program	-	-	(\$10,996)
Total, Pricing Decreases	-	-	(\$42,195)
Total Adjustments-to-Base	34	174	\$27,827

Budget Formulation Activity	Positions	FTE	Amount
FY 2018 Current Services	2,309	1,966	\$1,319,181
CDM O&M for partner Federal agencies	-	-	\$52,000
Counterterrorism and IP	-	-	\$3,423
Expand Operations in Field	47	26	\$8,221
Operation Coordination & Mission Support	75	43	\$20,632
Priority Communications	-	-	\$366
Proactive Cyber Protection	126	50	\$51,452
Total, Program Increases	248	119	\$136,094
FY 2018 Request	2,557	2,085	\$1,455,275
FY 2017 TO FY 2018 Change	282	293	\$163,921

Operations and Support Justification of Pricing Changes

Dollars in Thousands

Pricing Changes	FY 2018 President's Budget		
	Positions	FTE	Amount
Pricing Change 1 - 2018 Pay Raise	-	-	\$4,108
Mission Support	-	-	\$778
Cybersecurity	-	-	\$1,061
Cyber Readiness and Response	-	-	\$576
NCCIC Operations	-	-	\$338
NCCIC Planning and Exercises	-	-	\$238
Cyber Infrastructure Resilience	-	-	\$40
Cybersecurity Advisors	-	-	\$18
Enhanced Cybersecurity Services	-	-	\$7
Cybersecurity Education & Awareness	-	-	\$15
Federal Cybersecurity	-	-	\$445
Federal Network Resilience	-	-	\$96
Continuous Diagnostics and Mitigation	-	-	\$59
National Cybersecurity Protection System	-	-	\$290
Infrastructure Protection	-	-	\$1,072
Infrastructure Capacity Building	-	-	\$593
Sector Risk Management	-	-	\$215
Protective Security Advisors	-	-	\$237
Bombing Prevention	-	-	\$38
Infrastructure Information and Sensitive Data Protection	-	-	\$103
Infrastructure Security Compliance	-	-	\$479
Emergency Communications	-	-	\$245
Emergency Communications Preparedness	-	-	\$184
Priority Telecommunications Services	-	-	\$61
GETS/WPS/SRAS/TSP	-	-	\$36
Next Generation Networks Priority Services	-	-	\$25
Integrated Operations	-	-	\$630
Cyber and Infrastructure Analysis	-	-	\$195
Infrastructure Analysis	-	-	\$195
Critical Infrastructure Situational Awareness	-	-	\$78
Stakeholder Engagement and Requirements	-	-	\$230
Strategy, Policy, and Plans	-	-	\$127

Pricing Changes	FY 2018 President's Budget		
	Positions	FTE	Amount
Office of Biometric Identity Management	-	-	\$322
Identity and Screening Program Operations	-	-	\$322
Pricing Change 2 - Adjust for Acquisition O&M	-	-	(\$25,040)
Cybersecurity	-	-	(\$31,206)
Federal Cybersecurity	-	-	(\$31,206)
Continuous Diagnostics and Mitigation	-	-	\$3,580
National Cybersecurity Protection System	-	-	(\$34,786)
Emergency Communications	-	-	\$712
Priority Telecommunications Services	-	-	\$712
GETS/WPS/SRAS/TSP	-	-	\$912
Next Generation Networks Priority Services	-	-	(\$200)
Office of Biometric Identity Management	-	-	\$5,454
IDENT/Homeland Advanced Recognition Technology Operations and Maintenance	-	-	\$5,454
Pricing Change 3 - Annualization of 2017 Pay Raise	-	-	\$1,511
Mission Support	-	-	\$287
Cybersecurity	-	-	\$390
Cyber Readiness and Response	-	-	\$213
NCCIC Operations	-	-	\$125
NCCIC Planning and Exercises	-	-	\$88
Cyber Infrastructure Resilience	-	-	\$14
Cybersecurity Advisors	-	-	\$6
Enhanced Cybersecurity Services	-	-	\$3
Cybersecurity Education & Awareness	-	-	\$5
Federal Cybersecurity	-	-	\$163
Federal Network Resilience	-	-	\$35
Continuous Diagnostics and Mitigation	-	-	\$21
National Cybersecurity Protection System	-	-	\$107
Infrastructure Protection	-	-	\$394
Infrastructure Capacity Building	-	-	\$218
Sector Risk Management	-	-	\$79
Protective Security Advisors	-	-	\$87
Bombing Prevention	-	-	\$14
Infrastructure Information and Sensitive Data Protection	-	-	\$38
Infrastructure Security Compliance	-	-	\$176
Emergency Communications	-	-	\$91
Emergency Communications Preparedness	-	-	\$68
Priority Telecommunications Services	-	-	\$23
GETS/WPS/SRAS/TSP	-	-	\$13

Pricing Changes	FY 2018 President's Budget		
	Positions	FTE	Amount
Next Generation Networks Priority Services	-	-	\$10
Integrated Operations	-	-	\$231
Cyber and Infrastructure Analysis	-	-	\$72
Infrastructure Analysis	-	-	\$72
Critical Infrastructure Situational Awareness	-	-	\$29
Stakeholder Engagement and Requirements	-	-	\$84
Strategy, Policy, and Plans	-	-	\$46
Office of Biometric Identity Management	-	-	\$118
Identity and Screening Program Operations	-	-	\$118
Pricing Change 4 - Balanced Workforce Adjustment FTP/FTE - Salaries and Benefits	42	37	\$6,130
Mission Support	1	1	\$171
Infrastructure Protection	39	35	\$5,789
Infrastructure Capacity Building	19	16	\$2,349
Sector Risk Management	9	7	\$1,271
Protective Security Advisors	10	9	\$1,078
Infrastructure Security Compliance	20	19	\$3,440
Integrated Operations	2	1	\$170
Strategy, Policy, and Plans	2	1	\$170
Pricing Change 5 - Balanced Workforce Adjustment Program	-	-	(\$6,159)
Infrastructure Protection	-	-	(\$6,159)
Infrastructure Capacity Building	-	-	(\$2,319)
Sector Risk Management	-	-	(\$1,241)
Protective Security Advisors	-	-	(\$1,078)
Infrastructure Security Compliance	-	-	(\$3,840)
Pricing Change 6 - Efficiency to Program	-	-	(\$10,996)
Mission Support	-	-	(\$3,463)
Cybersecurity	-	-	(\$3,724)
Cyber Readiness and Response	-	-	(\$3,724)
NCCIC Operations	-	-	(\$3,724)
Infrastructure Protection	-	-	(\$1,561)
Infrastructure Capacity Building	-	-	(\$51)
Sector Risk Management	-	-	(\$687)
Protective Security Advisors	-	-	\$658
Infrastructure Information and Sensitive Data Protection	-	-	(\$22)
Infrastructure Security Compliance	-	-	(\$1,510)
Integrated Operations	-	-	(\$2,248)
Critical Infrastructure Situational Awareness	-	-	(\$48)
Stakeholder Engagement and Requirements	-	-	(\$2,200)

Pricing Changes	FY 2018 President's Budget		
	Positions	FTE	Amount
Pricing Change 7 - Rightsize FTP/FTE & Salaries and Benefits	(8)	137	\$25,871
Mission Support	(8)	(23)	(\$2,410)
Cybersecurity	-	113	\$20,748
Cyber Readiness and Response	-	36	\$6,175
NCCIC Operations	-	13	\$2,288
NCCIC Planning and Exercises	-	23	\$3,887
Cyber Infrastructure Resilience	-	15	\$2,681
Cybersecurity Advisors	-	7	\$1,393
Enhanced Cybersecurity Services	-	4	\$604
Cybersecurity Education & Awareness	-	4	\$684
Federal Cybersecurity	-	62	\$11,892
Federal Network Resilience	-	16	\$3,152
National Cybersecurity Protection System	-	46	\$8,740
Infrastructure Protection	-	29	\$4,845
Infrastructure Capacity Building	-	25	\$4,241
Sector Risk Management	-	14	\$2,338
Protective Security Advisors	-	6	\$1,098
Infrastructure Information and Sensitive Data Protection	-	5	\$805
Infrastructure Security Compliance	-	4	\$604
Emergency Communications	-	(1)	(\$172)
Emergency Communications Preparedness	-	(1)	(\$172)
Integrated Operations	-	26	\$4,008
Cyber and Infrastructure Analysis	-	26	\$3,978
Infrastructure Analysis	-	26	\$3,978
Critical Infrastructure Situational Awareness	-	1	\$174
Stakeholder Engagement and Requirements	-	(5)	(\$884)
Strategy, Policy, and Plans	-	4	\$740
Office of Biometric Identity Management	-	(7)	(\$1,148)
Identity and Screening Program Operations	-	(7)	(\$1,148)
Total Pricing Changes	34	174	(\$4,575)

Justification of Pricing Changes:

2018 Pay Raise: 2018 pay increase of 1.9%, totaling \$4.1 million.

Adjustment for Acquisition O&M: Adjustments to align funding with the planned acquisition profiles for FY 2018.

Annualization of 2017 Pay Raise: Annualizes the 2017 pay increase of 2.1%, totaling \$1.5 million.

Balanced Workforce Adjustment Positions/FTE - Salaries and Benefits: Salaries and benefits adjustments to hire Federal employees to perform functions previously performed by contractors that have been adjudged to be more appropriately carried out by Federal employees.

Balanced Workforce Adjustment Positions/FTE - Program: Adjustments to program funding to account for contract reductions associated with the hiring of Federal employees to perform functions previously performed by contractors that have been adjudged to be more appropriately carried out by Federal employees.

Operational Efficiencies: NPPD is proposing a range of programmatic adjustments to implement measures to increase operational efficiency and eliminate duplication or unnecessary programmatic expenses. These include US-CERT efficiency, IP facilities efficiency, process improvements efficiencies, training contract efficiencies, partnership engagement efficiencies, purchase card efficiencies and other operational efficiencies.

Rightsize Positions/FTE & Salaries and Benefits: Adjustments to salary and benefits based on actual current hiring projections and historical execution ensuring that all FTE counts are fully funded and attainable. NPPD has made a concerted effort in this budget request to ensure that all positions were fully funded. In some cases, because of historical position levels displayed in previous budget requests, salaries and benefits funding and FTE levels were insufficient to attain the positions requested. In those cases, increases were included to rightsize the salaries and benefits funding and FTE levels. Additionally, in any cases where FTE levels were unattainable based on the existing hiring projections, those FTE were reduced to appropriate levels.

Operations and Support
Justification of Program Changes
Dollars in Thousands

Program Changes	FY 2018 President's Budget		
	Positions	FTE	Amount
Program Change 1 - CDM O&M for partner Federal agencies	-	-	\$52,000
Cybersecurity	-	-	\$52,000
Federal Cybersecurity	-	-	\$52,000
Continuous Diagnostics and Mitigation	-	-	\$52,000
Program Change 2 - Counterterrorism and IP	-	-	\$3,423
Infrastructure Protection	-	-	\$3,423
Infrastructure Capacity Building	-	-	\$3,423
Sector Risk Management	-	-	\$2,858
Bombing Prevention	-	-	\$565
Program Change 3 - Expand Operations in Field	47	26	\$8,221
Cybersecurity	14	8	\$5,060
Cyber Infrastructure Resilience	14	8	\$5,060
Cybersecurity Advisors	14	8	\$5,060
Infrastructure Protection	17	9	(\$2,147)
Infrastructure Capacity Building	17	9	\$815
Protective Security Advisors	17	9	\$815
Infrastructure Security Compliance	-	-	(\$2,962)
Emergency Communications	11	6	\$5,723
Emergency Communications Preparedness	11	6	\$5,723
Integrated Operations	5	3	(\$415)
Stakeholder Engagement and Requirements	5	3	(\$415)
Program Change 4 - Operation Coordination & Mission Support	75	43	\$20,632
Mission Support	24	15	\$16,653
Infrastructure Protection	1	1	(\$3,342)
Infrastructure Capacity Building	1	1	(\$3,342)
Infrastructure Information and Sensitive Data Protection	1	1	(\$3,342)
Integrated Operations	50	27	\$7,321
Cyber and Infrastructure Analysis	38	21	(\$20)
National Infrastructure Simulation Analysis Center (NISAC)	-	-	(\$5,657)
Infrastructure Analysis	38	21	\$5,637
Critical Infrastructure Situational Awareness	12	6	\$7,341
Program Change 5 - Priority Communications	-	-	\$366

Program Changes	FY 2018 President's Budget		
	Positions	FTE	Amount
Emergency Communications	-	-	\$366
Priority Telecommunications Services	-	-	\$366
GETS/WPS/SRAS/TSP	-	-	\$366
Program Change 6 - Proactive Cyber Protection	126	50	\$51,452
Cybersecurity	126	50	\$51,452
Cyber Readiness and Response	67	20	\$45,999
NCCIC Operations	43	7	\$30,335
NCCIC Planning and Exercises	24	13	\$15,664
Cyber Infrastructure Resilience	-	-	(\$7,905)
Cybersecurity Education & Awareness	-	-	(\$7,905)
Federal Cybersecurity	59	30	\$13,358
Federal Network Resilience	35	18	\$11,388
Continuous Diagnostics and Mitigation	24	12	\$1,970
Total Program Changes	248	119	\$136,094

Program Change

Continuous Diagnostics and Mitigation (CDM) O&M for Partner Federal Agencies, \$52.0 million, 0 Positions/0 FTE

Description

NPPD requests the following program increases:

1. CDM O&M for Partner Federal Agencies, \$52.0 million, 0 Positions/0 FTE

Justification

Increases:

- **CDM O&M for Partner Federal Agencies:** The additional resources will support Federal Department and Agencies’ Phase 1 product license maintenance costs and associated integration costs in FY 2018. In addition, funding will support contracts, to include Blanket Purchase Agreement (BPA) fees unaccounted for in the FY 2017 Continuing Resolution (CR) amount; follow-on contracts to continue Dashboard integration and evolution, building on value gained from existing CDM Phase 1 investments; and providing full endpoint protection for Phase 1 agencies. The additional resources will assist with CDM’s deployment and implementation schedule and coverage to Federal Departments and Agencies. In addition to funding the “must fund” Phase 1 Task Order contract options, CDM will cover the unforeseen expenses for unreported Agency assets.

Performance

Increases:

- **CDM O&M for Partner Federal Agencies:** The additional funds will allow agencies who participated in CDM Phase 1 to ensure continued license support for the endpoint management tools they received. These tools enable Federal departments and agencies to assist in properly identifying, configuring and managing IT assets, reducing their vulnerability to attack. These funds will assist with CDM integrations activities, such as follow-on licensing costs and to resume the phased deployment schedule largely caused by widespread Federal departments and agencies under-reporting of assets.

Program Change:

Counterterrorism and Infrastructure Protection: Sector Risk Management, \$2.9 million, 1 Position/1 FTE

Description

NPPD requests the following program increases:

1. Technology Development & Deployment Program, \$0.1 million
2. PNT Coordination, \$4.1 million
3. IT Security (ISC-CS), \$0.6 million

NPPD requests the following program decreases:

1. Technical Assistance Analytical Products, (\$1.1 million)
2. Daily Open Source Infrastructure Report, (\$0.8 million)

Justification

Increases:

- **Technology Development & Deployment Program:** This request will provide personnel to enhance the protection and resilience of critical infrastructure. The requested FTE will manage a unique contracting vehicle to pursue new innovative technologies for rapid deployment through a competition that will identify projects devised to solve resilient design challenges, develop tools to support infrastructure investment decisions, and create products that can aid in detecting malicious activity.
- **PNT Coordination:** DHS has become increasingly involved in Position, Navigation, and Timing (PNT) due to the centrality of Global Positioning System (GPS) on the operation of critical infrastructure and the relative gap in federal governance in this area. Currently, funding is focused on a comprehensive study of infrastructure PNT requirements and outreach to manufacturers of PNT equipment to ensure enhanced security. Diverting current limited funds away from infrastructure focused efforts to support the interagency policy and coordination efforts would significantly curtail nascent efforts to partner with industry to better

secure GPS and prepare for a potential PNT outage. (Note that GPS is the U.S. system that provides PNT).

- **IT Security (ISC-CS):** The additional funding of \$0.2M would enable NPPD to contract a dedicated Information System Security Office (ISSO) for the Interagency Security Committee -Compliance System (ISC-CS) effort to ensure that the system will fully meet the needs of DHS and NPPD's security requirements. The Interagency Security Committee – Compliance System Application will provide DHS with the ability to monitor and analyze compliance of the ISC policies for agencies housed in non-military Federal facilities, including leased facilities, per existing authority under Executive Order 12977. Federal users will have the ability to leverage other existing data sources, such as leasing data bases, in order to reduce data entry and validate both headquarters and facility level metrics for their agency. The ISC-CS will provide the method to collect and analyze data, produce reports and metrics, and analyze established benchmarks for DHS, ISC member agencies and system users. The ISSO would be responsible for ensuring the implementation and maintenance of security controls in accordance with the ISC-CS Security Plan (SP) and Department of Homeland Security (DHS) policies. Further, the ISSO would provide guidance, oversight, and expertise to NPPD and the ISC-CS team to develop security documents and implement applicable security controls. The remaining funds of \$0.4M would also ensure that IP is able to obtain contract support to properly meet the Certification and Accreditation (C&A) process. Through the C&A process, the ISSO would work with the Information Systems Security Manager (ISSM) to ensure the system documentation/architecture is ready for the security compliance assessment and is successful at obtaining an Authority to Operate (ATO).

Decreases:

- **Technical Assistance Analytical Products:** The reduction will eliminate the analytical support required for development of implementation roadmaps for six critical infrastructure sectors: Chemical; Commercial Facilities; Critical Manufacturing; Dams; Emergency Services; and Nuclear Reactors, Materials, and Waste Sectors. While there is value to these analytical products, NPPD and IP are actively seeking internal efficiencies to enable funding to be available to emerging high priority issues.
- **Daily Open Source Infrastructure Report:** This reduction eliminates the research, production, and writing support services of the Open Source Infrastructure Report. While there is value to these analytical products, NPPD and IP are actively seeking internal efficiencies to enable funding to be available to emerging high priority issues.

Performance

Increases:

- **Technology Development & Deployment Program:** The additional resources will give NPPD the flexibility to connect with private sector counterparts to conduct and coordinate cutting edge critical infrastructure community-based research and technology development without employing the formal, lengthy standard Federal procurement processes. The planned competition will promote technology transfer and commercialization of products for the critical infrastructure community. Prototypes identified through this process can then be brought to market and disseminated broadly to support the critical infrastructure community. At

present, NPPD has minimal capacity to build the legal framework and expand the outreach network necessary to connect customers to TDDP projects.

- **PNT Coordination:** Obtaining these additional funds will allow DHS to initiate several efforts to enhance the resiliency of critical infrastructure that relies on PNT capabilities. These include completion of requirements development and an Analysis of Alternatives (AoA) to meet the FY 2017 National Defense Authorization Act (NDDA) requirement; increasing vulnerability awareness for manufacturers and users; developing security standards for PNT receivers; effectively monitoring GPS disruptions; and working with the interagency and private sector partners for implementing the results of the 2017 NDAA studies which will minimize the likelihood of a major PNT outage, which would otherwise have major economic consequences. . NPPD requires these funds to meet the NDAA requirements and conduct other activities to secure the Nation’s vital PNT capabilities. Technological advances, such as the implementation of 5G wireless capabilities, will continue to be hampered by the lack of a reliable, alternate timing source; or industries will field systems without an alternate source which will introduce significant risk into the infrastructure.
- **IT Security (ISC-CS):** Not funding a dedicated ISSO could leave ISC-CS vulnerable or the system operating a less than optimal state as the part time ISSO remains subject to multi-tasking and task saturation.

Decreases:

- **Technical Assistance Analytical Products:** NPPD expects minimal impact as enhancement to situational awareness and partnership building will mitigate much of the risk through programmatic efficiencies and improvements
- **Daily Open Source Infrastructure Report:** NPPD expects minimal impact as enhancements to situational awareness and partnership building will mitigate much of the risk through increased information sharing. Additionally, critical infrastructure partners will be able to access the information from other open sources.
-

Program Change

Counterterrorism and IP #2: Bombing Prevention, \$0.6, 0 Positions/0 FTE

Description

NPPD requests the following program increases:

1. IT Security, \$0.6 million

Justification

Increases:

- **IT Security:** Of the requested \$0.6 million, additional funding of \$0.2 million would enable NPPD to acquire a dedicated

ISSO for the CSAT modernization effort to ensure that the upgraded TRIPwire system will fully meet the needs of DHS and NPPD's growing security requirements. TRIPwire is DHS's secure and unclassified online Counter-IED (C-IED) information sharing platform for Federal, SLTT, and private sector officials, such as bomb technicians, first responders, military personnel, intelligence analysts, and security professionals. The information provided through TRIPwire increases awareness of evolving IED tactics, techniques, and procedures, as well as incident lessons learned and C-IED preparedness information. TRIPwire combines expert analyses and reports with relevant documents, images, and videos gathered directly from terrorist source materials to help users understand risks to their communities and to prepare for and prevent IED incidents. The ISSO would be responsible for ensuring the implementation and maintenance of security controls in accordance with the TRIPwire Security Plan (SP) and DHS policies. Further, the ISSO would provide guidance, oversight, and expertise to NPPD and the TRIPwire modernization team to develop security documents and implement applicable security controls. Receiving the additional \$0.4M will provide IP the contract support needed to obtain the Certification and Accreditation (C&A) process. Through the C&A process, the ISSO would work with the Information Systems Security Manager (ISSM) to ensure the system documentation/architecture is ready for the security compliance assessment and is successful at obtaining an Authority to Operate (ATO).

Performance

Increases:

Bombing Prevention: Not funding a dedicated ISSO could leave TRIPwire vulnerable or the system operating a less than optimal state as the part time ISSO remains subject to multi-tasking and task saturation.

Program Change

Expand Operations in Field #1: Cybersecurity Advisors, \$5.1 million, 14 Positions/8 FTE

Description

NPPD requests the following program increases:

1. Cybersecurity Advisors (CSA) \$5.1 million, 14 Positions/8 FTE

Justification

Increases:

- **Cybersecurity Advisors:** CSAs bolster the cyber security preparedness, risk mitigation, and incident response capabilities of local critical infrastructure entities and bring them into closer alignment with the Federal Government. CSAs are regionally located DHS personnel assigned to one of the 10 CSA regions, aligned to the Federal Emergency Management Agency (FEMA)

regions, representing a front-line approach and promote resilience of key cyber infrastructures throughout the U.S. and its territories. As a cybersecurity field presence for the Department, CSAs offer opportunities to collaborate with local critical infrastructure and raise cybersecurity awareness in their local areas of responsibility. CSAs have historically closely partnered with NPPD's Protective Security Advisors (PSAs) while participating in the U.S. Secret Service Electronic Crimes Task Force initiative, local FBI InfraGard chapters, and other community-based activities. The CSAs currently function as the link between critical infrastructure owners and operators, community leadership, and other NPPD programs.

Performance

Increases:

- **Cybersecurity Advisors:** This request would allow NPPD to expand the number of regionally-based CSAs and CSA support center personnel from 16 to 30 Positions for the entire program (24 field / 6 HQ). Based on FY16 and FY17 assessment totals, the additional resources will allow NPPD to conduct an additional 105 cybersecurity assessments keeping pace with demand. With additional funding, the CSA program will increase the number of facilitated cybersecurity vulnerability and resiliency assessments from 150 to 255 per year, with 75% of organizations implementing at least one cybersecurity enhancement after receiving a cybersecurity vulnerability assessment or survey. This funding additionally increases the number of CSA engagements (e.g., strategic messaging, stakeholder cyber preparedness, working group support, and partnership development) from 475 to approximately 990 in FY 2018. Without additional resources the program will have limited ability to project resources and expertise forward to critical infrastructure owners and operators in the field.

Program Change

Expand Operations in Field #2: Protective Security Advisors, \$0.815 million, 17 Positions/9 FTE

Description

NPPD requests the following program increases:

1. Protective Security Advisors (PSA), \$2.315 million, 17 Positions/9 FTE

NPPD requests the following program decreases:

- 1) Three-Year Strategic Plan, (\$1.5 million).

Justification

Increases:

- **Protective Security Advisors:** This program change is to increase the NPPD Office of Infrastructure Protection's (IP's) field forces and regional staffing. Specifically, increasing the PSA program by 17 positions would ensure that IP is able to sufficiently assist Federal, State, Local, Tribal and Territorial, and private sector mission partners with the protection of the Nation's critical infrastructure by developing, implementing and providing national coordination for protective programs; supporting efforts to counter violent extremists; and facilitating critical infrastructure response and recovery. The additional PSAs will provide needed support in the urban areas with the highest population and critical infrastructure density, as well as support the dynamic needs and requirements of the IP Regional Offices. Specific support to the IP Regional Offices will include, but not be limited to, developing customized regional risk assessments, conducting strategic and operational planning activities, and providing regionally focused situational awareness to the National Infrastructure Coordinating Center.

Decreases:

- Three-Year Strategic Plan: FY 2016 enactment included an additional \$1.5 million above the President's Budget to prepare a three year strategic plan to guide vulnerability assessments, analytic assessments, and the Regional Resiliency Assessment Program. Since the funding was provided for a specific, short-term deliverable, the funding will not be requested again in FY 2017.

Performance

Increases:

- **Protective Security Advisors:** Based on requirements collected from regional stakeholders —leveraging input from the State, Local, Tribal, and Territorial Government Coordinating Council; engaging partners inside and outside the NCR; and observing regional execution of NPPD IP programs— NPPD IP established Regional Offices to increase the impact of existing programs and functions, improve support to stakeholders, and ensure enhancements to the security and resilience of critical infrastructure. Although NPPD IP's primary customers are State, local, and private sector partners across the country, to date, NPPD IP has relied on limited field staff of other NPPD, DHS, and Federal partners to provide information, resources and programs supporting the critical infrastructure security and resilience mission. As demand from stakeholders in the regions for PSA services has grown, PSAs have been asked to perform functions outside of the core PSA role. This has diverted resources away from the traditional PSA mission which includes performing outreach; conducting assessments; providing access to critical infrastructure security and resilience resources and training; and supporting Special Security Events (NSSEs) and Special Event Activity Rating (SEAR) events. Adding regional staff to take on the additional responsibilities, in response to stakeholder demand, will enable PSAs to focus on that mission, while also allowing NPPD IP to meet expanded stakeholder demand and requirements related to cybersecurity; response and recovery; and resources to support community infrastructure investment planning. Staffing the NPPD IP Regional Offices is essential to managing the execution of NPPD IP's mission in the regions; coordinating regional operations; supporting the

requirement of regional critical infrastructure partners; providing centralized oversight for the execution of the mission support services that sustain IP field forces; and providing support to other field forces from NPPD. The Regional Offices, under the leadership of Regional Directors (RDs), will ensure a more targeted allocation of NPPD and DHS' limited resources to enhance the security and resilience of the Nation's critical infrastructure.

Decreases:

- Three-Year Strategic Plan: NPPD expects minimal impact as the strategic plan should be completed in FY 2016.

Program Change

Expand Operations in Field #3: Infrastructure Security Compliance, (\$3 million), 0 Positions/0 FTE

Description

NPPD requests the following program increases:

1. Personnel Surety Vetting Capabilities, \$1.4 million
2. IT Security (CSAT), \$0.4 million

NPPD requests the following program decreases:

1. Ammonium Nitrate Security Program, (\$4.5 million)
2. IP Regionalization, (\$0.2 million)

Justification

Increases:

- **Personnel Surety Vetting Capabilities:** Personnel surety screening of the employees of high-risk chemical facilities for terrorist ties is a requirement of the Chemical Facility Anti-Terrorism Standards (CFATS) regulation. The current funding level – approximately \$0.6 million annually – for Personnel Surety Vetting consists solely of overhead costs paid to the Transportation Security Administration for the capability of their systems. In normal operating years (i.e. FY 2017 and beyond) additional costs are incurred based on the volume of names subject to vetting. NPPD estimates that steady-state function of the system will require approximately \$2 million annually, an increase of \$1.4 million over FY 2018 base budget guidance.
- **IT Security (CSAT):** The additional funding of \$0.4M will provide IP the contract support needed to obtain the Certification and Accreditation (C&A) process. The Chemical Security Assessment Tool suite (CSATs) provides for developing a suite of online capabilities, including the CSAT survey tool and the Chemical Security Evaluation and Compliance System (CHEMSEC)

workflow management tool. It includes future development efforts addressing requirements resulting from: new regulation affecting the sale/purchase of ammonium nitrate, future Chemical Facility Anti-Terrorism Standards (CFATS) legislative changes, processes reengineering initiatives, and system migration to a DHS Data Center or cloud-based infrastructure as a service (IaaS) hosting provider. CSATs fills the gap of non-existing capabilities by providing for: the electronic submission of extensive facility data, controlled use of such data, inspection related and correspondence materials, and workflow processes. Through the C&A process, the Information Systems Security Manager (ISSM) will work to ensure the CSAT system documentation/architecture is ready for the security compliance assessment and is successful at obtaining an Authority to Operate (ATO).

Decreases:

- **Ammonium Nitrate Security Program (ANSP):** Ammonium Nitrate Security Program (ANSP): Funding was provided in FY 2016 for ammonium nitrate and other improvised explosive device (IED) precursors. ISCD is currently pursuing a dual-track effort by continuing to move forward under the existing statutory requirement for the ANSP, while concurrently pursuing legislative updates to address issues with the scope and cost-effectiveness of the program. The required funding for ammonium nitrate regulation is dependent on an agreed upon legislative and regulatory path forward for securing IED precursors, which is informed by studies and chemical testing of IED precursors – including ammonium nitrate – currently underway. The decrease will effectively end this research and significantly delay overall implementation timelines. ISCD currently anticipates that the path forward will be determined in FY18 as a result of the completion of the National Academy of Sciences study and resultant legislative action.
- **IP Regionalization:** NPPD's continued enhancement of Infrastructure Protection (IP) regions requires funding to pay the recurring rent for previously established field offices and funding for additional permanent facilities to be built out. The cost for space includes security services, parking, and information technology (IT) support. To support the overarching cost and transition and to realize efficiencies from regional office colocation, \$0.2 million in funding is being transferred from the Infrastructure Security Compliance PPA to the Mission Support PPA to be used for Regionalization facilities costs. This money has previously funded the Westchester, Pennsylvania facility for Chemical Security Inspectors and will now support the new regional office where all regional staff will be located.

Performance

Increases:

- **Personnel Surety Vetting Capabilities:** Without this proposed increase, NPPD would be unable to fully support its Personnel Surety vetting function, resulting in failure to satisfy the regulatory requirement of vetting names for potential terrorism ties. IP has begun deployment of the Personnel Surety Program to Tiers 1 and 2 facilities, which are the highest risk facilities. Beginning in FY18, IP will make this offering available to all other tiered high-risk facilities, which is a much larger population. If this

funding is not available, IP will not be able to provide vetting of personnel to regulated chemical facilities with lesser quantities of chemicals. Currently, Tiers 1 and 2 comprise some 253 facilities, while Tiers 3 and 4 - the other high-risk tiers – comprise 2,383 facilities. In other words, if this proposed increase is denied approximately 90% of regulated high-risk facilities would remain unable to vet employees for terrorism ties.**IT Security (CSAT):** Not funding the C&A could leave CSAT vulnerable or the system operating a less than optimal state as the ATO is required to be compliant.

Decreases:

- **Ammonium Nitrate Security Program:** NPPD expects minimal impact in FY 2017, but expects this requirement, or a similar requirement, relating to securing and preventing the misappropriation of IED precursors, to continue in the future. DHS looks forward to working with Congress to create a legislative structure that addresses IED precursors, not just ammonium nitrate.
- **IP Regionalization:** As NPPD/IP stands up ten regions, personnel can better implement national goals and requirements in a manner tailored to each region's unique risks, needs, and capabilities. Furthermore, the regional enhancement buildout will allow NPPD /IP to be more strategic with resources, better assess and plan for risks across sectors, and strengthen partnerships within local critical infrastructure communities. Because critical infrastructure is not located solely in the National Capital Region, locating staff and resources in the field across the Nation is an important step in enabling NPPD IP to build routine interactions with communities and infrastructure owners and operators. These interactions and accompanying resources are essential in empowering communities to make effective infrastructure investment decisions not only in hardening existing infrastructure, but also in considering security and resilience in new infrastructure design. If this program change does not occur, NPPD /IP would not have funds to continue paying rent for temporary facilities or recruit for field positions. If funding for obtaining new permanent facilities is not available, field personnel would remain in temporary facilities for a longer period, thus increasing temporary facility costs. Ultimately, if no provisions are made for regional facilities (permanent or temporary) in FY 2018, NPPD estimates the planned field staff would not be able to relocate to the field.

Program Change

Expand Operations in Field #4: Emergency Communications Preparedness, \$5.7 million, 11 Positions/6 FTE

Description

NPPD requests the following program increases:

1. SLTT Planning & Assessment Program (PAP), \$7.4 million, 11 Positions/6 FTE
2. IT Security (CASM), \$0.4 million

NPPD requests the following program decreases:

1. Rural Emergency Medical Communication Demonstration Project (\$2 million)

Justification

Increases:

- **SLTT Planning & Assessment Program:** NPPD requests an increase of \$7.4 million, 11 Positions/6 FTE for the State, local, tribal, and territorial (SLTT) Planning & Assessment Program. The requested increase is needed to ensure Public Safety has effective, interoperable emergency communications systems. Additional resources are required to provide support to SLTT governments to mitigate emergency communications gaps identified by national or statewide strategic planning through on-site and virtual technical assistance, Automated Tools, and the National Emergency Communications Plan. The Office of Emergency Communications (OEC) is mandated to provide technical assistance to SLTT government officials with respect to the use of interoperable communications capabilities. This is a duty OEC has performed for nearly 10 years and in that time has demonstrated a long record of success at addressing SLTT needs and concerns and building their capabilities. However, the needs of the SLTT community are rapidly expanding because of new technologies, new demands for support of special events, and a rapidly evolving threat to Development telecommunications/cyber communications operability and interoperability. The requested SLTT PAP resources will be used to 1) assess capabilities and assist the 29 current Tier 1 Urban Area Security Initiatives (UASIs) in addressing gaps; 2) support technical assistance for tribal communities and Federal response agencies; 3) create a Communications Unit Steering Committee to update training curriculum; 4) develop a process for State certification; and 5) institutionalize Communication Unit personnel at the incident level. Included in the request are 20 communications interoperability experts to provide regional support.
- **IT Security (CASM):** NPPD requests an increase of \$0.4 million for IT Security (Communication Assets Survey & Mapping (CASM)). This request will provide an Information System Security Officer (ISSO). An ISSO performs security actions for the Communication Assets Survey and Mapping (CASM) system. CASM is a Level III IT System that provides first responders with information on communications resources such as radio systems, mobile communications vehicles and trained personnel that can be deployed for a strategic incident response. CASM is a secure, web-based application that allows authorized, registered users to track communications assets. The Office of Emergency Communications with the support of contractors via an IAA with the Department of Navy – SPAWAR manages and deploy CASM. . Only one ISSO is assigned to a system, but multiple alternate ISSOs may be designated to assist the ISSO. While the ISSO performs security functions, responsibility for information system security always rests with the System Owner.

Decreases:

- **Rural Emergency Medical Communication Demonstration Project:** NPPD requests a decrease of \$2 million for the Rural Emergency Medical Communication Demonstration Project. The request will non-recur funding for this effort. FY 2016 enactment included an additional \$2 million above the President's Budget to establish a demonstration project leveraging existing technologies and engage non-medical professionals to help establish or sustain statewide medical communications systems and utilize existing infrastructures to improve the delivery of rural medical care. This funding is not being requested again in FY 2018.

Performance

Increases:

- **SLTT Planning & Assessment Program:** OEC will work with emergency response organizations to assess their communications capabilities and identify gaps in their communications operating procedures, protocols, coverage and other attributes in order to develop plans that will close those gaps. Additionally, OEC will assist public safety with communications planning for major planned events (parades, marathons and other sporting events) and advocate that these plans be used for unplanned events (e.g., hurricanes, tornadoes, terrorist attacks). This effort will significantly increase the public safety's preparedness and resiliency for all planned and unplanned events/disasters making the Nation more secure and resilient. Public safety communications is going through an unprecedented transformation in our Nation's history, with the migration to Internet-Protocol (IP) networks. Throughout America, 9-1-1 Centers are migrating from voice only services, to full information services (voice, video and data); Land-Mobile Radio incident response systems are being augmented by commercial wireless broadband services and cellular alert and warning systems are being deployed. Public safety is unprepared for this transformation and they rely on OEC to help make this transition successful.
- **IT Security (CASM):** ISSO duties will include:
 - a. Ensuring that security requirements for CASM are being or will be met.
 - b. Ensuring that requests for certification and accreditation of computer systems are completed in accordance with the published procedures.
 - c. Ensuring that protective measures such as deadbolt locks on doors, placement of electrical wiring, etc. as countermeasures for physical security threats, are in place.
 - d. Ensuring compliance with all legal requirements concerning the use of commercial proprietary software, e.g. respecting copyrights and obtaining site licenses.
 - e. Maintaining an inventory of hardware and software within the program and development offices or field site facility.
 - f. Coordinating the development of a Contingency Plan and ensuring that the plan is tested and maintained.
 - g. Ensuring that risk analyses are completed to determine cost-effective and essential safeguards.

- h. Ensuring preparation of security plans for sensitive systems and networks.
- i. Attending security awareness and related training programs and distributing security awareness information to the user community as appropriate.
- j. Reporting IT security incidents (including computer viruses) in accordance with established procedures.
- k. Reporting security incidents not involving IT resources to the appropriate security office.

Decreases:

- **Rural Emergency Medical Communication Demonstration Project:** NPPD expects minimal impact as the initiative was for a demonstration project with limited scope.

Program Change

Expand Operations in Field #5: Stakeholder Engagement and Requirements, (\$0.4 million), 5 Positions/3 FTE

Description

NPPD requests the following program increases:

1. Section 9 Program, \$3.1 million
2. Supply Chain Analysis, \$0.4 million

NPPD requests the following program decreases:

1. Information Sharing and Analysis Organizations Grant, (\$2.2 million)
2. Software Assurance, (\$1.7 million)

Justification

Increases:

- **Section 9 Program:** NPPD requests an increase of \$3.1 million and 5 Positions/3 FTE for Section 9 Program. The Section 9 program is the Department's principal approach to supporting the cybersecurity of the nation's most critical infrastructure. Currently, this program supports four operational lines of effort with major financial institutions, three new projects with major energy firms, and a significant inter-agency effort with Tier 1 Internet Service Providers. These projects are each intended to provide Section 9 entities with focused risk management assistance to address identified capability gaps and to develop information or guidance that protects the broader sectors. DHS also chairs an inter-agency working group with eight other agencies intended to develop a cohesive government-wide approach to supporting Section 9 companies. These requested resources would allow DHS to contribute to all Section 9 activities and lead the development of new initiatives to support these highly important customers. Funds will enable DHS to support current and future activities that demonstrably reduce the likelihood of a catastrophic cyber-attack affecting national security, economic security, or public health and safety. NPPD will continue to work with the annually updated list of Section 9 Critical Infrastructure designated companies to synchronize cyber relationship coordination with the government and to strengthen a response capability designed to mitigate the impact of a catastrophic incident and reduce the time to reestablish a steady state. The additional positions will initiate and manage one-on-one engagements with Section 9 organizations in a variety of capacities.
- **Supply Chain Analysis:** NPPD requests an increase of \$0.4 million for Supply Chain Analysis. Supply chain risks are increasingly salient across critical infrastructure sectors due to increasingly complex dependencies and heightened numbers of inter-connected devices. These resources will allow NPPD to conduct additional analyses into supply chain dependencies and

associated risks for private sector partners, focusing particularly on the Information Technology and Communications Sectors.

Decreases:

- **Information Sharing and Analysis Organizations Grant:** NPPD requests a decrease of \$2.2 million for ISAO Grant. As part of Executive Order 13691, DHS was directed to enter into an agreement with a nongovernmental organization to coordinate private sector stakeholders to produce a set of standards defining what constitutes an ISAO and basics regarding how they will operate. Once these standards are published, the grant will no longer be required. ISAOs, like ISACs, are entities formed to share cyber threat information with its community of trust.
- **Software Assurance:** The reduction merges the Software Assurance program with the Research and Standards Integration program funded in the Research and Development appropriation.

Performance

Increases:

- **Section 9 Program:** With the requested resources, NPPD will increase the number of new pilot risk management efforts conducted with Section 9 companies from seven to ten, increase the percentage of Section 9 companies reporting that DHS cybersecurity programs demonstrably reduce their cybersecurity risk, and increase the percentage of Section 9 sectors with a codified and exercised plan to reduce the likelihood that a cyber-attack on any one Section 9 company could result in catastrophic consequences.
- **Supply Chain Analysis:** The additional resources allow NPPD to develop and conduct supply chain risk assessments, including the External Dependencies Management (EDM) assessment, on the information and communication technology (ICT) service supply chain. Such assessments will help organizations develop and understand how well they manage the risks arising from external supply chain dependencies. The ICT service supply chain consists of outside parties that operate, provide or maintain information and communications technology for the organization. Common examples include externally provided web and data hosting, telecommunications services and data centers. Available to all critical infrastructure entities, NPPD has conducted supply chain assessments for the Defense Industrial Base, Financial, Energy, and Water sectors.

Decreases:

- **Information Sharing and Analysis Organizations Grant:** This decrement will result in no impact to the mission, due to the planned conclusion of the effort for which this grant is required. This grant is a three year grant, issued in FY 2015 with work to conclude at the end of FY 2017.
- **Software Assurance:** NPPD expects minimal impact as both programs focus on working with partners to develop cybersecurity standards for government and industry. The two programs will work to prioritize their requirements jointly, resulting in contract

funding savings. **Program Change**

Operation Coordination & Mission Support #1: Mission Support, \$16.7 million, 24 Positions/15 FTE

Description

NPPD requests the following program increases:

1. OHC Staffing Plan, \$1.4 million, 7 Positions/4 FTE
2. OHC Requirements Support, \$0.6 million, 0 Positions/0 FTE
3. OHC Analytical Support, \$1.8 million, 0 Positions/0 FTE
4. Office of Compliance and Security Mission Requirements, \$1 million, 5 Positions/3 FTE
5. Executive Secretary Staffing Plan, \$0.4 million, 1 Positions/1 FTE
6. Administrative Services Software Tools, \$0.1 million, 0 Positions/0 FTE
7. Consolidated Financial Management System, \$0.3 million, 0 Positions/0 FTE
8. Budget and Finance Accountants, \$0.3 million, 3 Positions/2 FTE
9. NPPD Privacy Staffing Plan, \$0.3 million, 2 Positions/1 FTE
10. Corry Station Continuity Enhancement, \$0.2 million, 2 Positions/1 FTE
11. Continuity Enhancement (Devolution), \$1 million, 0 Positions/0 FTE
12. IP Regionalization, \$9.3 million, 0 Positions/0 FTE

Justification

Increases:

- **OHC Staffing Plan:** The NPPD Office of Human Capital's (OHC) mission is to build an organization and workforce that is effective, agile, and able to respond to emerging risks and challenges in support of mission accomplishment. This request will allow OHC to onboard 7 additional staff members. With bringing staffing in-house (OHC currently contracts with OPM), OHC expects to reduce the hiring process by approximately 10 days, as the communication with OPM will be eliminated and HR specialists will see hiring actions from initiation to completion, eliminating additional steps in the hiring process OHC acting as the go-between for hiring managers and OPM. NPPD's organizational effectiveness depends on the talents and capabilities of its workforce to achieve success. OHC plays a critical role in NPPD's mission success and is committed to being responsive to workforce challenges, employee needs, and leadership requirements, while remaining agile and resilient to adapt to changing external drivers. As NPPD's mission continues to evolve and expand, and our workforce adapts to meet these new challenges, the Office of Human Capital also needs to evolve, expand, and adapt to ensure our workforce has the best human resource services and capabilities in place. NPPD personnel growth will require additional human capital support and capabilities to include staffing, cyber human capital program management, recruitment, personnel security and workforce planning professionals. In

addition, Infrastructure Protection's expansion in regionalization efforts will require a significant increase in personnel action processing and classification requirements as they shift functions/positions from HQ to field locations.

- **OHC Requirements Support:** Within OHC, there is an increased focus on current human resources service delivery mandate changes in the level of management, oversight, and accountability. The requested contract support would continue additional support to the areas of Employee & Labor Relations and Pay/Compensation/ Personnel action processing support. OHC is currently focused on developing standard operating procedures and management directives and instructions to streamline workflow and create efficiencies. OHC is also committed to developing role-based training programs for all of its HC staff to ensure we have competent, well-trained, and forward-thinking staff members to push OHC toward greater productivity, particularly in the areas of pay, compensation, and personnel action processing support. These efficiencies will increase the accuracy and timeliness of personnel processing, driving greater employee retention due to fewer errors that lead to frustration for NPPD employees. The increase in Employee and Labor Relations support will enable managers more efficiency in dealing with poor performers and conduct issues, thereby increasing morale in the workplace.
- **OHC Analytical Support:** Recent OPM and DHS audits have revealed the need for NPPD to expand workforce planning efforts, develop a formal Workforce Model, personnel/organization management system & succession plan, and implement a formal process to identify competency gaps and once implemented, develop strategies to recruit, develop, and retain a high performing workforce. The project will be to design and engineer a staffing model process and system that will enable other NPPD subcomponents to provide staffing projections and management workforce data.
- **Office of Compliance and Security Mission Requirements:** The Office of Compliance and Security (OCS) is responsible for governance, policy, and oversight of NPPD's Internal Affairs Investigations, Security Programs, and Program Review & Evaluation. Internal Affairs investigates and coordinates allegations of employee misconduct. Internal Affairs will stand up a new criminal investigation law enforcement office that will investigate alleged employee criminal misconduct. The office will have the delegated criminal investigation authority under 40 U.S.C. §1315 and will be staffed by four 1800-series employees. OCS will also hire one additional employee to address NPPD's increased security clearance and compliance requirements. Program funding will also be used to develop program self-inspection tools that will enhance component programmatic oversight. In response to DHS Office of the Inspector General Report OIG-15-108-ICQ, *Oversight Review of the National Protection Programs Directorate's Internal Affairs Division*, NPPD will stand up a new criminal investigation law enforcement office. This requirement will establish independent criminal investigations capability needed to manage the law enforcement workforce. In addition, the anticipated cyber workforce growth will result in an increased number of security clearance holders which subsequently mandates appropriate management of risks associated with protecting classified national security information. The increased enterprise-wide security support requirements require additional resources. Lastly, the increase in field personnel associated with the NPPD transition will require NPPD to leverage technology to implement a Self-Inspection Program that will facilitate data needs for component leadership's oversight.

- **Executive Secretary(ExecSec) Staffing Plan:** These additional resources will provide an increased and focused administrative and strategic capability directly to the Under Secretary, Deputy Under Secretary, and Chief of Staff offices to provide increased customer service, program management, and compliance/oversight of the de-centralized ExecSec function within the sub-components and Lines of Business (including to the Regional Offices and field forces). Currently, the Front Office is not directly supported by this group, as it is in other counterpart organizations. The additional position will help to establish the importance and presence of this function within NPPD and elevate NPPD's position and presence at the DHS Executive Secretariat level to be commensurate with the rest of the DHS organizational components. The additional positions and 3 contract support are necessary to meet the needs of the continually expanding volume and urgency of Departmental tasks, as well as the increasing volume of self-generated products.
- **Administrative Services Software Tools:** The Administrative Services Division (ASD) has a requirement to procure and maintain a set of analytical software tools. These tools will be employed to refine and validate facilities' usage and requirements data. With NPPD regional growth, additional Construction Project Managers will join the team and be embedded in regional offices to support the ongoing and upcoming construction projects across the nation. These construction Project Managers will need the requested tools to perform their mission support duties. The construction project manager specifies objectives and plans, maximizes resource efficiency, implements various DHS-specific requirements, and develops communication processes with customers and effected stakeholders. These software tools promote unity of effort, maximize resource utilization, and deliver the ability to make data-driven decisions.
- **Consolidated Financial Management System (CFMS):** NPPD's CFMS requires additional program dollars currently not in its base for full implementation of the system. In FY 2018, \$0.3 million is needed for legacy system and accounting costs prior to going "live" with System-as-Service from a Federal Shared Provider in Q3 FY 2018. In 2013, NPPD established the CFMS as part of the Department's commitment to modernize its financial management systems using a distributed approach versus a single, enterprise-wide solution. The CFMS provides NPPD with the four capabilities of Core Financial, Procurement, Asset Management, and Business intelligence, which are required to meet the DHS Financial Management System Strategy.
- **Budget and Finance Accountants:** Financial Reporting Accountant (1 Position-contractor conversion): The conversion of one Financial Reporting Accountant from a contracted position to a federal position reporting to the Financial Reporting and Accounting Policy Supervisor will provide greater stability and knowledge-base for the Financial Reporting team. It also will offer annual cost savings in the amount expended annually for the financial reporting services provided (approximately \$70k per year). In addition to the daily operations and reporting requirements, strengthening is necessary in regards to Standard Operating Procedures (SOPs) as well as verification and training relating to the implementation of HQ CFO function. Property Accountants (3 Positions): Three additional property accountants, in the 510 series, who are necessary to apply and record the property in the financial system for suitable recording in the financial statements of the Department. The programs and the property acquired to support the program are growing at exponential rates and require the appropriate classification and support review to evade a weakness in the independent auditor's report, Internal Controls over Financial Reporting. Internal Controls Accountants (3

Position- contractor conversion): Converting current contractor support to federal employees will result in annual cost savings of approximately \$350k/year, ensure retention of institutional knowledge currently lost due to reliance on contractors, and reduce duplicative review efforts over assessment deliverables. Since FY 2016, there has been an increase in internal controls requirements; assessment criteria has been expanded to detailed assessments around information technology general controls, fraud risk, entity level controls, and management review controls. To meet the Department's goals consistent with the DHS Financial Accountability Act (DHS FAA), internal controls need to be designed and routinely assessed and monitored, in all business lines. To further adhere to the DHS FAA, NPPD must regularly assess all working business processes to support the annual Statement of Assurance. Originally, NPPD was required to review 2-3 business processes every three years. The new guidance requires assessments over all significant business processes every year.

- **NPPD Privacy Staffing Plan:** Two additional privacy analysts are needed in FY 2018 to support increasing cybersecurity requirements and OMB Circular A-130 Revised (Management of Federal Information Resources) requirements to implement a continuous privacy monitoring program. DHS is designated as the information sharing platform under the Cybersecurity Information Sharing Act of 2015 (CISA) for which DHS has ongoing privacy oversight responsibilities subject to statutorily required audits by the DHS Office of Inspector General and the Government Accountability Office in FY18 and 19, respectively. In addition CISA requires DHS and the Department of Justice to biannually review and update the Privacy and Civil Liberties Guidelines; the first biannual review will need to commence in FY 2018. To meet the privacy expectations of our stakeholders (e.g., the public, Congress, Administration) it will be necessary to appropriately resource CISA implementation and OMB Circular A-130's continuous privacy monitoring requirements. This necessitates building a cadre of privacy personnel that understand and can apply privacy protections to an increasingly complex cyber landscape. For example, continuing privacy obligations exist for future phases of Continuous Diagnostics and Mitigation (CDM). This proposal would place additional resources at the National Cybersecurity Communications and Integration Center (NCCIC) (with direct report to NPPD Privacy) to support the ever-increasing cyber portfolio, enable agility to the Privacy team to meet continuing privacy obligations under the E-Government Act of 2002 and Privacy Act of 1974, support cyber innovations (e.g., non-signature based intrusion detection capabilities) that ensure privacy, ensure that NCCIC operators are trained on their privacy obligations, and conduct outreach with stakeholders (including those within the private sector and civil society).
- **Corry Station Continuity Enhancement:** The Continuity personnel enhancement is to support Mission Essential Function execution in a devolved environment. The NPPD enhanced operations and functions are dispersed for uninterrupted continuity across the nation and to ensure adequate support of regionalization priorities. A robust Continuity of Operations capability requires coordination of uninterrupted Mission Essential Function(s) execution. Continuity operations/communications enhancements outside of the National Capital Region (Corry Station and Denver Federal Center) are critical to NPPD mission success.
- **Continuity Enhancement (Devolution):** Federal Continuity Directives 1 and 2 require continuity communications capability for Mission Essential Function execution in a devolved environment. NPPD's regionalization priorities, in support of the NPPD Devolved Out of Area Successor (OAS), create additional requirements for the BCEP mission to enable constant, effective, and

uninterrupted readiness in the focus areas of Continuity Planning, Testing/Training and Exercises, and Regional Operations. To meet this demand, additional personnel and network communications funding is required to ensure the Directorate's ability for uninterrupted Mission Essential Functions in accordance with Federal Continuity Directive 1.

IP Regionalization: NPPD's continued enhancement of Infrastructure Protection (IP) regions requires funding to pay the recurring rent and other costs for previously established temporary field offices and funding for permanent facilities. The total cost in FY 2018 is \$9.28 million. NPPD has focused on streamlining its field operations, closing two underutilized facilities and attempting to co-locate its Regional Offices with other DHS elements where practicable. This has allowed the Regionalization initiative to be undertaken with lower costs than initially projected and with increased effectiveness due to operational synergies. In FY 2018, facilities-based costs – design & construction; furniture; information technology (IT); parking; and leasing and security services – in the 10 regions are estimated to total \$5.4 million. Throughout FY 2018, nine temporary offices and nine permanent offices will be operational for at least a portion of the year. FY 2018 will include the highest facility costs for the regionalization effort because there will be a period of time during which there will be both temporary and permanent facility costs for certain regions as the permanent locations are being built out and staff remain in temporary space. In FY 2019 and subsequent years, the facilities costs reduces substantially. The remaining funds requested in FY18 are for logistics to support placing staff in the field, including costs to recruit and hire positions; IT support for increased regional presence; vehicle costs; travel and training; and contract support for increased administrative, analytical, and technical assistance, including those for NIPP Partnership activities in the field. In addition, this will provide contract support of one additional Exercise and Training Specialist for each of the Regional offices to supplement the FTE and support increasing requirements from stakeholders. The specialist will support and facilitate training and exercise efforts by critical infrastructure stakeholders to respond to and recover from significant incidents. Training and Exercises constitute key vehicles for critical infrastructure stakeholders to test and validate their response and recovery plans, identify planning and response gaps, and close gaps through the training programs made available to them through IP and other interagency partners. Included in the total increase is a transfer of \$2.28 million from the Infrastructure Security Compliance PPA which previously supported the Westchester, Pennsylvania facility. This facility will be moved to be co-located with the new NPPD IP regional office and the funds will support the shared facility.

Performance

Increases:

- **OHC Staffing Plan:** Without the increase in human resources (HR) support staff, NPPD will be unable to adequately support its operational and support personnel needs, or meet its future recruitment, hiring and retention goals. Currently, NPPD has one HR Specialist for every 57 employees using the current President's Management Agenda (PMA) HC Benchmarking definitions. The DHS Human Capital PMA Benchmarking servicing ratio is one HR Specialist for every 65 employees. The 7 Positions requested and the expected growth of 750-1000 new employees will give NPPD a one HR Specialist to every 65 employees ratio and align NPPD with the DHS service ratio benchmark. Without the additional positions, NPPD will increase to a staff ratio of 1-73, and significantly reduce its ability to provide support in the areas of staffing, recruitment, classification, and processing.

- **OHC Requirements Support:** With this support, NPPD will be able to continue contract support currently used for several basic human resources functions. This includes Employee Labor and Relations (EL&R), Performance Management, Pay and Compensation, as well as Personnel Action Processing. Without these continued resources, OHC will have difficulty in meeting the DHS and NPPD vision to build and sustain a high-performing workforce.
- **OHC Analytical Support:** With this support, NPPD will complete a workforce analysis and competency framework, develop a workforce planning model and formal succession plan. Without this support, NPPD will be unable to adequately forecast workforce resource needs, track/monitor its workforce adequately, or develop a succession plan. Workforce planning and succession planning lessen the impact of institutional knowledge loss as employees retire or leave, and maximize current talent utilization by closing leadership staffing and competency gaps/deficiencies.
- **Office of Compliance and Security Mission Requirements:** Without these additional resources, NPPD will not be able to implement the initiatives that will close out the OIG's audit recommendation regarding criminal investigation responsibilities and will result in the under-staffing of NPPD's increased internal security responsibilities pursuant to DHS Management Directive 11052. Lastly, the lack of funding to leverage data analytics from Self-Inspection data will negatively impact program management decisions relating to compliance with Executive Orders and Departmental guidance. The ability to effectively manage security programs and protect national security information requires additional resources to address projected significant increases in personnel supporting the cyber and infrastructure protection mission.
- **Executive Secretary Staffing Plan:** In 2015, NPPD received and processed 2,141 tasks with an average on-time rate of 45%. In 2016, NPPD has already received 217 tasks in 8 weeks. Many Departmental tasks are received with significantly short turnaround times, routinely requiring staff to drop all other tasks. The volume alone prevents the ability to dedicate staff without negatively impacting other operations. Also, the current staff is not properly staffed with the requisite "writer-editor" skill set; this significantly impacts NPPD's ability to provide the required level/capacity of support. The additional resources - specifically the "writer-editor" FTEs - will enable ExecSec to increase its capabilities, provide a level of work that is currently not being done proficiently, and support to leadership's priorities to provide factual, timely, and professional work-products to the Department.
- **Administrative Services Software Tools:** With additional resources, NPPD would procure and maintain analytic software tools (Primavera; AutoCAD LT; AutoCAD Architecture; Co-Star) to refine and validate facilities' usage and software requirements data, and provide consistent and accurate data reporting to DHS, OMB, and GSA. The programs provide the ability to conduct project management, identify space locations and costs, and conduct building/architectural planning and design. With the proper software tools, the Construction Project Managers (CPM) will be able to provide consistent accurate data for reporting to DHS, OMB and GSA as required at a minimum quarterly. Not having the programs to manage NPPD's portfolio and to provide efficient design and construction management raises the potential of audit concerns. Each tool will add to the effectiveness of mission support and will also lead to improved efficiencies.
- **Consolidated Financial Management System:** Transition to a modern financial management system will result in elimination of unnecessary customizations to the current system, easier adoption of best practices, and increased use of standard government

processes that will allow NPPD to focus more on its core mission. Transition will result in increased productivity, reduced response time and manual errors, stronger controls including segregation of duties, improved system security, and reduced rework. If the request is not approved, NPPD will continue with numerous workarounds, compensating controls, and manual processes that are costly, complex, and resource intensive to maintain. NPPD will face increased risk for control failures and continued material weakness findings, as well as continued difficulty adhering to federal laws, regulations, guidelines and requirements.

- **Budget and Finance Accountants:** Financial Reporting Accountant (1 Position-contractor conversion): Conversion of one contractor to a federal position will allow additional duties that are inherently federal in nature to be completed by the additional team member. Property Accountants (3 Positions): This is a request for one Property Supervisor and two Property Accountants. As NPPD strategizes to become an operational component, there is greater scrutiny on the financial capabilities, and attention to the financial management area is of the utmost importance. Without dedicated property accountants, NPPD may jeopardize the Department-wide opinion required to be obtained by an independent auditor over internal controls of DHS. Internal Controls Accountants (3 Positions- contractor conversion): This request is to convert contract support to three Internal Controls Accountant positions to ensure retention of institutional knowledge currently lost due to reliance on contractors, and reduce duplicative review efforts over assessment deliverables. If internal controls continue to be performed by contractors (instead of Federal employees):
 - a. NPPD will continue to need at least \$1.2 million to fund contractor support to perform a less efficient and less effective job with limited accountability of the deliverables, or
 - b. NPPD will not fully support the Department’s audit goals, routine monitoring strategy, and compliance with OMB A-123, the GAO Green Book, and DHS FAA. Without the results of assessments to support NPPD’s state of internal controls, NPPD could result in issuing a Statement of No Assurance. Noncompliance is not the recommended option, particularly when a potential transformation requires demonstrating the high standards of a world class organization.
- **NPPD Privacy Staffing Plan:** Trust and confidence in DHS’s implementation of cyber programs under CISA as well as programs such as NCPS, and CDM is a key component to their success. Resourcing Privacy to manage growing cyber demands will enable consistent privacy oversight and attention to statutory requirements as well as position NPPD Privacy to meet OMB Circular A-130’s continuous privacy monitoring requirements. As an interim strategy, existing staff can prioritize the most urgent work, but without additional privacy analysts supporting the cyber portfolio, DHS is at risk of not meeting statutory and other mandatory privacy obligations. Like cybersecurity professionals, there is a growing demand and limited supply of privacy professionals; in order to attract and retain quality privacy professionals, higher grades are needed.
- **Corry Station Continuity Enhancement:** Additional Positions and funding will improve the NPPD operational and communications capabilities and be evidenced in the improved ability to establish and maintain uninterrupted devolution and communication capabilities that support the growing NPPD regional footprint.
- **Continuity Enhancement (Devolution):** Increased Positions will mature 24/7 capability at NPPD’s continuity devolution location(s) and devolved support to the OAS. Without these Positions and increased funding, NPPD will struggle to meet required, sustained, and uninterrupted continuity postures outlined in NSPD/HSPD and Federal Continuity Directive guidance in

support of NPPD's regionalization efforts.

- **IP Regionalization:** As NPPD IP stands up ten regions, personnel can better implement national goals and requirements in a manner tailored to each region's unique risks, needs, and capabilities. Furthermore, the regional enhancement buildout will allow NPPD IP to be more strategic with resources, better assess and plan for risks across sectors, and strengthen partnerships within local critical infrastructure communities. Because critical infrastructure is not located solely in the National Capital Region, locating staff and resources in the field across the Nation is an important step in enabling NPPD IP to build routine interactions with communities and infrastructure owners and operators. These interactions and accompanying resources are essential in empowering communities to make effective infrastructure investment decisions not only in hardening existing infrastructure, but also in considering security and resilience in new infrastructure design. If this program change does not occur, NPPD IP would not have funds to continue paying rent for temporary facilities or recruit for field positions. If funding for obtaining new permanent facilities is not available, field personnel would remain in temporary facilities for a longer period, thus increasing temporary facility costs. Ultimately, if no provisions are made for regional facilities (permanent or temporary) in FY 2018, NPPD estimates planned field staff would not be able to relocate to the field.

Program Change

Operation Coordination & Mission Support #2: Infrastructure Information Sensitive Data Protection, (\$3.3 million), 1 Position/ 1 FTE

Description

NPPD requests the following program increases:

1. Customer Relationship Management (CRM) Implementation, \$0.4 million
2. IT Security, \$0.5 million, 1 Position/ 1 FTE

NPPD requests the following program decreases:

1. IP Gateway (\$4.2 million)

Justification

Increases:

- **Customer Relationship Management Implementation:** The Office of Infrastructure Protection (IP) coordinates with a multitude of stakeholders, public and private, in support of critical infrastructure protection. As a result, a need was identified by several divisions for a stakeholder/customer management capability to track stakeholder engagement. The CRM tool will provide a consolidated repository for all of IP to use instead of multiple stove piped and varied tools for each division. In addition to allowing greater information accessibility, this consolidated approach is expected to be more cost effective than establishment and operation of divisional-level relationship management approaches.
- **IT Security:** Of the \$0.5 million, an additional funding of \$0.1 million and 1 FTP would enable NPPD to acquire a dedicated ISSM for the IP Gateway modernization effort to ensure that the system will fully meet the needs of DHS and NPPD's growing security requirements. The ISSM would be responsible for ensuring information security requirements are properly implemented, managed, and enforced and that the information security program is aligned with the DHS Information Security Program. Further, the ISSM would provide oversight to the dedicated Information Systems Security Manager (ISSOs) and ensure the implementation and maintenance of security controls in accordance with the Security Plan (SP) and Department of Homeland Security (DHS) policies. The remaining funding of \$0.4M will provide IP the contract support needed to obtain the Certification and Accreditation (C&A) process. Through the C&A process, the ISSM would oversee the process of ensuring the system documentation/architecture is ready for the security compliance assessment and is successful at obtaining an Authority to Operate (ATO).

Decreases:

- **IP Gateway:** FY 2016 enactment included an additional \$4.2 million above the President's Budget to expedite development of the IP Gateway, which provides critical infrastructure information through a comprehensive database. This decrease is the amount

of funding provided above the FY 2016 President's Budget.

Performance

Increases:

- **Customer Relationship Management Implementation:** Requirements will be collected for an IP-wide capability and an Analysis of Alternatives (AoA) will be conducted. Following the AoA, a solutions engineering and capability design effort will be conducted in FY 2017 to provide an initial operating capability. In FY 2018, this funding is required to continue enhancements towards a final operating capability and enable the technical maintenance of the capability and the operational implementation of a knowledge management effort.
- **IT Security:** Not funding a dedicated ISSM could leave the IP Gateway vulnerable or the system operating a less than optimal state as the current dedicated ISSM remains subject to multi-tasking and task saturation.

Decreases:

- **IP Gateway:** Operational costs for database elements developed in FY 2016 and the continuation of development activities from FY 2016 will be absorbed within base funding levels in FY 2018.

Program Change

Operation Coordination & Mission Support #3: National Infrastructure Simulation Analysis Center (NISAC), (\$5.7 million), 0 Positions/0 FTE

Description

NPPD requests the following program decreases:

1. High Risk Infrastructure Vulnerabilities (\$5.7 million)

Justification

Decrease:

- **High Risk Infrastructure Vulnerabilities:** FY 2016 enactment included an additional \$5.7 million above the President's Budget to expand the modeling, simulation, and analysis provided by the National Infrastructure Simulation and Analysis Center (NISAC). This decrease is the amount of funding provided above the FY 2016 President's Budget.

Performance

Decrease:

High Risk Infrastructure Vulnerabilities: This decrease will eliminate funding to support advanced analytics in support of emerging risks. In addition, OCIA will discontinue support to develop regional critical infrastructure risk assessments. This reduction will enable the funding of higher priority activities.

Program Change

Operation Coordination & Mission Support #4: Infrastructure Analysis, \$5.6 million, 38 Positions/21 FTE

Description

NPPD requests the following program increases:

1. Counterterrorism and Infrastructure Analysts, \$3.2 million
2. Cybersecurity Analysts and Data Scientists, \$1.9 million
3. IT Security, \$0.6 million

Justification

Increases:

- **Counterterrorism and Infrastructure Analysts:** OCIA requires additional analysts to ensure its analytics keep pace with the evolving risk environment. This includes enhancing its analytic efforts to understand risk to infrastructure posed by international dependencies, coordinating with Department-wide cybersecurity and counterterrorism initiatives, and leveraging cutting-edge techniques to communicate OCIA's analytics.
- **Cybersecurity Analysts and Data Scientists:** OCIA's portfolio has grown to include cybersecurity as well as developing analyses for increasingly complex problems, including issues associated with big data, on request from NPPD's other programs such as cyber and biometric analytics. With existing resources, NISAC is not able to invest in developing capabilities utilizing modern analytic approaches (e.g. big data analytics) beyond NISAC's traditional models of infrastructure systems. OCIA faces cases where existing tools do not have the capacity to exploit the huge datasets that are available for analysis. For example, CS&C recently asked OCIA to analyse incident data they had collected and attempt to correlate the actors who were moving to real world events in order to understand if attacks on agencies could be correlated to actions in the news or if they were largely random. This request create the capabilities to address such requests by funding dedicated cybersecurity analysts to provide strategic analysis in support of NPPD's cybersecurity activities as well as data scientists to develop the capability to both implement new approaches to analyzing infrastructure data and conduct analytics of large cyber and biometric datasets.
- **IT Security:** OCIA is developing an information technology environment to host some of its analytic capabilities in a more accessible and economic manner. This funding will ensure that security requirements for the system are met.

Performance

Increases:

- **Counterterrorism and Infrastructure Analysts:** Enhancing OCIA's international infrastructure analytic capability will enable

OCIA to better understand foreign infrastructure dependencies. This analysis will enable the government to better manage the risk that United States infrastructure could be disrupted by international events, such as major snow storms, earthquakes, hurricanes, or other natural disasters. Improving NPPD's coordination with Department-wide counterterrorism and cybersecurity efforts will improve OCIA's analytic products by increasing their relevance to Departmental decision making. The additional personnel will enhance NPPD capability to inform the Secretary on counter terrorism decisions in the national critical infrastructure community. Finally, increasing the number of analysts focused on improving OCIA's analytic communication methods will enable OCIA to develop analytic products that leverage advanced techniques. This will include interactive graphics and web-based reports, as well as exploring virtual and augmented reality techniques.

- **Cybersecurity Analysts and Data Scientists:** This funding will increase OCIA's integration with the Department's cybersecurity activities and enable the development of strategic analyses that will improve the Department's cybersecurity activities. In addition, the strategic cybersecurity analysis will enhance the Department's understanding of strategic cyber risk, allowing better long-term planning for cybersecurity programs. The additional personnel will help enhance the ability to analyze information and provide security partners with timely relevant analytic products by providing daily reports, requests for information, and Critical Infrastructure Sector Resilience Reports to NPPD leadership and security partners. The data scientists will enable NPPD to better leverage the wealth of data on cyber and infrastructure risk that is either publically available or collected by the Department. Leveraging this data will improve the quality of OCIA's analyses of cyber and infrastructure risk and enable OCIA to draw conclusions that may not have been apparent in the absence of that data.
- **IT Security:** Without this funding, OCIA will either need to delay the implementation of its IT environment or reduce funding for analytic activities to ensure the environment is sufficiently secure.

Program Change

Operation Coordination & Mission Support #5: Critical Infrastructure Situational Awareness, \$7.3 million, 12 Positions/6 FTE

Description

NPPD requests the following program increases:

1. Cyber and Infrastructure Awareness and Reporting, \$2 million, 0 Positions/0 FTE
2. Critical Infrastructure (CI) Interagency Coordination, \$5.3 million, 12 Positions/6 FTE

Justification

Increases

- **Cyber and Infrastructure Awareness and Reporting:** The request will provide funding for the development and implementation of a data strategy to identify new authoritative data sources to enhance the situational awareness capability for NPPD.
- **CI Interagency Coordination:** This request is part of NPPD's ongoing efforts to integrate cyber and physical operations to enhance information sharing and analytical support for critical infrastructure owners and operators as envisioned in Presidential Policy Directive 21: Critical Infrastructure Security and Resilience (PPD-21). The National Infrastructure Coordinating Center (NICC) will provide integrated, near real-time situational awareness, synthesis of briefing and reporting products, and executive briefing functions for Steady State, incident management, and special events postures, maximizing the ability for federal interagency; State, local, tribal and territorial; and owner/operator partners to organize synchronized response, mitigation, and recovery efforts. This will also allow the NICC to coordinate support to the stakeholders in Federal regions when the needs of responding to an incident exceed regional capabilities and resources.

Performance

Increases

- **Cyber and Infrastructure Awareness and Reporting:** The additional resources will enable automating data inputs with a focus on lifeline critical sectors by enhancing processes, policies, and technology. Specifically, the additional resources will be used to build data bridges, create dashboards, and program automatic report generation to monitor for abnormalities that may indicate emerging threats and hazards. NPPD will rapidly, effectively, and efficiently identify anomalies or impacts to infrastructure across the Nation, vet that information for accuracy, and more immediately provide that situational awareness to critical infrastructure stakeholders.
- **CI Interagency Coordination:** The additional resources enhance the current 24 x 7 x 365 capability to operate at the intersection of government, private sector, and international critical infrastructure security and resilience. This would be a fully-dedicated

function to more robustly coordinate the activities of a combined cyber-physical Watch operations center and would provide the additional capacity necessary to support steady state critical infrastructure security and resilience activities and three real world (cyber/physical) incidents on a daily basis in surge conditions. Additionally, the NICC is currently challenged to provide a strategic reporting and executive briefing capability of regionally informed cross-domain (cyber/physical) critical infrastructure security and resilience activities to support regional operations coordination in addition to its primary role of supporting the NPPD Office of Infrastructure Protection Watch and Warning function. Expanding resources allow for the creation of an overarching NPPD enterprise-wide reporting and coordination function to better meet the needs of all stakeholders and provide an expanded suite of information products for internal and external stakeholders. In particular, the additional resources would allow the NICC to enhance the stakeholder briefing capability (currently provided at least once daily) to better meet the needs of owners and operators to support their security and resilience efforts. Additional resources for the NPPD Executive Briefing Team would support the creation of a dedicated entity to support daily reporting, monthly and quarterly outreach engagements, as well as operational reporting and briefing engagements during surged operations. The stakeholder briefing capability provides strategic, regionally informed information integration and coordination for physical and cyber infrastructure so that stakeholders have the timely information and support they need to reduce vulnerabilities; minimize consequences; identify and disrupt threats; and hasten response and recovery efforts related to critical infrastructure. All Executive Briefing Team services are currently provided by limited NPPD IP resources and cannot be sustained in 24x7 surge capacity. Additional resources would properly resource a dedicated NPPD Executive Briefing Team to provide robust information sharing and decision support for internal and external stakeholders, including the ability to surge as needed. Of the 12 positions supporting the overarching NPPD enterprise-wide reporting and coordination function, two (2) positions would augment the Executive Briefing Team.

Program Change

Priority Communications #1: Priority Telecommunications Services, \$0.4 million

Description

NPPD requests the following program increases:

1. Priority Telecommunications Services (PTS), \$0.4 million

Justification

Increases:

- **Priority Telecommunications Services:** NPPD requests an increase of \$0.4 million for IT Security. This request will provide an Information System Security Officer (ISSO). An ISSO performs security actions for TSPWeb. TSPWeb enables the

Telecommunications Service Priority (TSP) Program Office to process and maintain requests for TSP authorization codes assigned nationwide to all levels of government and critical infrastructures. TSPWeb enables its authorized users to manage access, generate notices and reports, schedule and submit batch processes, assign TSP Codes, create and execute queries, maintain TSP Code information, maintain point of contact and organization information, perform database administrative tasks and fulfill FCC reporting requirements. TSPWeb users are the TSP Program Office Federal staff, contractor support staff and telecommunications vendor points of contact. Only one ISSO is assigned to a system, but multiple alternate ISSOs may be designated to assist the ISSO. While the ISSO performs security functions, responsibility for information system security always rests with the System Owner.

Performance

Increases:

- **Priority Telecommunications Services:** ISSO duties include:
 - a. Ensuring that security requirements for TSPWeb will be met.
 - b. Ensuring that requests for certification and accreditation of computer systems are completed in accordance with the published procedures.
 - c. Ensuring that protective measures such as deadbolt locks on doors, placement of electrical wiring, etc. as countermeasures for physical security threats, are in place.
 - d. Ensuring compliance with all legal requirements concerning the use of commercial proprietary software, e.g. respecting copyrights and obtaining site licenses.
 - e. Maintaining an inventory of hardware and software within the program and development offices or field site facility.
 - f. Coordinating the development of a Contingency Plan and ensuring that the plan is tested and maintained.
 - g. Ensuring that risk analyses are completed to determine cost-effective and essential safeguards.
 - h. Ensuring preparation of security plans for sensitive systems and networks.
 - i. Attending security awareness and related training programs and distributing security awareness information to the user community as appropriate.
 - j. Reporting IT security incidents (including computer viruses) in accordance with established procedures.
 - k. Reporting security incidents not involving IT resources to the appropriate security office.

Program Change

Proactive Cyber Protection #1: National Cybersecurity and Communications Integration Center (NCCIC) Operations, \$30.3 million, 43 Positions/7 FTE

Description

NPPD requests the following program increases:

1. NCCIC MS-ISAC Cost Sharing, \$0.2 million
2. NCCIC Analytics, \$6 million
3. Automated Information Sharing (AIS) Threat Dissemination, \$8.3 million
4. Emergency Support Function #2 Communications Operation, \$1.3 million
5. NCCIC Staffing Plan, \$14.5 million
6. IT Security (NCC Watch), \$0.4 million

Justification

Increases:

- **NCCIC MS-ISAC Cost Sharing:** Culminating from over six months of collaborative efforts between NPPD and the MS-ISAC, the cost sharing plan represents an agreement between Federal and SLTT governments to ensure stability and demonstrate a shared responsibility in protecting our nation's critical networks and services. A cost analysis of the Federal responsibilities as defined in the plan has determined NPPD requires \$9.5 million in FY 2018 in order to fully execute its Federal responsibilities. The FY 2018 shortfall, \$0.2 million, ensures NPPD can support the nation's SLTT governments without reducing other critical MS-ISAC services. NPPD requests an increase of \$0.2 million for MS-ISAC Cost Sharing Services to include:
 - a. Act as the DHS NPPD Liaison for cybersecurity to State, local, tribal, and territorial (SLTT) entities.
 - b. Sustain Network Analysis Services to all 50 States and 6 territories.
 - c. Analyze threat and attack information to maintain a real time cybersecurity posture of the SLTT sector.
 - d. Develop appropriate mitigation strategies to assist SLTTs.
 - e. Information sharing, incident management and response.
 - f. Implementation of the Nationwide Cyber Security Review (NCSR).
 - g. Implementation of the MS-ISAC SCIF and facilitation of classified information sharing with DHS and State and local Fusion Centers.
 - h. Support DHS' weather map through metrics and data reporting.
 - i. Support for travel in FY 2018.

NCCIC Analytics: NPPD requests an increase of \$6 million to improve the NCCIC’s situational awareness of internal network operations, coordinate internal cyber response, and implement cybersecurity best practices to protect DHS data sets and critical infrastructure from cyber threats. Activities will include providing adequate malware lab capabilities to the NCCIC Incident Response Teams (IRTs) and National Cybersecurity Assessment and Technical Services teams (NCATS) and further developing the NCCIC’s analytic expertise, techniques and procedures.

The demand for NCCIC IRTs and NCATS assessments is growing at an exponential rate, thus requiring a more robust, scalable support infrastructure to conduct today’s activities; however, there are currently no dedicated funds supporting the Hunt and Incident Response Teams (HIRT)/NCATS malware lab. The NCCIC requires analytic tools, resources, and a larger lab to be fully effective. The expanded shared NCCIC lab will provide the facilities and infrastructure to support additional engagements derived from expanded efficiency by enabling remote operations thereby reducing costly travel expenses and time associated with every deployment. The lab and analytics functions will serve as critical enablers to the IRT and NCATS, providing greater agility to identify and detect (analytics), protect (lab), and respond and recover to threats as they occur. In the field, automated analysis workflow is necessary to aggregate known network intrusions and share file-level indicators, automatically extract all available static and dynamic indicators using multiple state-of-the-art tool-sets and cross reference the data against known and available Commercial Off the Shelf (COTS) and Government Off the Shelf (GOTS) data for possible mitigations.

- **Automated Information Sharing Threat Dissemination:** NPPD requests an increase of \$8.3 million to fulfill timely sharing requirements of the Cybersecurity Act of 2015 which states the NCCIC shall perform the timely sharing of classified cyber threat indicators and defensive measures to “to prevent or mitigate adverse effects from such cybersecurity threats”. The AIS initiative addresses policy issues enabling the automated receipt, filtering, analysis, and dissemination of cyber threat indicators, in addition to the technology pieces (STIX, TAXII, cloud environment and any other commercial components required to sanitize or redact indicators with personally identifiable information or Protected Critical Infrastructure Information (PCII)).

The AIS initiative will include participants across the private sector (including Information Sharing and Analysis Organizations), Federal Departments and agencies, State, local, tribal and territorial partners and international entities. Under the Cybersecurity Act of 2015, AIS will be required to include cyber threat data elements and defensive measures. In order to meet the requirements of the Cybersecurity Act of 2015 and the National Cybersecurity Protection Act of 2014, the NCCIC will use the requested resources to:

- Adopt the latest STIX and TAXII standards, while developing translations to maintain backward compatibility with older versions for organizations that are not able to upgrade their own tools and systems in FY18.
- Develop processes and capabilities to generate indicator confidence, improve risk scoring, handle revocation of improperly published indicators and identify duplicative indicators.
- Advance automation and orchestration of the indicators through integration with the Integrated Active Cyber Defense framework.

- • Develop processes and solutions to help Federal Departments and Agencies and non-Federal entities resolve technical concerns, business issues and/or policy constraints with automated information sharing.**Emergency Support Function #2 Communications Operation:** NPPD requests an increase of \$1.3 million to provide enhanced, integrated, actionable information about emerging trends, imminent threats, and the status of incidents that may impact critical infrastructure. The National Response Framework (NRF) designates NCCIC/NCC as the lead for organization and management of Emergency Support Function #2 (ESF #2) (Communications). As the national coordinator for ESF#2, the NCCIC is expected to maintain readiness and field a trained team for response. Due to a reduction in resources over the last two fiscal years, the National Coordinating Center (NCC) for Communications Training and Exercise (T&E) team has been unable to provide the ESF#2 properly skilled individuals to complete response and recovery duties, a task which is required by the NRF and the National Disaster Recovery Framework (NRDF).

The request will enable NPPD to sustain critical operational capabilities and fully support emergency communications response and recovery efforts under ESF #2 – Communications of the National Response Framework.

- **NCCIC Staffing Plan:** NPPD requests an increase of \$14.5 and 43 Positions/7 FTE to implement the first phase of the NCCIC Staffing Plan. NPPD performed a thorough review of workload-based staffing requirements proportionate to increased analytic demands for FY 2017-2021. The product of that review was the NCCIC Staffing Plan, delivered to Congress in 2015.

The NCCIC Staffing Plan identifies workload-based staffing requirements proportionate to increased analytic demands for NCCIC products and services in FYs 2017-2021. The resource plan details the functional layout of the NCCIC, provides the current state of the NCCIC staff, and describes the desired future state for each NCCIC branch, including the resources required to reach that state. This funding is vital for the NCCIC to effectively support Federal agencies and private sector companies in identifying, responding to, and recovering from cybersecurity incidents; planning and conducting cybersecurity exercises for the NCCIC and its stakeholders; and providing 24x7 operational watch floor support to the National Coordinating Center for Communications (NCC).

FY 2018 funding will support specialized NCCIC teams for response during a significant cybersecurity incident or proximate to a known significant risk. These teams will apply capabilities from across the NCCIC, such as “red team” penetration testing and “hunting” for adversary activity, to address the victim’s specific risk management requirements. DHS will lead the teams in consultation with the National Security Council, the Office of Management and Budget (OMB) and appropriate partner agencies.

The NCCIC staffing plan additionally supports the Department’s cyber incident response capabilities. The NCCIC incident response teams assist government agencies and private sector companies in protecting their IT systems and control systems against

emerging cyber threats, vulnerabilities, and/or incidents. NCCIC threat analysts share timely and actionable cybersecurity information with Federal and SLTT agencies and organizations, the Intelligence Community, private sector constituents, and international partners. NCCIC technical analysts conduct vulnerability and malware analysis and support forensic investigations.

In addition to incident response, NCCIC will engage in three principal activities. First, network analysts will analyze data from the EINSTEIN intrusion detection and prevention system in order to identify potential compromises of Federal networks and alert impacted agencies. Second, threat analysts will develop and disseminate cybersecurity threat, vulnerability, and mitigation information to government and private sector partners via both automated and manual means. Finally, technical analysts will use data from government and private sector partners to develop indicators of malicious activity that are used in the EINSTEIN system to detect potential compromises, sharing with government and private sector partners to support their own cybersecurity.

The NCCIC operates at the intersection of government, private sector, and international network defense and communications communities, applying unique analytic perspectives, ensuring shared situational awareness, and orchestrating synchronized response, mitigation, and recovery efforts while protecting the Constitutional and privacy rights of Americans in both the cybersecurity and communications domains. Funding for the NCCIC Staffing Plan allows NPPD to onboard Federal & contractor personnel to meet the growing demand for NCCIC services, including 24x7x365 operational staffing at both Glebe and Pensacola locations, and to maintain readiness to execute national security/emergency preparedness activities.

Additional resources to build Federal civilian cybersecurity teams under the leadership of DHS will support the NCCIC's long-term efforts to support Federal agencies in managing cybersecurity events or incidents to limit damage, increase the confidence of external stakeholders, and drives timely recovery. The NCCIC red team penetration testing and cyber hunt capabilities will support the proactive identification of vulnerabilities and threats in agency networks.

- **IT Security (NCC Watch):** NPPD requests an increase of \$0.4 million for IT Security (National Coordinating Center (NCC) Watch). This request will provide an Information System Security Officer (ISSO). An ISSO performs security actions to support the NCC LAN system. The NCC LAN system supports the following:
 - Infrastructure Mapping Tool (IMT) and Undersea Cable Infrastructure (UCI)
 - TSP Web – Funded by OEC
 - Shared File Folders - houses years of historical data and analysis
 - Master Station Log (MSL)
 - SHARES program
 - Miscellaneous Watch Tools/Applications (like modeling tools primarily)
 - Industry non-filtered Internet shots (Resident Industry Representatives)
 - U.S. Secret Service non-filtered Internet shots (on the 4th floor)

- Only one ISSO is assigned to a system, but multiple alternate ISSOs may be designated to assist the ISSO. While the ISSO performs security functions, responsibility for information system security always rests with the System Owner.

Performance

Increases:

- **NCCIC MS-ISAC Cost Sharing:** The requested resources will enable NPPD to execute its responsibilities as defined in the agreed upon cost sharing plan, without impacting critical MS-ISAC services to be provided by DHS.
- **NCCIC Analytics:** With the provisioning of upgraded facilities, communications and technology, the NCCIC will be able to effectively communicate with teams deployed in the field, analyze on-wire artifacts and support efficiencies of scale with remote assessments and response. At current funding level the malware lab is on track to analyze 6,150 malware artifacts in FY 2017; 76 percent of these artifacts are from HIRT and the FBI. With this investment, the NCCIC will be able to handle the technical analysis requirements for 20 additional remote responses (incidents and/or assessments) per year (at maximum utilization) or 200 percent of current capacity. There is currently a significant backlog of un-analyzed malware artifacts that continues to grow on a daily basis.

The NCCIC will also support private sector companies with unique knowledge of threat actor tactics, techniques and procedures derived from sensitive intelligence information in addition to a breadth of experience from intrusions into government networks that cannot be provided in the marketplace. By supporting these companies, we are fulfilling our legally mandated mission to support private sector and critical infrastructure from cyber incidents upon their request. The government learns key details of these intrusions that can be further shared with a wider community to ensure that other organizations can defend themselves from similar incidents. This information also informs the government understanding of intrusion trends from a variety of actors so that more accurate risk profiles and mitigation measures can be developed.

- **Automated Information Sharing Threat Dissemination:** In FY 2016 and FY 2017, AIS has successfully implemented the infrastructure required to rapidly share large volumes of information. The next phase will need to establish and then improve the quality of indicators shared along with additional technical context allowing further automation of the indicators. Without the requested resources, the NCCIC will be unable to automate feedback and measurement of indicator timeliness, quality and value to receiving organizations. While many organizations are signed up to receive indicators not all are using in a fully automated fashion, so the requested resources will allow the NCCIC to work across Federal and non-Federal entities develop processes and a technical roadmap supporting full operationalization.
- **Emergency Support Function #2 Communications Operation:** The additional resources will allow NPPD to provide essential operational capabilities required to sustain its performance of the ESF #2 national coordinator role. The additional resources will restore contractor support to previous senior level of expertise as subject matter experts and technical analysts, provide training and exercise events, upgrade local area network equipment, and enhance interagency coordination and information sharing.

CS&C will host a national ESF#2 training and exercise event of approximately 150 responder to ensure the readiness of the interagency (FCC, USDA, DOI, FEMA, DOC, DoD, GSA) and industry to execute communications response. Prior to national training event, foundational webinars (target 5) will be conducted to provide basic response background and also focus on subject matter expert presentation. Support will also enhance the analysis and communications support for the upcoming New Madrid Seismic Zone national exercise.

- **NCCIC Staffing Plan:** As detailed in the NCCIC Workforce Staffing Plan, the capabilities, outputs and outcomes associated with this request include:
 - a. Expand the capacity of the NCCIC 24x7 watch floor from three shifts to five shifts.
 - b. Real time continuity of operations at a second site, with technical analysis capabilities for incident response.
 - c. Expand the size and capabilities of red team penetration testing and cyber hunt teams to help Federal agencies identify and mitigate risks to their critical systems and provide assessments for critical infrastructure companies and SLTT governments
 - d. Increase the simultaneous capacity of incident response teams from five to eight incidents, and the annual capacity for onsite engagements from 30 to 50.
 - e. Increase the quantity, quality and speed of threat indicators distributed via AIS, and reduce the potential for violations of citizens' personally identifiable information.
- IT Security (NCC Watch): Duties:
 - a. Ensuring that security requirements for the NCC-LAN operations system will be met.
 - b. Ensuring that requests for certification and accreditation of computer systems are completed in accordance with the published procedures.
 - c. Ensuring that protective measures such as deadbolt locks on doors, placement of electrical wiring, etc. as countermeasures for physical security threats, are in place.
 - d. Ensuring compliance with all legal requirements concerning the use of commercial proprietary software, e.g. respecting copyrights and obtaining site licenses.
 - e. Maintaining an inventory of hardware and software within the program and development offices or field site facility.
 - f. Coordinating the development of a Contingency Plan and ensuring that the plan is tested and maintained.
 - g. Ensuring that risk analyses are completed to determine cost-effective and essential safeguards.
 - h. Ensuring preparation of security plans for sensitive systems and networks.
 - i. Attending security awareness and related training programs and distributing security awareness information to the user community as appropriate.
 - j. Reporting IT security incidents (including computer viruses) in accordance with established procedures.
 - k. Reporting security incidents not involving IT resources to the appropriate security office.

Program Change

Proactive Cyber Protection #2: National Cybersecurity and Communications Integration Center (NCCIC) Planning and Exercises, \$15.7 million, 24 Positions/13 FTE

Description

NPPD requests the following program increases:

1. Industrial Control System-Cyber Emergency Response Team (ICS-CERT) Operator Training and Additional Assessments, \$5 million
2. NCCIC Staffing Plan, \$10.6 million, 24 Positions/13 FTE

Justification

Increases:

- **ICS-CERT Operator Training and Additional Assessments:** NPPD requests an increase of \$5 million to provide advanced operator training and additional assessments for the ICS-CERT. This increase will enable 100 additional assessment activities, increasing the number of total assessments per year to an estimated 230 (up from an actual in FY 2016 of 130 assessments). ICS-CERT works to protect and secure control systems essential to the Nation's overarching security and economy. ICS-CERT's relationships, risk mitigation and analysis techniques, and ability to keep pace with the compounding number of exploited vulnerabilities enable our Nation's industrial control systems and stakeholders to operate under reduce cyber risk and prepare for future vulnerabilities.

NPPD is responsible for leading the Federal Government's efforts to improve the technical cybersecurity expertise and capabilities of partners tasked with preventing, mitigating, and responding to threats against the Nation's industrial control systems. The request will provide additional onsite assessments including Design Architecture Review and Network Architecture Verification & Validation. Funding will allow workforce development initiatives to provide 20 additional advanced training courses to improve technical cybersecurity expertise and capabilities of partners.

- **NCCIC Staffing Plan:** NPPD requests an increase of \$10.6 million and 24 Positions/13 FTE in support of the NCCIC Staffing Plan. This resource request supports the National Cybersecurity Assessment and Technical Services (NCATS) teams, as recent events highlight that DHS needs more capacity to proactively assess agency risks. Agency assessments ensure that all large and high risk agencies can be compared using a standard approach. This proactive assessment and search for malicious cyber activity on Federal networks will allow DHS to be more aggressive in discovering network vulnerabilities and potential malicious activity, such as the OPM data breach.

Additional resources to build Federal civilian cybersecurity teams under the leadership of DHS will support the NCCIC's long-term efforts to support Federal agencies in managing cybersecurity events or incidents to limit damage, increase the confidence of external stakeholders, and drives timely recovery. The NCCIC red team penetration testing and cyber hunt capabilities will support the proactive identification of vulnerabilities and threats in agency networks. Through the NCCIC Staffing Plan, the bifurcation of US-CERT, and the proposed NCCIC teaming construct, agencies will default to using DHS or a DHS-provided surge capacity for incident response, red team penetration testing, cyber hunt and the additional proactive agency assessments to search for malicious cyber activity on Federal networks to discover network vulnerabilities and potential malicious activity.

Performance

Increases:

- **ICS-CERT Operator Training and Additional Assessments:** This increase will enable 100 additional assessment activities, increasing the number of total assessments per year to an estimated 230 (up from an actual in FY 2016 of 130 assessments). The number of actual assessments that can be performed with the additional contracted resources is somewhat variable, as requests from our stakeholder shift towards more complex technical assessments, which in turn consume a higher proportion of resources.

In addition, these resources will enable ICS-CERT to provide additional control systems training courses to critical infrastructure owner/operators. Current demand for this training has historically exceeded capacity by at least a factor of two. Together with the continued rising demand for regional and international training events (billed as capacity building by the State Department and DHS International), these resources are necessary to help ICS-CERT meet demand. ICS-CERT will provide 40 total in-person training courses, in both classroom and regionally-based settings, from the FY 2017 baseline of 20 courses.

- **NCCIC Staffing Plan:** Fully funding the NCCIC Staffing Plan in FY 2018 will allow NCCIC to expand the size and capabilities of its NCATS and cyber hunt teams to pro-actively help Federal agencies identify and mitigate risks to their critical systems and provide assessments for critical infrastructure companies and SLTT governments. Specific mission services that rely on this funding request include:
 - a. Increasing the number of cyber hygiene scanning reports to 45,000.
 - b. Increasing the number of risk and vulnerability assessments from 90 to 150.
 - c. Increasing phishing campaign assessments from 5 to 25.
 - d. Increasing capacity for the National Vulnerability Database to identify and manage vulnerabilities.
 - e. Make use of new data from the Continuous Diagnostics and Mitigation system.
 - f. Decrease the time required to detect and mitigate critical vulnerabilities.

Program Change

Proactive Cyber Protection #3: Cybersecurity Education and Awareness, (\$7.9 million), 0 Positions/0 FTE

Description

NPPD requests the following program increases:

1. IT Security (NICCS Portal), \$0.4 million

NPPD requests the following program decreases:

1. Cybersecurity Education (\$8.3 million)

Justification

Increases:

- **IT Security (NICCS Portal):** NPPD requests an increase of \$0.4 million for IT Security (National Initiative for Cybersecurity Careers and Studies (NICCS) Portal). This request will provide an Information System Security Officer (ISSO). An ISSO performs security actions for an information system. Only one ISSO is assigned to a system, but multiple alternate ISSOs may be designated to assist the ISSO. While the ISSO performs security functions, responsibility for information system security always rests with the System Owner.

Decreases:

- **Cybersecurity Education:** NPPD requests a decrease of \$8.3 million for Cybersecurity Education. This reduction will reduce support for middle and high school curricular support efforts, cybersecurity higher education promotion, and workforce development programs.

Performance

Increases:

- **IT Security (NICCS Portal):** Duties include:
 - a. Ensuring that security requirements for the major application or general support system will be met.
 - b. Ensuring that requests for certification and accreditation of computer systems are completed in accordance with the published procedures.
 - c. Ensuring that protective measures such as deadbolt locks on doors, placement of electrical wiring, etc., as countermeasures for physical security threats, are in place.
 - d. Ensuring compliance with all legal requirements concerning the use of commercial proprietary software, e.g., respecting

- copyrights and obtaining site licenses.
- e. Maintaining an inventory of hardware and software within the program and development offices or field site facility.
 - f. Coordinating the development of a Contingency Plan and ensuring that the plan is tested and maintained.
 - g. Ensuring that risk analyses are completed to determine cost-effective and essential safeguards.
 - h. Ensuring preparation of security plans for sensitive systems and networks.
 - i. Attending security awareness and related training programs and distributing security awareness information to the user community as appropriate.
 - j. Reporting IT security incidents (including computer viruses) in accordance with established procedures.
 - k. Reporting security incidents not involving IT resources to the appropriate security office.

Decrease:

- **Cybersecurity Education:** Impacts of this reduction will be mitigated in part by continuing to fund the existing Federal Virtual Training Environment (FedVTE) and NICCS portal, cybersecurity training platforms available to students and professionals across the nation. This reduction will limit DHS's ability to promote cybersecurity knowledge and careers, funding for Scholarship for Service (SFS) job fairs, and National Cyber Security Awareness activities, including the Cybersecurity Awareness grant, Stop.Think.Connect, and National Cybersecurity Awareness Month. Finally, this reduction will minimize cybersecurity workforce training through the Federal Cybersecurity Training Events (FedCTE) program.

Program Change

Proactive Cyber Protection #4: Federal Network Resilience, \$11.4 million, 35 Positions/18 FTE

Description

NPPD requests the following program increases:

1. Federal Information Security Modernization Act (FISMA), \$6.2 million, 18 Positions/9 FTE
2. FISMA – Agency Governance and Training, \$0.6 million, 4 Positions/2 FTE
3. FISMA – Agency Support and Coordination, \$2.1 million, 2 Positions/1 FTE
4. Cybersecurity Design and Engineering, \$3 million, 11 Positions/ 6 FTE

NPPD requests the following program decreases:

1. Cybersecurity Assurance (\$0.3 million)
2. Network and Infrastructure Security – Trusted Internet Connection (TIC) (\$0.2 million)

Justification

Increases:

- **Federal Information Security Modernization Act:** NPPD requests an increase of \$6.2 million and 18 Positions/9 FTE for FISMA. This request enables NPPD to execute authorities under FISMA 2014 and support agencies and OMB with the identification and verification of capabilities to address the NIST Framework, FISMA Metrics and CAP goals.
- **FISMA – Agency Governance and Training:** NPPD requests an increase of \$0.6 million and 4 Positions/2 FTE for FISMA – Agency Governance and Training. NPPD has the mission to provide a common baseline of security across the Government and to assist agencies manage their cyber risk. In providing this common baseline, NPPD strives to reduce the prevalence of damaging cybersecurity incidents that result in the loss of information or the degradation of services. The FNR Division focuses on the activities of measuring, motivating, and guiding federal cybersecurity; to include developing approaches to drive change in cybersecurity risk management across the Federal Government. Authorities under the FISMA, 2014 require heightened attention and investment to assess agency and government-wide cybersecurity, gather Federal cybersecurity requirements, and develop operational policies for the Federal Government. With requested resources, FNR will begin to develop and expand its governance, training and education staff. Agencies have consistently stated that the most daunting obstacles to integrating Continuous Diagnostics and Mitigation (CDM) into their existing cybersecurity programs are not only technical challenges, but organizational readiness that may include governance, policy, and a lack of cybersecurity risk management discipline. To address this gap, FNR's Training Program is designed to help agency leadership and cybersecurity staff better understand their cybersecurity risk and areas of potential improvement. The Training Program will provide agencies with approaches to using their data to measure

cybersecurity risk reduction; training will be based upon use of continuous monitoring feeds and intrusion data, and the CDM Dashboard at the Agency and Federal-level for improved management of defect prioritization and remediation activities. Training sessions will inform and motivate Chief Information Officer (CIO) and Chief Information Security Officer (CISO) behavior, and provide Federal CIOs and CISOs with information to assist them in understanding and managing their own cybersecurity risks and guide investment toward measurably effective solutions. FNR's Training Program has a unique focus on socializing continuous authorization guidance, both in developing and issuing, in consultation with OMB and NIST, to enable the transition from manual accreditation to continuous authorization, including via the revision of Circular A-130. The Dashboard Training modules will specifically focus in this area.

- **FISMA – Agency Support and Coordination:** NPPD requests an increase of \$2.1 million and 2 Positions/1 FTE for FISMA – Agency Support and Coordination. The Agency Support Coordination program provides targeted and tailored support to Federal department and agency cyber leaders and their cybersecurity efforts through cross-program unified information sharing, comprehensive status and implementation tracking, and fully integrated cybersecurity service delivery. Federal departments and agencies are engaging DHS on a variety of issues to include program implementation and operations. In order to ensure NPPD has targeted the right agencies at the right times and provided effective support services, the Agency Support Coordination program is the primary method by which FNR gathers, analyzes, and translates Federal customer requirements to drive DHS program improvements and capability enhancements. Greater awareness into the specific needs of Federal partners allows NPPD to quickly address issues and enables FNR to better identify and recommend actions or solutions to address specific challenges and cross-government trends.
- **Cybersecurity Design and Engineering:** NPPD requests an increase of \$3 million and 11 Positions/ 6 FTE for Cybersecurity Design and Engineering. The requested resources will equip specialized cyber design and engineering teams to provide cyber engineering assistance to Federal Departments, agencies and individual stakeholders to effectively secure their high value systems from cyber threats. NPPD assists agencies with continuous improvement in securing and safeguarding Federal information and networks. This funding will support assessments in areas with cyber security challenges to protect high value information and information systems across the government. The design and engineering team will support the pre-incident evaluation of agency systems and operations, with the goal of identifying opportunities for improvement in design, architecture, and engineering. This team can also support Federal partners after an incident in longer term remediation including providing assistance and expertise for rebuilding affected systems. Additionally, this request will start the planned expansion of its design and engineering capability. The funding will be used to assist Federal departments and agencies that are struggling to secure their cyber assets by starting multi-faceted security evaluations of systems and operations and subsequently providing remediation recommendations. These resources will deepen FNR's ability to close security deficiencies identified in agency systems as well as develop new services and compliance approaches with NIST.

Decreases:

- **Cybersecurity Assurance:** NPPD requests a decrease of \$0.3 million for Cybersecurity Capability Validation (CCV) assessments. This reduction will eliminate CCV assessments (blue teams) for two Federal departments and/or agencies.
- **Network and Infrastructure Security – Trusted Internet Connection:** NPPD requests a decrease of \$0.2 million for Network and Infrastructure Security. This reduction will limit the ability to provide TIC assessment analysis and plans of action and milestones (POAMs) for small and micro Federal civilian departments and agencies.

Performance

Increases:

- **Federal Information Security Modernization Act:** The additional funds will enhance NPPD's collaboration efforts through improved data analytics increasing the resulting value of the FISMA reporting process and a better understanding by agency cybersecurity risk and areas of potential improvement with valid insights into relative cybersecurity maturity across the Executive Branch.
- **FISMA – Agency Governance and Training:** Currently, FNR's cybersecurity governance and training capabilities are inadequately resourced to meet the demand for governance processes and management controls to ensure a successful and measurable implementation required to implement critical security programs to focus on CDM. The CDM Program is currently being implemented across the Federal Government; in support of Phase 1 and 2 security capability deployments, FNR is leading a shift in cybersecurity governance that will ease the burden on Federal agencies and enable a transition to ongoing assessment and authorization. During the CDM Program's CyberStat in mid-2016, the availability of training on the CDM solution and Dashboard to the Federal civilian agencies was a high interest area. FNR, in partnership with the CDM Program Management Office, continues to explore cost-effective options and avenues to offer a stable and sustained training approach to the Federal civilian cyber workforce. With the requested resources, FNR will begin to develop and expand its governance, training and education capabilities. The resources will assist in building out FNR's Federal staff for the cybersecurity governance and training capability for CDM.
- **FISMA – Agency Support and Coordination:** The requested resources will improve FNR's agency support coordination and management capabilities through the development of a centralized and portfolio-based engagement and outreach "system". FNR will focus on five critical efforts – outreach and administration of program agreements; supporting the implementation of priority cyber programs; defining and translating customer requirements; interagency coordination and information sharing; and small agency support – that will improve the way that Federal departments and agencies interact with current and future cybersecurity programs and capabilities. FNR will create a product line that addresses the most significant interagency challenges, identifies and prioritizes the delivery of tailored cybersecurity services at specific agencies based on needs, and comprehensively tracks the implementation of Federal cybersecurity requirements, priorities, standards, guidelines, and policies. This funding will allow FNR to create and execute 17 additional agency-specific cybersecurity support plans across, at minimum, the CFO Act agencies and

high-impact non-CFO Act agencies, and implement and additional 10 interagency information sharing events and exchange sessions for a total of 40. Agency support coordination provides a much broader mission than outreach and program awareness.

- **Cybersecurity Design and Engineering:** These resources will strengthen NPPD’s ability to manage continuous risk and take advantage of the data and analytics so customers can start to thrive and not just survive. The additional resources will begin the improvement and deepening of current design, architecture, and engineering assistance capabilities provided to Federal departments and agencies, as well as develop new services for those struggling. When used in conjunction with other cybersecurity evaluations and assessments, these resources will improve the current “picture” of cybersecurity risk that it provides to Federal departments and agencies. Additionally, the requested resources will equip specialized cyber design and engineering teams to provide cyber engineering assistance to Federal Departments, agencies and individual stakeholders to effectively secure their high value systems from cyber threats. NPPD assists agencies with continuous improvement in securing and safeguarding Federal information and networks. This funding will support assessments in areas with cyber security challenges to protect high value information and information systems across the government. The design and engineering team will support the pre-incident evaluation of agency systems and operations, with the goal of identifying opportunities for improvement in design, architecture, and engineering. This team can also support Federal partners after an incident in longer term remediation including providing assistance and expertise for rebuilding affected systems. Additionally, this request will start the planned expansion of its design and engineering capability.

Decreases:

- **Cybersecurity Assurance:** NPPD expects minimal impact as accelerated deployments of continuous monitoring capabilities will mitigate much of the risk.
- **Network and Infrastructure Security – Trusted Internet Connection:** NPPD expects minimal impact as accelerated deployments of continuous monitoring capabilities will mitigate much of the risk.

Program Change

Proactive Cyber Protection #5: Continuous Diagnostics and Mitigation (CDM), \$2 million, 24 Positions/12 FTE

Description

NPPD requests the following program increase:

1. Continuous Diagnostics and Mitigation (CDM), \$2 million, 24 Positions/12 FTE

Justification

Increases:

- **Continuous Diagnostics and Mitigation:** The CDM program is not sufficiently staffed to support its rapidly expanding program requirements. Tasked to enhance the overall security posture of Federal agencies' networks, the demand for the program has grown exponentially since initiation and requirements have subsequently multiplied. This increase in demand and responsibility requires a proportional increase in personnel to ensure adequate programmatic and engineering support. While contractor support is key to deployment and integration of CDM capabilities, there are inherently governmental functions to manage the roll outs, planning, and implementation of capabilities that must be provided by Federal employees.

Performance

Increases:

- **Continuous Diagnostics and Mitigation:** . The additional resources will allow NPPD to fully staff the CDM program management office, in accordance with the program's staffing plan, and ensure due diligence is applied to fully plan and implement CDM phases as the Federal Government strengthens its defenses against continual attacks and the dynamic threat landscape. The additional 24 positions will enable timely delivery of cyber tools, sensors and integration services to the civilian Federal workforce, and reduce the capability of Federal information technology security staff to address cyber threats. Without additional resources, NPPD will be unable to successfully execute CDM at the rate in which it is needed, leaving departments and agencies vulnerable to exploitation, vulnerabilities, insider attacks, and other cyber threats.

Operations and Support Personnel Compensation and Benefits

Pay Summary *Dollars in Thousands*

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Mission Support	418	356	\$54,621	\$153.27	418	356	\$54,606	\$153.22	435	349	\$54,982	\$157.37	17	(7)	\$376	\$4.15
Cybersecurity	603	408	\$69,368	\$170.02	603	408	\$74,441	\$182.45	743	579	\$106,519	\$183.97	140	171	\$32,078	\$1.52
Infrastructure Protection	624	499	\$75,153	\$150.61	624	499	\$75,152	\$150.61	681	573	\$88,268	\$154.05	57	74	\$13,116	\$3.44
Emergency Communications	126	103	\$16,168	\$156.97	126	103	\$17,280	\$167.77	137	108	\$18,134	\$167.91	11	5	\$854	\$0.14
Integrated Operations	334	265	\$41,605	\$157	334	265	\$44,104	\$166.43	391	322	\$53,855	\$167.25	57	57	\$9,751	\$0.82
Office of Biometric Identity Management	170	161	\$22,551	\$140.07	170	161	\$22,551	\$140.07	170	154	\$21,843	\$141.84	-	(7)	(\$708)	\$1.77
Total	2,275	1,792	\$279,466	\$155.92	2,275	1,792	\$288,134	\$160.76	2,557	2,085	\$343,601	\$164.77	282	293	\$55,467	\$4.01
Discretionary - Appropriation	2,275	1,792	\$279,466	\$155.92	2,275	1,792	\$288,134	\$160.76	2,557	2,085	\$343,601	\$164.77	282	293	\$55,467	\$4.01

* The FTE Rate calculation does not include Object Class 11.8-Special Personal Services Payments or 13.0-Benefits for Former Personnel.

Pay by Object Class *Dollars in Thousands*

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$199,058	\$204,717	\$244,105	\$39,388
11.3 Other than Full-Time Permanent	\$6,163	\$6,308	\$7,038	\$730
11.5 Other Personnel Compensation	\$4,103	\$4,268	\$5,122	\$854
11.8 Special Personal Services Payments	\$58	\$58	\$59	\$1
12.1 Civilian Personnel Benefits	\$70,084	\$72,783	\$87,277	\$14,494
Total - Personnel Compensation and Benefits	\$279,466	\$288,134	\$343,601	\$55,467
Positions and FTE				
Positions - Civilian	2,275	2,275	2,557	282
FTE - Civilian	1,792	1,792	2,085	293

Operations and Support Permanent Positions by Grade – Appropriation

Grades and Salary Range	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
Total, SES	43	43	48	5
Total, EX	1	1	1	-
GS-15	391	391	439	48
GS-14	764	764	859	95
GS-13	633	633	711	78
GS-12	287	287	323	36
GS-11	85	85	96	11
GS-9	57	57	64	7
GS-8	1	1	2	1
GS-7	8	8	9	1
GS-6	1	1	1	-
GS-5	2	2	2	-
Other Graded Positions	2	2	2	-
Total Permanent Positions	2,275	2,275	2,557	282
Position Locations				
Headquarters	295	295	332	37
U.S. Field	1,980	1,980	2,225	245
Averages				
Average Personnel Costs, ES Positions	170,215	170,215	170,215	-
Average Personnel Costs, GS Positions	98,453	98,453	98,453	-
Average Grade, GS Positions	13	13	13	-

Operations and Support Non Pay Budget Exhibits

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Mission Support	\$35,374	\$20,984	\$32,535	\$11,551
Cybersecurity	\$514,367	\$519,324	\$614,038	\$94,714
Infrastructure Protection	\$109,509	\$110,489	\$99,687	(\$10,802)
Emergency Communications	\$84,383	\$83,696	\$95,787	\$12,091
Integrated Operations	\$76,947	\$76,595	\$72,041	(\$4,554)
Office of Biometric Identity Management	\$192,701	\$192,132	\$197,586	\$5,454
Total	\$1,013,281	\$1,003,220	\$1,111,674	\$108,454
Discretionary - Appropriation	\$1,013,281	\$1,003,220	\$1,111,674	\$108,454

Operations and Support Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$13,456	\$13,398	\$13,707	\$309
22.0 Transportation of Things	\$270	\$270	\$300	\$30
23.1 Rental Payments to GSA	\$10,958	\$10,271	\$11,638	\$1,367
23.2 Rental Payments to Others	\$2,072	\$2,078	\$2,054	(\$24)
23.3 Communications, Utilities, and Misc. Charges	\$15,136	\$15,494	\$15,112	(\$382)
24.0 Printing and Reproduction	\$96	\$95	\$97	\$2
25.1 Advisory and Assistance Services	\$439,328	\$451,405	\$455,710	\$4,305
25.2 Other Services from Non-Federal Sources	\$44,715	\$48,877	\$136,361	\$87,484
25.3 Other Goods and Services from Federal Sources	\$219,273	\$219,571	\$227,242	\$7,671
25.4 Operation and Maintenance of Facilities	\$4,218	\$4,262	\$4,492	\$230
25.5 Research and Development Contracts	\$4,412	\$4,393	\$4,540	\$147
25.6 Medical Care	\$3,908	\$3,874	\$4,084	\$210
25.7 Operation and Maintenance of Equipment	\$191,909	\$191,943	\$198,691	\$6,748
25.8 Subsistence & Support of Persons	\$418	\$418	\$625	\$207
26.0 Supplies and Materials	\$690	\$684	\$782	\$98
31.0 Equipment	\$27,825	\$14,532	\$13,568	(\$964)
32.0 Land and Structures	\$5,912	\$6,052	\$5,495	(\$557)
41.0 Grants, Subsidies, and Contributions	\$15,390	\$15,350	\$16,921	\$1,571
42.0 Insurance Claims and Indemnities	\$249	\$253	\$255	\$2
94.0 Financial Transfers	\$13,046	-	-	-
Total - Non Pay Object Classes	\$1,013,281	\$1,003,220	\$1,111,674	\$108,454

Mission Support – PPA

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Mission Support	418	356	\$89,995	418	356	\$75,590	435	349	\$87,517	17	(7)	\$11,927
Total	418	356	\$89,995	418	356	\$75,590	435	349	\$87,517	17	(7)	\$11,927
Subtotal Discretionary - Appropriation	418	356	\$89,995	418	356	\$75,590	435	349	\$87,517	17	(7)	\$11,927

Mission Support – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$75,919		
Transfers & Reprogrammings	\$14,108		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	(\$32)		
Revised Enacted/Request	\$89,995	\$75,590	\$87,517
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$89,995	\$75,590	\$87,517
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$89,995	\$75,590	\$87,517
Obligations (Actual/Projections/Estimates)	\$89,905	\$75,514	\$87,429
Personnel: Positions and FTE			
Enacted/Request Positions	418	418	435
Enacted/Request FTE	356	356	349
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	357	418	435
FTE (Actual/Estimates/Projections)	358	356	349

Mission Support – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	418	356	\$75,919
Cyber Facilities and Operational Requirements	-	-	\$14,108
Total Above Threshold Reprogrammings/Transfers	-	-	\$14,108
FY16 Rescission	-	-	(\$32)
Total Rescissions	-	-	(\$32)
FY 2016 Revised Enacted	418	356	\$89,995
FY 2017 Annualized CR	418	356	\$75,590
FY 2018 Base Budget	418	356	\$75,590
Transfer to USM/CHCO from OBIM due to CHCO WCF Activity Costs Removal	-	-	(\$5)
Transfer to USM/CIO from OBIM due to CIO WCF Activity Costs Removal	-	-	(\$1)
Transfer to USM/CRSO from OBIM due to CRSO WCF Activity Costs Removal	-	-	(\$74)
Transfer to USM/CSO from OBIM due to CSO WCF Activity Costs Removal	-	-	(\$9)
Total Transfers	-	-	(\$89)
2018 Pay Raise	-	-	\$778
Annualization of 2017 Pay Raise	-	-	\$287
Balanced Workforce Adjustment FTP/FTE - Salaries and Benefits	1	1	\$171
Total, Pricing Increases	1	1	\$1,236
Efficiency to Program	-	-	(\$3,463)
Rightsize FTP/FTE & Salaries and Benefits	(8)	(23)	(\$2,410)
Total, Pricing Decreases	(8)	(23)	(\$5,873)
Total Adjustments-to-Base	(7)	(22)	(\$4,726)
FY 2018 Current Services	411	334	\$70,864
Operation Coordination & Mission Support	24	15	\$16,653
Total, Program Increases	24	15	\$16,653
FY 2018 Request	435	349	\$87,517
FY 2017 TO FY 2018 Change	17	(7)	\$11,927

PPA Description

NPPD requests \$87.5 million and 435 Positions/349 FTE for the Mission Support PPA under the Operations & Support appropriation.

The Mission Support PPA provides enterprise leadership, management, and business administrative services that sustain the day-to-day management and back office operations. Key capabilities include conducting agency planning and performance management, managing finances, managing agency workforce, providing physical and personnel security, acquiring goods and services, managing information technology, managing agency property and assets, managing agency communications, managing legal affairs, and providing general management and administration.

Adjustments to Base Justification

- \$1.1 million increase for FY 2018 pay inflation. Of this amount, \$0.3 million is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$0.8 million is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$1.1 million in FY 2017 pay inflation is built into the base, which includes \$0.2 million for the annualization of the 2016 pay raise (1.6 percent) and \$0.9 million for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$0.2 million increase for balanced workforce adjustment to hire one Federal employee to perform functions previously performed by contractors.
\$2.4 million and 23 FTE decrease for rightsizing of personnel based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$3.5 million decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses. Based on an analysis of historical facility and facility support costs and the shift of a number of personnel to the field as part of Regionalization activities, NPPD believes that it can realize efficiencies across the organization and reduce overall costs while still maintaining some flexibility for out-year maintenance, especially with anticipated lower future National Capital Region (NCR) facility needs outlined in a space reduction plan. NPPD believes that its coordinated space reduction plan will reduce facility costs by FY 2018. Additionally, an analysis was done using FY 2014 actual expenditures against FY 2015 planned spending (as listed in project spend plans). Based on this analysis, NPPD is able to reduce purchase card spending in FY 2018.

Mission Support – PPA Personnel Compensation and Benefits

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Mission Support	418	356	\$54,621	\$153.27	418	356	\$54,606	\$153.22	435	349	\$54,982	\$157.37	17	(7)	\$376	\$4.15
Total	418	356	\$54,621	\$153.27	418	356	\$54,606	\$153.22	435	349	\$54,982	\$157.37	17	(7)	\$376	\$4.15
Discretionary - Appropriation	418	356	\$54,621	\$153.27	418	356	\$54,606	\$153.22	435	349	\$54,982	\$157.37	17	(7)	\$376	\$4.15

* The FTE Rate calculation does not include Object Class 11.8-Special Personal Services Payments or 13.0-Benefits for Former Personnel.

NARRATIVE EXPLANATION OF CHANGES

- \$1.1 million increase for pay inflation. Of this amount, \$0.3 million is associated with the 2.1 percent pay raise in 2017 (one quarter) and \$0.8 million is associated with the 1.9 percent pay raise in 2018 (three quarters).
- \$0.2 million increase for balanced workforce adjustment to hire one Federal employee to perform functions previously performed by contractors.
- \$3.1 million and 27 FTE decrease as a result of operational efficiencies in the mission support PPA for Office of the Undersecretary, eliminating duplication or unnecessary expenses.
- \$2.4 million and 23 FTE decrease for rightsizing the PPA based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions:
- \$0.5 million and 7 FTE in program changes:
 - \$1.6 million (24 FTP/15 FTE) increases to the Office of the Under Secretary to optimize mission support activities.
 - \$1.1 million (8 FTP/8 FTE) decrease as a result of IP process improvements.

FTE Change FY 2017-2018: (7)

PCB Change FY 2017-2018: \$376,000

Average Cost Change FY 2017-2018: \$4,150

Mission Support – PPA**Pay by Object Class***Dollars in Thousands*

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$38,785	\$38,765	\$39,008	\$243
11.3 Other than Full-Time Permanent	\$2,181	\$2,182	\$2,200	\$18
11.5 Other Personnel Compensation	\$496	\$497	\$500	\$3
11.8 Special Personal Services Payments	\$58	\$58	\$59	\$1
12.1 Civilian Personnel Benefits	\$13,101	\$13,104	\$13,215	\$111
Total - Personnel Compensation and Benefits	\$54,621	\$54,606	\$54,982	\$376
Positions and FTE				
Positions - Civilian	418	418	435	17
FTE - Civilian	356	356	349	(7)

Pay Cost Drivers*Dollars in Thousands*

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilians Total	356	\$54,621	\$153.43	356	\$54,606	\$153.39	349	\$54,982	\$157.54	(7)	\$376	\$4
Total – Pay Cost Drivers	356	\$54,621	\$153.43	356	\$54,606	\$153.39	349	\$54,982	\$157.54	(7)	\$376	\$4

The FY 2018 request provides additional funding to account for inflation.

**Mission Support – PPA
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Mission Support	\$35,374	\$20,984	\$32,535	\$11,551
Total	\$35,374	\$20,984	\$32,535	\$11,551
Discretionary - Appropriation	\$35,374	\$20,984	\$32,535	\$11,551

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$489	\$488	\$756	\$268
22.0 Transportation of Things	\$12	\$12	\$19	\$7
23.1 Rental Payments to GSA	\$3,656	\$2,875	\$4,456	\$1,581
23.2 Rental Payments to Others	\$149	\$149	\$231	\$82
24.0 Printing and Reproduction	\$5	\$5	\$8	\$3
25.1 Advisory and Assistance Services	\$5,029	\$5,029	\$7,795	\$2,766
25.2 Other Services from Non-Federal Sources	\$2,447	\$2,447	\$3,793	\$1,346
25.3 Other Goods and Services from Federal Sources	\$2,882	\$2,882	\$4,467	\$1,585
25.4 Operation and Maintenance of Facilities	\$298	\$298	\$462	\$164
25.7 Operation and Maintenance of Equipment	\$6,551	\$6,551	\$10,163	\$3,612
26.0 Supplies and Materials	\$178	\$178	\$276	\$98
31.0 Equipment	\$13,678	\$70	\$109	\$39
Total - Non Pay Object Classes	\$35,374	\$20,984	\$32,535	\$11,551

Mission Support – PPA Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Operation and Maintenance of Facilities and Equipment	\$6,849	\$6,849	\$10,625	\$3,776
Mission Support Services	\$10,358	\$10,358	\$16,055	\$5,697
Rental Payments to GSA and Others	\$3,805	\$3,024	\$4,687	\$1,663
Other Costs	\$14,362	\$753	\$1,168	\$415
Total – Non Pay Cost Drivers	\$35,374	\$20,984	\$32,535	\$11,551

NARRATIVE EXPLANATION OF CHANGES

Operations and Maintenance of Facilities and Equipment: Includes funding that supports the operations and maintenance of equipment and systems utilized by NPPD including building maintenance and repairs. FY 2018 funding assumes the continuation of FY 2017 requirements, with inflation.

Mission Support Services: Funding supports the management and oversight of NPPD's programs. FY 2018 funding assumes the continuation of FY 2017 requirements, with inflation.

Rental Payments to GSA and others: Includes funding for rental of spaces and other incidental services utilized by NPPD including GSA rentals, offsite storage spaces, and occupied seats and production shared spaces at Mt Weather.

Other costs: Includes funding for equipment and NPPD leadership and employee travel and office supplies needed to complete professional duties and responsibilities.

*Cybersecurity - PPA***Budget Comparison and Adjustments****Comparison of Budget Authority and Request***Dollars in Thousands*

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Cyber Readiness and Response	309	230	\$153,534	309	230	\$151,726	376	286	\$200,965	67	56	\$49,239
Cyber Infrastructure Resilience	34	15	\$42,186	34	15	\$42,053	48	38	\$41,943	14	23	(\$110)
Federal Cybersecurity	260	163	\$388,015	260	163	\$399,986	319	255	\$477,649	59	92	\$77,663
Total	603	408	\$583,735	603	408	\$593,765	743	579	\$720,557	140	171	\$126,792
Subtotal Discretionary - Appropriation	603	408	\$583,735	603	408	\$593,765	743	579	\$720,557	140	171	\$126,792

Cybersecurity – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$595,906		
Transfers & Reprogrammings	(\$12,148)		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	(\$23)		
Revised Enacted/Request	\$583,735	\$593,765	\$720,557
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$583,735	\$593,765	\$720,557
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$583,735	\$593,765	\$720,557
Obligations (Actual/Projections/Estimates)	\$583,146	\$593,162	\$719,447
Personnel: Positions and FTE			
Enacted/Request Positions	603	603	743
Enacted/Request FTE	408	408	579
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	422	603	743
FTE (Actual/Estimates/Projections)	398	408	579

Cybersecurity – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	603	408	\$595,906
Cyber Facilities and Operational Requirements	-	-	(\$12,098)
TSA Transfer	-	-	(\$950)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$13,048)
Cyber Exercises	-	-	\$900
Total Below Threshold Reprogrammings	-	-	\$900
FY16 Rescission	-	-	(\$23)
Total Rescissions	-	-	(\$23)
FY 2016 Revised Enacted	603	408	\$583,735
FY 2017 Annualized CR	603	408	\$593,765
FY 2018 Base Budget	603	408	\$593,765
Transfer of CDM from PC&I to O&S to align budget to CAS policy	-	-	\$31,011
Total Transfers	-	-	\$31,011
2018 Pay Raise	-	-	\$1,061
Annualization of 2017 Pay Raise	-	-	\$390
Rightsize FTP/FTE & Salaries and Benefits	-	113	\$20,748
Total, Pricing Increases	-	113	\$22,199
Adjust for Acquisition O&M	-	-	(\$31,206)
Efficiency to Program	-	-	(\$3,724)
Total, Pricing Decreases	-	-	(\$34,930)
Total Adjustments-to-Base	-	113	\$18,280
FY 2018 Current Services	603	521	\$612,045
CDM O&M for partner Federal agencies	-	-	\$52,000
Expand Operations in Field	14	8	\$5,060
Proactive Cyber Protection	126	50	\$51,452
Total, Program Increases	140	58	\$108,512
FY 2018 Request	743	579	\$720,557
FY 2017 TO FY 2018 Change	140	171	\$126,792

PPA Description

NPPD requests \$720.6 million and 743 FTP/579 FTE for the Cybersecurity PPA under the Operations & Support appropriation. The Cybersecurity program advances computer security preparedness and the response to cyberattacks and incidents. The program includes activities to secure the federal network, respond to incidents, disseminate actionable information, and collaborate with private sector partners to secure critical infrastructure. This program supports the implementation of government-wide deployment of hardware and software systems to prevent and detect incidents, response to incidents at federal and private entities, and collaboration with the private sector to increase the security and resiliency of critical networks. The program also coordinates cybersecurity education for the federal workforce.

Adjustments to Base Justification

- \$1.5 million increase for FY 2018 pay inflation. Of this amount, \$0.4 million is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$1.1 million is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$1.5 million in FY 2017 pay inflation is built into the base, which includes \$0.3 million for the annualization of the 2016 pay raise (1.6 percent) and \$1.2 million for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$20.7 million and 113 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$31.2 million decrease to align operations and maintenance funding with the planned acquisition profile for FY 2018.
- \$3.7 million decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.
- \$83 million transfer from the Procurement, Construction, & Improvements account to the Operations & Support account to align the budget to Departmental policy for the Common Appropriations Structure.

Cybersecurity – PPA
Personnel Compensation and Benefits

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Cyber Readiness and Response	309	230	\$40,073	\$174.23	309	230	\$40,488	\$176.03	376	286	\$50,040	\$174.97	67	56	\$9,552	(\$1.06)
Cyber Infrastructure Resilience	34	15	\$2,773	\$184.87	34	15	\$2,773	\$184.87	48	38	\$7,383	\$194.29	14	23	\$4,610	\$9.42
Federal Cybersecurity	260	163	\$26,522	\$162.71	260	163	\$31,180	\$191.29	319	255	\$49,096	\$192.53	59	92	\$17,916	\$1.24
Total	603	408	\$69,368	\$170.02	603	408	\$74,441	\$182.45	743	579	\$106,519	\$183.97	140	171	\$32,078	\$1.52
Discretionary - Appropriation	603	408	\$69,368	\$170.02	603	408	\$74,441	\$182.45	743	579	\$106,519	\$183.97	140	171	\$32,078	\$1.52

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$45,719	\$49,153	\$70,871	\$21,718
11.3 Other than Full-Time Permanent	\$1,226	\$1,295	\$1,715	\$420
11.5 Other Personnel Compensation	\$970	\$1,028	\$1,368	\$340
12.1 Civilian Personnel Benefits	\$21,453	\$22,965	\$32,565	\$9,600
Total - Personnel Compensation and Benefits	\$69,368	\$74,441	\$106,519	\$32,078
Positions and FTE				
Positions - Civilian	603	603	743	140
FTE - Civilian	408	408	579	171

**Cybersecurity – PPA
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Cyber Readiness and Response	\$113,461	\$111,238	\$150,925	\$39,687
Cyber Infrastructure Resilience	\$39,413	\$39,280	\$34,560	(\$4,720)
Federal Cybersecurity	\$361,493	\$368,806	\$428,553	\$59,747
Total	\$514,367	\$519,324	\$614,038	\$94,714
Discretionary - Appropriation	\$514,367	\$519,324	\$614,038	\$94,714

Cybersecurity – PPA Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$1,292	\$1,286	\$1,616	\$330
22.0 Transportation of Things	\$74	\$74	\$83	\$9
23.1 Rental Payments to GSA	\$4,896	\$5,003	\$4,576	(\$427)
23.2 Rental Payments to Others	\$385	\$393	\$349	(\$44)
23.3 Communications, Utilities, and Misc. Charges	\$4,119	\$4,110	\$3,514	(\$596)
25.1 Advisory and Assistance Services	\$333,859	\$341,012	\$337,501	(\$3,511)
25.2 Other Services from Non-Federal Sources	\$11,739	\$15,777	\$101,820	\$86,043
25.3 Other Goods and Services from Federal Sources	\$86,199	\$91,711	\$106,325	\$14,614
25.4 Operation and Maintenance of Facilities	\$2,425	\$2,480	\$2,367	(\$113)
25.5 Research and Development Contracts	\$556	\$569	\$512	(\$57)
25.7 Operation and Maintenance of Equipment	\$22,359	\$22,815	\$21,398	(\$1,417)
25.8 Subsistence & Support of Persons	\$418	\$418	\$625	\$207
26.0 Supplies and Materials	\$58	\$59	\$59	-
31.0 Equipment	\$13,601	\$13,917	\$12,892	(\$1,025)
32.0 Land and Structures	\$5,912	\$6,052	\$5,495	(\$557)
41.0 Grants, Subsidies, and Contributions	\$13,431	\$13,395	\$14,651	\$1,256
42.0 Insurance Claims and Indemnities	\$249	\$253	\$255	\$2
94.0 Financial Transfers	\$12,795	-	-	-
Total - Non Pay Object Classes	\$514,367	\$519,324	\$614,038	\$94,714

Cyber Readiness and Response – PPA Level II
Budget Comparison and Adjustments
Comparison of Budget Authority and Request
Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
NCCIC Operations	172	135	\$87,279	172	135	\$87,109	215	155	\$116,471	43	20	\$29,362
NCCIC Planning and Exercises	137	95	\$66,255	137	95	\$64,617	161	131	\$84,494	24	36	\$19,877
Total	309	230	\$153,534	309	230	\$151,726	376	286	\$200,965	67	56	\$49,239
Subtotal Discretionary - Appropriation	309	230	\$153,534	309	230	\$151,726	376	286	\$200,965	67	56	\$49,239

Cyber Readiness and Response – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	309	230	\$152,433
Cyber Facilities and Operational Requirements	-	-	\$210
Total Above Threshold Reprogrammings/Transfers	-	-	\$210
Cyber Exercises	-	-	\$900
Total Below Threshold Reprogrammings	-	-	\$900
FY16 Rescission	-	-	(\$9)
Total Rescissions	-	-	(\$9)
FY 2016 Revised Enacted	309	230	\$153,534
FY 2017 Annualized CR	309	230	\$151,726
FY 2018 Base Budget	309	230	\$151,726
2018 Pay Raise	-	-	\$576
Annualization of 2017 Pay Raise	-	-	\$213
Rightsize FTP/FTE & Salaries and Benefits	-	36	\$6,175
Total, Pricing Increases	-	36	\$6,964
Efficiency to Program	-	-	(\$3,724)
Total, Pricing Decreases	-	-	(\$3,724)
Total Adjustments-to-Base	-	36	\$3,240
FY 2018 Current Services	309	266	\$154,966
Proactive Cyber Protection	67	20	\$45,999
Total, Program Increases	67	20	\$45,999
FY 2018 Request	376	286	\$200,965
FY 2017 TO FY 2018 Change	67	56	\$49,239

PPA Level II Description

NPPD requests \$201.0 million and 376 FTP/286 FTE for the Cyber Readiness and Response PPA in the Operations & Support appropriation.

The Cyber Readiness and Response PPA funds efforts to ensure the security and resilience of the Nation's critical infrastructure from physical and cyber threats. This PPA funds the National Cybersecurity and Communications Integration Center (NCCIC), the Federal Government's civilian hub for 24x7 cyber situational awareness, incident response, coordination, information sharing, and analysis. The NCCIC serves as a management center that is a national nexus of cyber and communications integration for the Federal Government; State, local, tribal, and territorial (SLTT) government; the intelligence community; law enforcement; the private sector; and international entities.

The justification for the Classified Program that is part of this PPA will be made available under a separate cover.

Adjustments to Base Justification

- \$0.8 million increase for FY 2018 pay inflation. Of this amount, \$0.2 million is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$0.6 million is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$0.8 million in FY 2017 pay inflation is built into the base, which includes \$0.2 million for the annualization of the 2016 pay raise (1.6 percent) and \$0.6 million for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$6.2 million and 36 FTE increase for rightsizing the personnel in the PPA based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$3.7 million decrease as a result of US-CERT efficiencies in the mission support PPA. The operational impacts of this reduction will be offset by planned process and workflow modifications to leverage integrated NCCIC services such as ticketing, event management and incident response. By eliminating operationally isolated activities and leveraging shared platforms and resources provided by NSD, NCCIC will gain efficiency savings that will allow for consistent production at reduced cost.

**Cyber Readiness and Response – PPA Level II
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
NCCIC Operations	172	135	\$23,346	\$172.93	172	135	\$23,761	\$176.01	215	155	\$27,642	\$178.34	43	20	\$3,881	\$2.33
NCCIC Planning and Exercises	137	95	\$16,727	\$176.07	137	95	\$16,727	\$176.07	161	131	\$22,398	\$170.98	24	36	\$5,671	(\$5.09)
Total	309	230	\$40,073	\$174.23	309	230	\$40,488	\$176.03	376	286	\$50,040	\$174.97	67	56	\$9,552	(\$1.06)
Discretionary - Appropriation	309	230	\$40,073	\$174.23	309	230	\$40,488	\$176.03	376	286	\$50,040	\$174.97	67	56	\$9,552	(\$1.06)

Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$25,617	\$25,871	\$32,090	\$6,219
11.3 Other than Full-Time Permanent	\$973	\$982	\$1,218	\$236
11.5 Other Personnel Compensation	\$743	\$752	\$919	\$167
12.1 Civilian Personnel Benefits	\$12,740	\$12,883	\$15,813	\$2,930
Total - Personnel Compensation and Benefits	\$40,073	\$40,488	\$50,040	\$9,552
Positions and FTE				
Positions - Civilian	309	309	376	67
FTE - Civilian	230	230	286	56

Cyber Readiness and Response – PPA Level II Non Pay Budget Exhibits

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
NCCIC Operations	\$63,933	\$63,348	\$88,829	\$25,481
NCCIC Planning and Exercises	\$49,528	\$47,890	\$62,096	\$14,206
Total	\$113,461	\$111,238	\$150,925	\$39,687
Discretionary - Appropriation	\$113,461	\$111,238	\$150,925	\$39,687

“CERT” is a mapping of costs primarily associated with NCCIC’s activities supporting both Mission and Business Systems (i.e., United States Computer Emergency Readiness Team) and control systems (i.e., Industrial Control Systems Cyber Emergency Response Team).

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$998	\$986	\$1,352	\$366
22.0 Transportation of Things	\$29	\$29	\$41	\$12
23.1 Rental Payments to GSA	\$85	\$85	\$119	\$34
23.2 Rental Payments to Others	\$8	\$8	\$11	\$3
23.3 Communications, Utilities, and Misc. Charges	\$8	\$8	\$11	\$3
25.1 Advisory and Assistance Services	\$61,257	\$59,634	\$80,149	\$20,515
25.2 Other Services from Non-Federal Sources	\$188	\$187	\$262	\$75
25.3 Other Goods and Services from Federal Sources	\$38,953	\$38,428	\$52,411	\$13,983
25.4 Operation and Maintenance of Facilities	\$271	\$270	\$379	\$109
25.7 Operation and Maintenance of Equipment	\$2,167	\$2,150	\$2,984	\$834
31.0 Equipment	\$561	\$547	\$718	\$171
41.0 Grants, Subsidies, and Contributions	\$8,881	\$8,851	\$12,411	\$3,560
42.0 Insurance Claims and Indemnities	\$55	\$55	\$77	\$22
Total - Non Pay Object Classes	\$113,461	\$111,238	\$150,925	\$39,687

NCCIC Operations – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
NCCIC Operations	172	135	\$87,279	172	135	\$87,109	215	155	\$116,471	43	20	\$29,362
Total	172	135	\$87,279	172	135	\$87,109	215	155	\$116,471	43	20	\$29,362
Subtotal Discretionary - Appropriation	172	135	\$87,279	172	135	\$87,109	215	155	\$116,471	43	20	\$29,362

NCCIC Operations – PPA Level III
Summary of Budget Changes
Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	172	135	\$87,491
Cyber Facilities and Operational Requirements	-	-	\$210
Total Above Threshold Reprogrammings/Transfers	-	-	\$210
Cyber Exercises	-	-	(\$415)
Total Below Threshold Reprogrammings	-	-	(\$415)
FY16 Rescission	-	-	(\$7)
Total Rescissions	-	-	(\$7)
FY 2016 Revised Enacted	172	135	\$87,279
FY 2017 Annualized CR	172	135	\$87,109
FY 2018 Base Budget	172	135	\$87,109
2018 Pay Raise	-	-	\$338
Annualization of 2017 Pay Raise	-	-	\$125
Rightsize FTP/FTE & Salaries and Benefits	-	13	\$2,288
Total, Pricing Increases	-	13	\$2,751
Efficiency to Program	-	-	(\$3,724)
Total, Pricing Decreases	-	-	(\$3,724)
Total Adjustments-to-Base	-	13	(\$973)
FY 2018 Current Services	172	148	\$86,136
Proactive Cyber Protection	43	7	\$30,335
Total, Program Increases	43	7	\$30,335
FY 2018 Request	215	155	\$116,471
FY 2017 TO FY 2018 Change	43	20	\$29,362

PPA Level III Description

NPPD requests \$116.5 million and 215 FTP/155 FTE for the NCCIC Operations PPA in the Operations & Support appropriation.

The National Cybersecurity and Communications Integration Center (NCCIC) serves as the U.S. Government's civilian hub for cybersecurity incident response, coordination, information and analysis. The NCCIC Operations PPA supports requirements associated with actively finding and assisting others in the response to incidents. This includes the creation of indicators and signatures based on commercial and government information, detection, incident response, tracking on-going efforts, malware analysis, and other analysis required to find and respond to potentially malicious activity.

Adjustments to Base Justification

- \$0.5 million increase for FY 2018 pay inflation. Of this amount, \$0.1 million is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$0.3 million is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$0.5 million in FY 2017 pay inflation is built into the base, which includes \$1 million for the annualization of the 2016 pay raise (1.6 percent) and \$0.4 million for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$2.3 million and 13 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$3.7 million decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

**NCCIC Operations – PPA Level III
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
NCCIC Operations	172	135	\$23,346	\$172.93	172	135	\$23,761	\$176.01	215	155	\$27,642	\$178.34	43	20	\$3,881	\$2.33
Total	172	135	\$23,346	\$172.93	172	135	\$23,761	\$176.01	215	155	\$27,642	\$178.34	43	20	\$3,881	\$2.33
Discretionary - Appropriation	172	135	\$23,346	\$172.93	172	135	\$23,761	\$176.01	215	155	\$27,642	\$178.34	43	20	\$3,881	\$2.33

NARRATIVE EXPLANATION OF CHANGES

- \$0.5 million increase for FY 2018 pay inflation. Of this amount, \$0.1 million is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$0.3 million is for the 1.9 percent pay raise in 2018 (three quarters).
- \$2.3 million and 13 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$1.1 million and 43 FTP/7 FTE increase for the NCCIC staffing plan.

FTE Change FY 2017-2018: 20

PCB Change FY 2017-2018: \$3.9 million

Average Cost Change FY 2017-2018: \$2,330

NCCIC Operations – PPA Level III
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$14,269	\$14,523	\$16,895	\$2,372
11.3 Other than Full-Time Permanent	\$543	\$552	\$642	\$90
11.5 Other Personnel Compensation	\$492	\$501	\$583	\$82
12.1 Civilian Personnel Benefits	\$8,042	\$8,185	\$9,522	\$1,337
Total - Personnel Compensation and Benefits	\$23,346	\$23,761	\$27,642	\$3,881
Positions and FTE				
Positions - Civilian	172	172	215	43
FTE - Civilian	135	135	155	20

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilians Total	135	\$23,346	\$172.93	135	\$23,761	\$176.01	155	\$27,642	\$178.34	20	\$3,881	\$2
Other Costs												
Total – Pay Cost Drivers	135	\$23,346	\$172.93	135	\$23,761	\$176.01	155	\$27,642	\$178.34	20	\$3,881	\$2

The FY 2018 request provides additional funding to account for inflation.

**NCCIC Operations – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
NCCIC Operations	\$63,933	\$63,348	\$88,829	\$25,481
Total	\$63,933	\$63,348	\$88,829	\$25,481
Discretionary - Appropriation	\$63,933	\$63,348	\$88,829	\$25,481

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$697	\$694	\$973	\$279
22.0 Transportation of Things	\$29	\$29	\$41	\$12
23.1 Rental Payments to GSA	\$85	\$85	\$119	\$34
23.2 Rental Payments to Others	\$8	\$8	\$11	\$3
23.3 Communications, Utilities, and Misc. Charges	\$8	\$8	\$11	\$3
25.1 Advisory and Assistance Services	\$27,207	\$26,750	\$37,510	\$10,760
25.2 Other Services from Non-Federal Sources	\$182	\$181	\$254	\$73
25.3 Other Goods and Services from Federal Sources	\$24,555	\$24,469	\$34,311	\$9,842
25.4 Operation and Maintenance of Facilities	\$271	\$270	\$379	\$109
25.7 Operation and Maintenance of Equipment	\$1,861	\$1,854	\$2,600	\$746
31.0 Equipment	\$94	\$94	\$132	\$38
41.0 Grants, Subsidies, and Contributions	\$8,881	\$8,851	\$12,411	\$3,560
42.0 Insurance Claims and Indemnities	\$55	\$55	\$77	\$22
Total - Non Pay Object Classes	\$63,933	\$63,348	\$88,829	\$25,481

**NCCIC Operations – PPA Level III
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President’s Budget	FY 2017 to FY 2018 Total Changes
Incident Response	\$3,413	\$3,413	\$10,598	\$7,185
Watch	\$17,330	\$17,131	\$21,014	\$3,883
Threat Detection & Analysis	\$33,690	\$33,304	\$47,701	\$14,397
MS-ISAC	\$9,500	\$9,500	\$9,516	\$16
Total – Non Pay Cost Drivers	\$63,933	\$63,348	\$88,829	\$25,481

NARRATIVE EXPLANATION OF CHANGES

Incident Response – FY 2018 request includes contract support and toolkits required to properly staff the NCCIC.

Watch – FY 2018 request includes contractor services and equipment purchases.

Threat Detection & Analysis – FY 2018 request includes contractor services, assessment tools and toolkits, and required lab equipment.

MS-ISAC – FY 2018 request reflects implementation of cost sharing initiative with SLTT partners.

NCCIC Planning and Exercises – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
NCCIC Planning and Exercises	137	95	\$66,255	137	95	\$64,617	161	131	\$84,494	24	36	\$19,877
Total	137	95	\$66,255	137	95	\$64,617	161	131	\$84,494	24	36	\$19,877
Subtotal Discretionary - Appropriation	137	95	\$66,255	137	95	\$64,617	161	131	\$84,494	24	36	\$19,877

NCCIC Planning and Exercises– PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	137	95	\$64,942
Cyber Exercises	-	-	\$1,315
Total Below Threshold Reprogrammings	-	-	\$1,315
FY16 Rescission	-	-	(\$2)
Total Rescissions	-	-	(\$2)
FY 2016 Revised Enacted	137	95	\$66,255
FY 2017 Annualized CR	137	95	\$64,617
FY 2018 Base Budget	137	95	\$64,617
2018 Pay Raise	-	-	\$238
Annualization of 2017 Pay Raise	-	-	\$88
Rightsize FTP/FTE & Salaries and Benefits	-	23	\$3,887
Total, Pricing Increases	-	23	\$4,213
Total Adjustments-to-Base	-	23	\$4,213
FY 2018 Current Services	137	118	\$68,830
Proactive Cyber Protection	24	13	\$15,664
Total, Program Increases	24	13	\$15,664
FY 2018 Request	161	131	\$84,494
FY 2017 TO FY 2018 Change	24	36	\$19,877

PPA Level III Description

NPPD requests \$84.5 million and 161 FTP/131 FTE for the NCCIC Planning and Exercises PPA in the Operations & Support appropriation.

The NCCIC Planning and Exercises PPA provides requirements associated with assisting stakeholders with the planning for cyber activities. This includes running exercises, information sharing activities, outreach, training, system evaluations, and vulnerability management.

Adjustments to Base Justification

- \$0.3 million increase for FY 2018 pay inflation. Of this amount, \$.088 million is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$0.2 million is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$0.330 million in FY 2017 pay inflation is built into the base, which includes \$0.067 million for the annualization of the 2016 pay raise (1.6 percent) and \$0.263 million for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$3.9 million and 23 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

**NCCIC Planning and Exercises– PPA Level III
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
NCCIC Planning and Exercises	137	95	\$16,727	\$176.07	137	95	\$16,727	\$176.07	161	131	\$22,398	\$170.98	24	36	\$5,671	(\$5.09)
Total	137	95	\$16,727	\$176.07	137	95	\$16,727	\$176.07	161	131	\$22,398	\$170.98	24	36	\$5,671	(\$5.09)
Discretionary - Appropriation	137	95	\$16,727	\$176.07	137	95	\$16,727	\$176.07	161	131	\$22,398	\$170.98	24	36	\$5,671	(\$5.09)

NARRATIVE EXPLANATION OF CHANGES

- \$0.326 million increase for 2018 pay inflation. Of this amount, \$0.088 million is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$0.238 million is for the 1.9 percent pay raise in 2018 (three quarters).
- \$3.887 million and 23 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$1.458 million and 24FTP/13 FTE increase for the NCCIC staffing plan.

FTE Change FY 2017-2018: 36

PCB Change FY 2017-2018: \$5.671 million

Average Cost Change FY 2017-2018: (\$5,090)

NCCIC Planning and Exercises– PPA Level III
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$11,348	\$11,348	\$15,195	\$3,847
11.3 Other than Full-Time Permanent	\$430	\$430	\$576	\$146
11.5 Other Personnel Compensation	\$251	\$251	\$336	\$85
12.1 Civilian Personnel Benefits	\$4,698	\$4,698	\$6,291	\$1,593
Total - Personnel Compensation and Benefits	\$16,727	\$16,727	\$22,398	\$5,671
Positions and FTE				
Positions - Civilian	137	137	161	24
FTE - Civilian	95	95	131	36

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	95	\$16,727	\$176.07	95	\$16,727	\$176.07	131	\$22,398	\$170.98	36	\$5,671	(\$5)
Other Costs												
Total – Pay Cost Drivers	95	\$16,727	\$176.07	95	\$16,727	\$176.07	131	\$22,398	\$170.98	36	\$5,671	(\$5)

The FY 2018 request supports additional required staff in order to keep pace with demand. The growth in personnel will provide 24/7/365 operational staffing to increase real-time continuity of operations, maintain readiness to execute national security/emergency preparedness, and support proactive assessments of agency risks. NPPD offers eligible cybersecurity positions a retention incentive, i.e., “cyber pay,” in order to attract and retain employees providing a special agency need. In the absence of such an incentive, these cyber-skilled employees would likely leave Federal service. The FY 2018 request includes an effort to rightsize FTEs due to projected slower growth in the NCCIC due to hiring and retention challenges.

**NCCIC Planning and Exercises– PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
NCCIC Planning and Exercises	\$49,528	\$47,890	\$62,096	\$14,206
Total	\$49,528	\$47,890	\$62,096	\$14,206
Discretionary - Appropriation	\$49,528	\$47,890	\$62,096	\$14,206

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$301	\$292	\$379	\$87
25.1 Advisory and Assistance Services	\$34,050	\$32,884	\$42,639	\$9,755
25.2 Other Services from Non-Federal Sources	\$6	\$6	\$8	\$2
25.3 Other Goods and Services from Federal Sources	\$14,398	\$13,959	\$18,100	\$4,141
25.7 Operation and Maintenance of Equipment	\$306	\$296	\$384	\$88
31.0 Equipment	\$467	\$453	\$586	\$133
Total - Non Pay Object Classes	\$49,528	\$47,890	\$62,096	\$14,206

**NCCIC Planning and Exercises– PPA Level III
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President’s Budget	FY 2017 to FY 2018 Total Changes
Exercises	\$5,949	\$4,634	\$8,050	\$3,416
Cyber and Communications Evaluations	\$15,006	\$15,006	\$22,771	\$7,765
Computer Network Defense Training & Development	\$4,313	\$4,313	\$7,013	\$2,700
Public & Private Partnerships	\$19,754	\$19,429	\$19,754	\$325
Strategy and Planning	\$4,506	\$4,508	\$4,508	\$0
Total – Non Pay Cost Drivers	\$49,528	\$47,890	\$62,096	\$14,206

NARRATIVE EXPLANATION OF CHANGES

Exercises – FY 2018 request includes funding for contractor services to meet the demand for cyber exercises services to Federal, State, and local stakeholders.

Cyber and Communications Evaluations – FY 2018 request includes resources for additional tools and contractor services in support of vulnerability coordination, assessments, watch operations, and operator training.

Computer Network Defense Training & Development – FY 2018 request includes funding for additional contractor services supporting operations, communications, analytics, and cyber threat information sharing.

Public & Private Partnerships – FY 2018 request includes resources for contractor services.

Strategy and Planning – No changes.

Cyber Infrastructure Resilience – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Cybersecurity Advisors	16	7	\$8,243	16	7	\$8,216	30	22	\$14,693	14	15	\$6,477
Enhanced Cybersecurity Services	8	3	\$16,597	8	3	\$16,543	8	7	\$17,157	-	4	\$614
Cybersecurity Education & Awareness	10	5	\$17,346	10	5	\$17,294	10	9	\$10,093	-	4	(\$7,201)
Total	34	15	\$42,186	34	15	\$42,053	48	38	\$41,943	14	23	(\$110)
Subtotal Discretionary - Appropriation	34	15	\$42,186	34	15	\$42,053	48	38	\$41,943	14	23	(\$110)

Cyber Infrastructure Resilience – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	34	15	\$42,190
FY16 Rescission	-	-	(\$4)
Total Rescissions	-	-	(\$4)
FY 2016 Revised Enacted	34	15	\$42,186
FY 2017 Annualized CR	34	15	\$42,053
FY 2018 Base Budget	34	15	\$42,053
2018 Pay Raise	-	-	\$40
Annualization of 2017 Pay Raise	-	-	\$14
Rightsize FTP/FTE & Salaries and Benefits	-	15	\$2,681
Total, Pricing Increases	-	15	\$2,735
Total Adjustments-to-Base	-	15	\$2,735
FY 2018 Current Services	34	30	\$44,788
Expand Operations in Field	14	8	\$5,060
Total, Program Increases	14	8	\$5,060
Proactive Cyber Protection	-	-	(\$7,905)
Total, Program Decreases	-	-	(\$7,905)
FY 2018 Request	48	38	\$41,943
FY 2017 TO FY 2018 Change	14	23	(\$110)

PPA Level II Description

NPPD requests \$41.9 million and 48 FTP/38 FTE for the Cyber Infrastructure Resilience PPA in the Operations & Support appropriation.

The Cyber Infrastructure Resilience PPA funds efforts to increase the security and resilience of critical infrastructure (CI) systems and networks through partnership and information sharing efforts with owners and operators, and promotion of cybersecurity awareness, training, and education. The PPA funds the Enhanced Cybersecurity Services (ECS) program, a voluntary information sharing program providing CI owners and operators with an enhanced approach to protecting and defending their networks by sharing

classified threat information with qualified program participants. The PPA also funds the Cyber Education and Awareness program, tasked to develop the cybersecurity workforce pipeline, and enhance cybersecurity education and awareness across the nation. Additionally, the PPA funds the Cybersecurity Advisors (CSA) initiative, protecting cyber components within the Nation's CI by acting as individual representatives of the Department, forming personal, on-the-ground connections with CI owners and operators.

Adjustments to Base Justification

- \$54,000 increase for FY 2018 pay inflation. Of this amount, \$14,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$40,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$55,000 in FY 2017 pay inflation is built into the base, which includes \$11,000 for the annualization of the 2016 pay raise (1.6 percent) and \$44,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$2.681 million and 15 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

Cyber Infrastructure Resilience – PPA Level II Personnel Compensation and Benefits

Pay Summary *Dollars in Thousands*

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Cybersecurity Advisors	16	7	\$1,233	\$176.14	16	7	\$1,233	\$176.14	30	22	\$3,970	\$180.45	14	15	\$2,737	\$4.31
Enhanced Cybersecurity Services	8	3	\$511	\$170.33	8	3	\$511	\$170.33	8	7	\$1,125	\$160.71	-	4	\$614	(\$9.62)
Cybersecurity Education & Awareness	10	5	\$1,029	\$205.8	10	5	\$1,029	\$205.8	10	9	\$2,288	\$254.22	-	4	\$1,259	\$48.42
Total	34	15	\$2,773	\$184.87	34	15	\$2,773	\$184.87	48	38	\$7,383	\$194.29	14	23	\$4,610	\$9.42
Discretionary - Appropriation	34	15	\$2,773	\$184.87	34	15	\$2,773	\$184.87	48	38	\$7,383	\$194.29	14	23	\$4,610	\$9.42

Pay by Object Class *Dollars in Thousands*

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$1,930	\$1,930	\$5,141	\$3,211
11.3 Other than Full-Time Permanent	\$22	\$22	\$45	\$23
11.5 Other Personnel Compensation	\$28	\$28	\$57	\$29
12.1 Civilian Personnel Benefits	\$793	\$793	\$2,140	\$1,347
Total - Personnel Compensation and Benefits	\$2,773	\$2,773	\$7,383	\$4,610
Positions and FTE				
Positions - Civilian	34	34	48	14
FTE - Civilian	15	15	38	23

**Cyber Infrastructure Resilience – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Cybersecurity Advisors	\$7,010	\$6,983	\$10,723	\$3,740
Enhanced Cybersecurity Services	\$16,086	\$16,032	\$16,032	-
Cybersecurity Education & Awareness	\$16,317	\$16,265	\$7,805	(\$8,460)
Total	\$39,413	\$39,280	\$34,560	(\$4,720)
Discretionary - Appropriation	\$39,413	\$39,280	\$34,560	(\$4,720)

Non Pay by Object Class
Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$81	\$81	\$61	(\$20)
22.0 Transportation of Things	\$28	\$28	\$26	(\$2)
23.1 Rental Payments to GSA	\$314	\$313	\$315	\$2
23.2 Rental Payments to Others	\$18	\$18	\$8	(\$10)
23.3 Communications, Utilities, and Misc. Charges	\$4,109	\$4,100	\$3,501	(\$599)
25.1 Advisory and Assistance Services	\$9,070	\$9,007	\$5,976	(\$3,031)
25.2 Other Services from Non-Federal Sources	\$8,274	\$8,241	\$8,232	(\$9)
25.3 Other Goods and Services from Federal Sources	\$11,836	\$11,817	\$13,132	\$1,315
25.7 Operation and Maintenance of Equipment	\$433	\$432	\$212	(\$220)
25.8 Subsistence & Support of Persons	\$394	\$393	\$603	\$210
26.0 Supplies and Materials	\$46	\$46	\$41	(\$5)
31.0 Equipment	\$179	\$179	\$89	(\$90)
32.0 Land and Structures	\$81	\$81	\$124	\$43
41.0 Grants, Subsidies, and Contributions	\$4,550	\$4,544	\$2,240	(\$2,304)
Total - Non Pay Object Classes	\$39,413	\$39,280	\$34,560	(\$4,720)

Cybersecurity Advisors PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Cybersecurity Advisors	16	7	\$8,243	16	7	\$8,216	30	22	\$14,693	14	15	\$6,477
Total	16	7	\$8,243	16	7	\$8,216	30	22	\$14,693	14	15	\$6,477
Subtotal Discretionary - Appropriation	16	7	\$8,243	16	7	\$8,216	30	22	\$14,693	14	15	\$6,477

Cybersecurity Advisors – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	16	7	\$8,243
FY 2016 Revised Enacted	16	7	\$8,243
FY 2017 Annualized CR	16	7	\$8,216
FY 2018 Base Budget	16	7	\$8,216
2018 Pay Raise	-	-	\$18
Annualization of 2017 Pay Raise	-	-	\$6
Rightsize FTP/FTE & Salaries and Benefits	-	7	\$1,393
Total, Pricing Increases	-	7	\$1,417
Total Adjustments-to-Base	-	7	\$1,417
FY 2018 Current Services	16	14	\$9,633
Expand Operations in Field	14	8	\$5,060
Total, Program Increases	14	8	\$5,060
FY 2018 Request	30	22	\$14,693
FY 2017 TO FY 2018 Change	14	15	\$6,477

PPA Level III Description

NPPD requests \$14.693 million and 30 FTP/22 FTE for the Cybersecurity Advisors PPA in the Operations & Support appropriation.

The Cybersecurity Advisor (CSA) PPA provides direct coordination, outreach, and regional support in order to protect cyber components essential to the sustainability, preparedness, and protection of the Nation's Critical Infrastructure and Key Resources (CIKR) and State, local, territorial, and tribal (SLTT) governments. CSAs bolster the cyber security preparedness, risk mitigation, and incident response capabilities of these entities and bring them into closer alignment with the Federal Government. CSAs are regionally located DHS personnel assigned to one of the 10 CSA regions, aligned to the Federal Emergency Management Agency (FEMA) regions, representing a front-line approach and promote resilience of key cyber infrastructures throughout the U.S. and its territories.

Adjustments to Base Justification

- \$24,000 increase for FY 2018 pay inflation. Of this amount, \$6,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$18,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$24,000 in FY 2017 pay inflation is built into the base, which includes \$5,000 for the annualization of the 2016 pay raise (1.6 percent) and \$19,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$1.393 million and 7 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

Cybersecurity Advisors – PPA Level III Personnel Compensation and Benefits

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Cybersecurity Advisors	16	7	\$1,233	\$176.14	16	7	\$1,233	\$176.14	30	22	\$3,970	\$180.45	14	15	\$2,737	\$4.31
Total	16	7	\$1,233	\$176.14	16	7	\$1,233	\$176.14	30	22	\$3,970	\$180.45	14	15	\$2,737	\$4.31
Discretionary - Appropriation	16	7	\$1,233	\$176.14	16	7	\$1,233	\$176.14	30	22	\$3,970	\$180.45	14	15	\$2,737	\$4.31

NARRATIVE EXPLANATION OF CHANGES

- \$24,000 increase for 2018 pay inflation. Of this amount, \$6,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$18,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$1.4 million and 7 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$1.3 million and 11 FTP/6 FTE increase for cybersecurity advisors.

FTE Change FY 2017-2018: 13

PCB Change FY 2017-2018: \$2.737 million

Average Cost Change FY 2017-2018: \$4,310

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$804	\$804	\$2,589	\$1,785
12.1 Civilian Personnel Benefits	\$429	\$429	\$1,381	\$952
Total - Personnel Compensation and Benefits	\$1,233	\$1,233	\$3,970	\$2,737
Positions and FTE				
Positions - Civilian	16	16	30	14
FTE - Civilian	7	7	22	15

Cybersecurity Advisors – PPA Level III

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	7	\$1,233	\$176.14	7	\$1,233	\$176.14	20	\$4,231	\$192.32	15	\$2,737	\$4.31
Other Costs												
Total – Pay Cost Drivers	7	\$1,233	\$176.14	7	\$1,233	\$176.14	20	\$4,231	\$192.32	15	\$2,737	\$4.31

As a cybersecurity field presence for the Department, CSAs offer opportunities to collaborate with local critical infrastructure and raise cybersecurity awareness in their local areas of responsibility. The FY 2018 request expands the number of regionally-based Cybersecurity Advisors and support personnel (24 in the field; 6 in headquarters), providing additional cybersecurity assessments in order to keep pace with demand. NPPD offers eligible cybersecurity positions a retention incentive, i.e., “cyber pay,” in order to attract and retain employees providing a special agency need. In the absence of such an incentive, these cyber-skilled employees would likely leave Federal service. The FY 2018 request includes an effort to rightsize FTEs based on actual current hiring projections and historical execution, providing funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

**Cybersecurity Advisors – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Cybersecurity Advisors	\$7,010	\$6,983	\$10,723	\$3,740
Total	\$7,010	\$6,983	\$10,723	\$3,740
Discretionary - Appropriation	\$7,010	\$6,983	\$10,723	\$3,740

Cybersecurity Advisors – PPA Level III

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
23.1 Rental Payments to GSA	\$86	\$86	\$132	\$46
25.1 Advisory and Assistance Services	\$1,573	\$1,555	\$2,388	\$833
25.2 Other Services from Non-Federal Sources	\$1	\$1	\$2	\$1
25.3 Other Goods and Services from Federal Sources	\$4,875	\$4,867	\$7,474	\$2,607
25.8 Subsistence & Support of Persons	\$394	\$393	\$603	\$210
32.0 Land and Structures	\$81	\$81	\$124	\$43
Total - Non Pay Object Classes	\$7,010	\$6,983	\$10,723	\$3,740

Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
CSA Assessments	\$6,400	\$6,400	\$9,023	\$2,623
CSA Engagements and Support	\$610	\$583	\$1,700	\$1,117
Total – Non Pay Cost Drivers	\$7,010	\$6,983	\$10,723	\$3,740

NARRATIVE EXPLANATION OF CHANGES

CSA Assessments – FY 2018 request provides additional funding and contractor services for Cyber Resilience Reviews (CRRs) and assessment support, and the Cyber Infrastructure Survey Tool.

CSA Engagements and Support – FY 2018 request includes additional contractor support and travel resources for CSA logistical/mission support and field IT support.

Enhanced Cybersecurity Services – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Enhanced Cybersecurity Services	8	3	\$16,597	8	3	\$16,543	8	7	\$17,157	-	4	\$614
Total	8	3	\$16,597	8	3	\$16,543	8	7	\$17,157	-	4	\$614
Subtotal Discretionary - Appropriation	8	3	\$16,597	8	3	\$16,543	8	7	\$17,157	-	4	\$614

Enhanced Cybersecurity Services – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	8	3	\$16,597
FY 2016 Revised Enacted	8	3	\$16,597
FY 2017 Annualized CR	8	3	\$16,543
FY 2018 Base Budget	8	3	\$16,543
2018 Pay Raise	-	-	\$7
Annualization of 2017 Pay Raise	-	-	\$3
Rightsize FTP/FTE & Salaries and Benefits	-	4	\$604
Total, Pricing Increases	-	4	\$614
Total Adjustments-to-Base	-	4	\$614
FY 2018 Current Services	8	7	\$17,157
FY 2018 Request	8	7	\$17,157
FY 2017 TO FY 2018 Change	-	4	\$614

PPA Level III Description

NPPD requests \$17.157 million and 8 FTP/7 FTE for the Enhanced Cybersecurity Services (ECS) PPA in the Operations & Support appropriation.

The ECS PPA is a voluntary information sharing program tasked with assisting critical infrastructure owners and operators with improving protection of their systems from unauthorized access, exploitation, or data exfiltration. Expanded in February 2013 by Executive Order 13636, “Improving Critical Infrastructure Cybersecurity,” ECS shares sensitive and classified government-vetted cyber threat information with qualified program participants. Participants use the cyber threat information to protect their customers who are validated critical infrastructure entities and/or to protect their internal networks.

Adjustments to Base Justification

- \$20,000 increase for 2018 pay inflation. Of this amount, \$3,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$7,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$10,000 in FY 2017 pay inflation is built into the base, which includes \$2,000 for

the annualization of the 2016 pay raise (1.6 percent) and \$8,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.

- \$0.604 million and 4 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

Enhanced Cybersecurity Services – PPA Level III Personnel Compensation and Benefits

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Enhanced Cybersecurity Services	8	3	\$511	\$170.33	8	3	\$511	\$170.33	8	7	\$1,125	\$160.71	-	4	\$614	(\$9.62)
Total	8	3	\$511	\$170.33	8	3	\$511	\$170.33	8	7	\$1,125	\$160.71	-	4	\$614	(\$9.62)
Discretionary - Appropriation	8	3	\$511	\$170.33	8	3	\$511	\$170.33	8	7	\$1,125	\$160.71	-	4	\$614	(\$9.62)

NARRATIVE EXPLANATION OF CHANGES

- \$20,000 increase for 2018 pay inflation. Of this amount, \$3,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$7,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$0.604 million and 4 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

FTE Change FY 2017-2018: 4

PCB Change FY 2017-2018: \$0.614 million

Average Cost Change FY 2017-2018: \$9,620

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$376	\$376	\$828	\$452
11.3 Other than Full-Time Permanent	\$6	\$6	\$13	\$7
11.5 Other Personnel Compensation	\$2	\$2	\$4	\$2
12.1 Civilian Personnel Benefits	\$127	\$127	\$280	\$153
Total - Personnel Compensation and Benefits	\$511	\$511	\$1,125	\$614
Positions and FTE				
Positions - Civilian	8	8	8	-
FTE - Civilian	3	3	7	4

Enhanced Cybersecurity Services – PPA Level III

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	3	\$511	\$170.33	3	\$511	\$170.33	7	\$1,125	\$160.71	4	\$614	(\$9.62)
Other Costs												
Total – Pay Cost Drivers	3	\$511	\$170.33	3	\$511	\$170.33	7	\$1,125	\$160.71	4	\$614	(\$9.62)

The FY 2018 request rightsizes FTEs based on actual current hiring projections and historical execution, providing funding for previously unfunded positions in order to ensure that all FTE counts are fully funded. NPPD offers eligible cybersecurity positions a retention incentive, i.e., “cyber pay,” in order to attract and retain employees providing a special agency need. In the absence of such an incentive, these cyber-skilled employees would likely leave Federal service.

**Enhanced Cybersecurity Services – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Enhanced Cybersecurity Services	\$16,086	\$16,032	\$16,032	-
Total	\$16,086	\$16,032	\$16,032	-
Discretionary - Appropriation	\$16,086	\$16,032	\$16,032	-

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$42	\$42	\$42	-
22.0 Transportation of Things	\$24	\$24	\$24	-
23.1 Rental Payments to GSA	\$141	\$141	\$141	-
23.3 Communications, Utilities, and Misc. Charges	\$2,925	\$2,918	\$2,918	-
25.1 Advisory and Assistance Services	\$249	\$248	\$248	-
25.2 Other Services from Non-Federal Sources	\$8,255	\$8,222	\$8,222	-
25.3 Other Goods and Services from Federal Sources	\$4,415	\$4,402	\$4,402	-
26.0 Supplies and Materials	\$35	\$35	\$35	-
Total - Non Pay Object Classes	\$16,086	\$16,032	\$16,032	-

Enhanced Cybersecurity Services – PPA Level III
Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Information Assurance and Engineering	\$12,668	\$12,079	\$12,079	\$0
Program Management & Support	\$3,418	\$3,953	\$3,953	\$0
Total – Non Pay Cost Drivers	\$16,086	\$16,032	\$16,032	\$0

NARRATIVE EXPLANATION OF CHANGES

Information Assurance and Engineering – FY 2018 request continues funding and contractor services for specialized information assurance and system security engineering services.

Program Management & Support – FY 2018 request continues funding and contractor services for program management and support activities, including assessments, metrics and capabilities planning.

Cybersecurity Education & Awareness – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Cybersecurity Education & Awareness	10	5	\$17,346	10	5	\$17,294	10	9	\$10,093	-	4	(\$7,201)
Total	10	5	\$17,346	10	5	\$17,294	10	9	\$10,093	-	4	(\$7,201)
Subtotal Discretionary - Appropriation	10	5	\$17,346	10	5	\$17,294	10	9	\$10,093	-	4	(\$7,201)

Cybersecurity Education & Awareness – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	10	5	\$17,350
FY16 Rescission	-	-	(\$4)
Total Rescissions	-	-	(\$4)
FY 2016 Revised Enacted	10	5	\$17,346
FY 2017 Annualized CR	10	5	\$17,294
FY 2018 Base Budget	10	5	\$17,294
2018 Pay Raise	-	-	\$15
Annualization of 2017 Pay Raise	-	-	\$5
Rightsize FTP/FTE & Salaries and Benefits	-	4	\$684
Total, Pricing Increases	-	4	\$704
Total Adjustments-to-Base	-	4	\$704
FY 2018 Current Services	10	9	\$17,998
Proactive Cyber Protection	-	-	(\$7,905)
Total, Program Decreases	-	-	(\$7,905)
FY 2018 Request	10	9	\$10,093
FY 2017 TO FY 2018 Change	-	4	(\$7,201)

PPA Level III Description

NPPD requests \$10.1 million and 10 FTP/9 FTE for the Cybersecurity Education & Awareness PPA in the Operations & Support appropriation.

The Cybersecurity Education and Awareness PPA funds national cybersecurity public awareness, education, training, and workforce development efforts to develop a more resilient and capable cyber nation. The PPA supports NPPD's leadership role in cultivating the nation's current and future cybersecurity workforce, institutionalizing cybersecurity as a profession, providing training and other developmental resources, and educating the public about best practices in online safety.

Adjustments to Base Justification

- \$20,000 increase for FY 2018 pay inflation. Of this amount, \$5,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$15,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$20,000 in FY 2017 pay inflation is built into the base, which includes \$4,000 for the annualization of the 2016 pay raise (1.6 percent) and \$16,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$684,000 and 4 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

Cybersecurity Education & Awareness – PPA Level III Personnel Compensation and Benefits

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Cybersecurity Education & Awareness	10	5	\$1,029	\$205.8	10	5	\$1,029	\$205.8	10	9	\$2,288	\$254.22	-	4	\$1,259	\$48.42
Total	10	5	\$1,029	\$205.8	10	5	\$1,029	\$205.8	10	9	\$2,288	\$254.22	-	4	\$1,259	\$48.42
Discretionary - Appropriation	10	5	\$1,029	\$205.8	10	5	\$1,029	\$205.8	10	9	\$2,288	\$254.22	-	4	\$1,259	\$48.42

NARRATIVE EXPLANATION OF CHANGES

- \$20,000 increase for 2018 pay inflation. Of this amount, \$5,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$15,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$684,000 and 4 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

FTE Change FY 2017-2018: 4

PCB Change FY 2017-2018: \$1,259,000

Average Cost Change FY 2017-2018: \$48.42

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$750	\$750	\$1,724	\$974
11.3 Other than Full-Time Permanent	\$16	\$16	\$32	\$16
11.5 Other Personnel Compensation	\$26	\$26	\$53	\$27
12.1 Civilian Personnel Benefits	\$237	\$237	\$479	\$242
Total - Personnel Compensation and Benefits	\$1,029	\$1,029	\$2,288	\$1,259
Positions and FTE				
Positions - Civilian	10	10	10	-
FTE - Civilian	5	5	9	4

Cybersecurity Education & Awareness – PPA Level III Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	5	\$1,029	\$205.80	5	\$1,029	\$205.80	9	\$2,288	\$254.22	4	\$1,259	(\$48.42)
Other Costs												
Total – Pay Cost Drivers	5	\$1,029	\$205.80	5	\$1,029	\$205.80	9	\$2,288	\$254.22	4	\$1,259	(\$48.42)

The FY 2018 request provides additional funding to account for inflation.

**Cybersecurity Education & Awareness – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Cybersecurity Education & Awareness	\$16,317	\$16,265	\$7,805	(\$8,460)
Total	\$16,317	\$16,265	\$7,805	(\$8,460)
Discretionary - Appropriation	\$16,317	\$16,265	\$7,805	(\$8,460)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$39	\$39	\$19	(\$20)
22.0 Transportation of Things	\$4	\$4	\$2	(\$2)
23.1 Rental Payments to GSA	\$87	\$86	\$42	(\$44)
23.2 Rental Payments to Others	\$18	\$18	\$8	(\$10)
23.3 Communications, Utilities, and Misc. Charges	\$1,184	\$1,182	\$583	(\$599)
25.1 Advisory and Assistance Services	\$7,248	\$7,204	\$3,340	(\$3,864)
25.2 Other Services from Non-Federal Sources	\$18	\$18	\$8	(\$10)
25.3 Other Goods and Services from Federal Sources	\$2,546	\$2,548	\$1,256	(\$1,292)
25.7 Operation and Maintenance of Equipment	\$433	\$432	\$212	(\$220)
26.0 Supplies and Materials	\$11	\$11	\$6	(\$5)
31.0 Equipment	\$179	\$179	\$89	(\$90)
41.0 Grants, Subsidies, and Contributions	\$4,550	\$4,544	\$2,240	(\$2,304)
Total - Non Pay Object Classes	\$16,317	\$16,265	\$7,805	(\$8,460)

Cybersecurity Education & Awareness – PPA Level III Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Higher Education	\$2,800	\$1,300	\$0	\$(1,300)
Training and Workforce Development	\$8,596	\$8,666	\$6,681	\$(1,985)
K-12 Education Program	\$1,500	\$3,000	\$0	\$(3,000)
Education Outreach and Engagement	\$3,421	\$1,350	\$0	\$(1,350)
Programmatic Support	\$0	\$1,959	\$1,124	\$(825)
Total – Non Pay Cost Drivers	\$16,317	\$16,275	\$7,805	\$(8,460)

NARRATIVE EXPLANATION OF CHANGES

Higher Education – FY 2018 request includes elimination of initiatives with higher education institutions (e.g., community colleges, 4-year education institutions, etc.) and the Scholarship for Service (SFS) program.

Training and Workforce Development – FY 2018 request fully funds the National Initiative for Cybersecurity Careers and Studies (NICCS) Portal, reduces funding for the National Initiative for Cybersecurity Education (NICE) and the Federal Virtual Training Environment (FedVTE), and eliminates support for the Federal Cybersecurity Training Environment (FedCTE).

K-12 Education Program – FY 2018 request eliminates the Integrated Cybersecurity Education Communities (ICEC) project.

Education Outreach and Engagement – FY 2018 request eliminates all support for cyber competitions, the National Cybersecurity Awareness program, and cyber education resource development and implementation.

Programmatic Support – FY 2018 request removes contractor services providing general programmatic support.

Federal Cybersecurity – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Federal Network Resilience	52	29	\$26,605	52	29	\$28,095	87	63	\$42,766	35	34	\$14,671
Continuous Diagnostics and Mitigation	31	28	\$5,149	31	28	\$5,139	55	40	\$93,780	24	12	\$88,641
National Cybersecurity Protection System	177	106	\$356,261	177	106	\$366,752	177	152	\$341,103	-	46	(\$25,649)
Total	260	163	\$388,015	260	163	\$399,986	319	255	\$477,649	59	92	\$77,663
Subtotal Discretionary - Appropriation	260	163	\$388,015	260	163	\$399,986	319	255	\$477,649	59	92	\$77,663

Federal Cybersecurity – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	260	163	\$401,283
Cyber Facilities and Operational Requirements	-	-	(\$12,308)
TSA Transfer	-	-	(\$950)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$13,258)
FY16 Rescission	-	-	(\$10)
Total Rescissions	-	-	(\$10)
FY 2016 Revised Enacted	260	163	\$388,015
FY 2017 Annualized CR	260	163	\$399,986
FY 2018 Base Budget	260	163	\$399,986
Transfer of CDM from PC&I to O&S to align budget to CAS policy	-	-	\$31,011
Total Transfers	-	-	\$31,011
2018 Pay Raise	-	-	\$445
Annualization of 2017 Pay Raise	-	-	\$163
Rightsize FTP/FTE & Salaries and Benefits	-	62	\$11,892
Total, Pricing Increases	-	62	\$12,500
Adjust for Acquisition O&M	-	-	(\$31,206)
Total, Pricing Decreases	-	-	(\$31,206)
Total Adjustments-to-Base	-	62	\$12,305
FY 2018 Current Services	260	225	\$412,291
CDM O&M for partner Federal agencies	-	-	\$52,000
Proactive Cyber Protection	59	30	\$13,358
Total, Program Increases	59	30	\$65,358
FY 2018 Request	319	255	\$477,649
FY 2017 TO FY 2018 Change	59	92	\$77,663

PPA Level II Description

NPPD requests \$477.649 million and 319 FTP/255 FTE for the Federal Cybersecurity PPA in the Operations & Support appropriation.

The Federal Cybersecurity program includes Continuous Diagnostics & Mitigation (CDM), National Cybersecurity Protection System (NCPS), and Federal Network Resilience (FNR). Protecting federal network efforts include the Continuous Diagnostics & Mitigation (CDM) and National Cybersecurity Protection System (NCPS) programs such as EINSTEIN 3 Accelerated, improving the security posture of high value assets and providing governance and training to implement cybersecurity requirements across the Federal Enterprise. The NCPS program is an integrated system delivering intrusion detection, analytics, intrusion prevention, and information sharing capabilities to public and private stakeholder groups across the Homeland Security Enterprise. This request will allow the NPPD to continue providing the necessary tools and services for all phases of the CDM program that enable federal and other government IT networks to strengthen the security posture of their cyber networks. Also, it enables continued enhancements to the protection of Federal civilian departments' and agencies' information technology (IT) infrastructure from cyber threats through the execution of the NCPS program. Together, CDM and NCPS share a common goal of protecting infrastructure by providing a common baseline of security for the Federal Civilian Government.

Adjustments to Base Justification

- \$0.608 million increase for FY 2018 pay inflation. Of this amount, \$0.163 million is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$0.445 million is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$0.616 million in FY 2017 pay inflation is built into the base, which includes \$125,000 for the annualization of the 2016 pay raise (1.6 percent) and \$0.491 million for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$11.892 million and 62 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$31.206 million decrease to align operations and maintenance funding with the planned acquisition profile for FY 2018.

**Federal Cybersecurity – PPA Level II
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Federal Network Resilience	52	29	\$5,130	\$176.9	52	29	\$6,705	\$231.21	87	63	\$13,434	\$213.24	35	34	\$6,729	(\$17.97)
Continuous Diagnostics and Mitigation	31	28	\$4,075	\$145.54	31	28	\$4,075	\$145.54	55	40	\$6,124	\$153.1	24	12	\$2,049	\$7.56
National Cybersecurity Protection System	177	106	\$17,317	\$163.37	177	106	\$20,400	\$192.45	177	152	\$29,538	\$194.33	-	46	\$9,138	\$1.88
Total	260	163	\$26,522	\$162.71	260	163	\$31,180	\$191.29	319	255	\$49,096	\$192.53	59	92	\$17,916	\$1.24
Discretionary - Appropriation	260	163	\$26,522	\$162.71	260	163	\$31,180	\$191.29	319	255	\$49,096	\$192.53	59	92	\$17,916	\$1.24

Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$18,172	\$21,352	\$33,640	\$12,288
11.3 Other than Full-Time Permanent	\$231	\$291	\$452	\$161
11.5 Other Personnel Compensation	\$199	\$248	\$392	\$144
12.1 Civilian Personnel Benefits	\$7,920	\$9,289	\$14,612	\$5,323
Total - Personnel Compensation and Benefits	\$26,522	\$31,180	\$49,096	\$17,916
Positions and FTE				
Positions - Civilian	260	260	319	59
FTE - Civilian	163	163	255	92

**Federal Cybersecurity – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Federal Network Resilience	\$21,475	\$21,390	\$29,332	\$7,942
Continuous Diagnostics and Mitigation	\$1,074	\$1,064	\$87,656	\$86,592
National Cybersecurity Protection System	\$338,944	\$346,352	\$311,565	(\$34,787)
Total	\$361,493	\$368,806	\$428,553	\$59,747
Discretionary - Appropriation	\$361,493	\$368,806	\$428,553	\$59,747

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$213	\$219	\$203	(\$16)
22.0 Transportation of Things	\$17	\$17	\$16	(\$1)
23.1 Rental Payments to GSA	\$4,497	\$4,605	\$4,142	(\$463)
23.2 Rental Payments to Others	\$359	\$367	\$330	(\$37)
23.3 Communications, Utilities, and Misc. Charges	\$2	\$2	\$2	-
25.1 Advisory and Assistance Services	\$263,532	\$272,371	\$251,376	(\$20,995)
25.2 Other Services from Non-Federal Sources	\$3,277	\$7,349	\$93,326	\$85,977
25.3 Other Goods and Services from Federal Sources	\$35,410	\$41,466	\$40,782	(\$684)
25.4 Operation and Maintenance of Facilities	\$2,154	\$2,210	\$1,988	(\$222)
25.5 Research and Development Contracts	\$556	\$569	\$512	(\$57)
25.7 Operation and Maintenance of Equipment	\$19,759	\$20,233	\$18,202	(\$2,031)
25.8 Subsistence & Support of Persons	\$24	\$25	\$22	(\$3)
26.0 Supplies and Materials	\$12	\$13	\$18	\$5
31.0 Equipment	\$12,861	\$13,191	\$12,085	(\$1,106)
32.0 Land and Structures	\$5,831	\$5,971	\$5,371	(\$600)
42.0 Insurance Claims and Indemnities	\$194	\$198	\$178	(\$20)
94.0 Financial Transfers	\$12,795	-	-	-
Total - Non Pay Object Classes	\$361,493	\$368,806	\$428,553	\$59,747

Federal Network Resilience PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Federal Network Resilience	52	29	\$26,605	52	29	\$28,095	87	63	\$42,766	35	34	\$14,671
Total	52	29	\$26,605	52	29	\$28,095	87	63	\$42,766	35	34	\$14,671
Subtotal Discretionary - Appropriation	52	29	\$26,605	52	29	\$28,095	87	63	\$42,766	35	34	\$14,671

Federal Network Resilience – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	52	29	\$28,186
Cyber Facilities and Operational Requirements	-	-	(\$1,575)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$1,575)
FY16 Rescission	-	-	(\$6)
Total Rescissions	-	-	(\$6)
FY 2016 Revised Enacted	52	29	\$26,605
FY 2017 Annualized CR	52	29	\$28,095
FY 2018 Base Budget	52	29	\$28,095
2018 Pay Raise	-	-	\$96
Annualization of 2017 Pay Raise	-	-	\$35
Rightsize FTP/FTE & Salaries and Benefits	-	16	\$3,152
Total, Pricing Increases	-	16	\$3,283
Total Adjustments-to-Base	-	16	\$3,283
FY 2018 Current Services	52	45	\$31,378
Proactive Cyber Protection	35	18	\$11,388
Total, Program Increases	35	18	\$11,388
FY 2018 Request	87	63	\$42,766
FY 2017 TO FY 2018 Change	35	34	\$14,671

PPA Level III Description

NPPD requests \$42.766 million and 87 FTP/63 FTE for the Federal Network Resilience PPA in the Operations & Support appropriation.

The Federal Network Resilience (FNR) PPA funds Federal departments and agencies capabilities to secure their systems and networks. It also funds a single, accountable focal point for achieving cyber infrastructure security and compliance throughout the Federal enterprise.

FNR manages the Trusted Internet Connection (TIC) Initiative with OMB. This optimizes network security capabilities into a common solution for the Federal information enterprise and facilitates reducing and consolidating external connections, including Internet points of presence, through approved access points.

FNR's FISMA Initiative supports the mitigation of cyber risk across Federal agencies, aligning outcome-oriented FISMA metrics with the Cybersecurity Framework, and provides OMB and Federal departments and agencies with support to understand current cybersecurity baselines while increasing future baselines.

FNR's Information Systems Security Line of Business (ISSLoB) delivers strategic sourcing solutions enabling Federal Government-wide cost savings for information technology security products and services. As the program management office and overseer of the Shared Service Centers (SSC) for the initiative, ISSLoB identifies information systems security solutions that reduce costs through shared services, eliminates duplication, and increases specialized expertise, freeing up resources for mission-specific requirements and other tailored security requirements.

FNR's Cybersecurity Capability Validation (CCV) assessments (blue teams) assess and validate each Federal civilian departments' and/or agencies' implementation of technical (tools and technologies) and operational (people, processes, and security program maturity) cybersecurity capabilities required by Federal laws, policies, and initiatives. CCV assessments incorporate document reviews, staff interviews, operational observations, and direct testing when possible to provide an objective, repeatable, and consistent methodology ensuring fairness, and facilitating government-wide trending and analysis.

Adjustments to Base Justification

- \$131,000 increase for FY 2018 pay inflation. Of this amount, \$35,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$96,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$132,000 in FY 2017 pay inflation is built into the base, which includes \$27,000 for the annualization of the 2016 pay raise (1.6 percent) and \$106,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$3.152 million and 16 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

**Federal Network Resilience – PPA Level III
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Federal Network Resilience	52	29	\$5,130	\$176.9	52	29	\$6,705	\$231.21	87	63	\$13,434	\$213.24	35	34	\$6,729	(\$17.97)
Total	52	29	\$5,130	\$176.9	52	29	\$6,705	\$231.21	87	63	\$13,434	\$213.24	35	34	\$6,729	(\$17.97)
Discretionary - Appropriation	52	29	\$5,130	\$176.9	52	29	\$6,705	\$231.21	87	63	\$13,434	\$213.24	35	34	\$6,729	(\$17.97)

NARRATIVE EXPLANATION OF CHANGES

- \$131,000 increase for 2018 pay inflation. Of this amount, \$35,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$96,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$3.152 million and 16 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

FTE Change FY 2017-2018: 34

PCB Change FY 2017-2018: \$6.729 million

Average Cost Change FY 2017-2018: (\$17,970)

Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$3,528	\$4,624	\$9,265	\$4,641
11.3 Other than Full-Time Permanent	\$41	\$53	\$106	\$53
11.5 Other Personnel Compensation	\$43	\$56	\$112	\$56
12.1 Civilian Personnel Benefits	\$1,518	\$1,972	\$3,951	\$1,979
Total - Personnel Compensation and Benefits	\$5,130	\$6,705	\$13,434	\$6,729
Positions and FTE				
Positions - Civilian	52	52	87	35
FTE - Civilian	29	29	63	34

Federal Network Resilience – PPA Level III

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President’s Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	29	\$5,130	\$176.90	29	\$6,705	\$231.21	63	\$13,434	\$213.24	34	\$6,729	(\$17.97)
Other Costs												
Total Pay Cost Drivers	29	\$5,130	\$176.90	29	\$6,705	\$231.21	63	\$13,434	\$213.24	34	\$6,729	(\$17.97)

The FY 2018 request provides additional funding to account for inflation.

**Federal Network Resilience – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Federal Network Resilience	\$21,475	\$21,390	\$29,332	\$7,942
Total	\$21,475	\$21,390	\$29,332	\$7,942
Discretionary - Appropriation	\$21,475	\$21,390	\$29,332	\$7,942

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$13	\$14	\$19	\$5
22.0 Transportation of Things	\$2	\$2	\$3	\$1
23.3 Communications, Utilities, and Misc. Charges	\$1	\$1	\$1	-
25.1 Advisory and Assistance Services	\$12,579	\$13,484	\$18,490	\$5,006
25.2 Other Services from Non-Federal Sources	\$34	\$36	\$49	\$13
25.3 Other Goods and Services from Federal Sources	\$6,936	\$7,378	\$10,118	\$2,740
25.7 Operation and Maintenance of Equipment	\$2	\$2	\$3	\$1
26.0 Supplies and Materials	\$12	\$13	\$18	\$5
31.0 Equipment	\$429	\$460	\$631	\$171
94.0 Financial Transfers	\$1,467	-	-	-
Total - Non Pay Object Classes	\$21,475	\$21,390	\$29,332	\$7,942

Federal Network Resilience – PPA Level III

Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
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FISMA	\$5,490	\$5,490	\$12,031	\$6,541
Trusted Internet Connections (TIC)	\$4,492	\$4,492	\$4,267	\$(225)
Design and Engineering	\$3,175	\$3,175	\$5,105	\$1,930
Cyber Operational Reviews	\$5,723	\$5,638	\$5,333	\$(305)
Information Systems Security Lines of Business	\$2,595	\$2,595	\$2,595	\$0
Total – Non Pay Cost Drivers	\$21,475	\$21,390	\$29,332	\$7,942

NARRATIVE EXPLANATION OF CHANGES

FISMA – FY 2018 request includes enhanced support required to execute additional authorities under FISMA and assistance to Departments and agencies to align to FISMA authorities and goals.

Trusted Internet Connections (TIC) – FY 2018 reduction reflects limited TIC compliance cybersecurity support, mitigated by CDM deployments.

Design and Engineering – FY 2018 enhancement provides contractor services enabling engineering and system architecture reviews supporting Departments and agencies in need.

Cyber Operational Reviews – FY 2018 request reflects elimination of Cybersecurity Capability Validation (CCV) assessments to two Federal Departments/agencies.

Information Systems Security Line of Business – No change.

Continuous Diagnostics and Mitigation – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Continuous Diagnostics and Mitigation	31	28	\$5,149	31	28	\$5,139	55	40	\$93,780	24	12	\$88,641
Total	31	28	\$5,149	31	28	\$5,139	55	40	\$93,780	24	12	\$88,641
Subtotal Discretionary - Appropriation	31	28	\$5,149	31	28	\$5,139	55	40	\$93,780	24	12	\$88,641

Continuous Diagnostics and Mitigation – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	31	28	\$5,149
FY 2016 Revised Enacted	31	28	\$5,149
FY 2017 Annualized CR	31	28	\$5,139
FY 2018 Base Budget	31	28	\$5,139
Transfer of CDM from PC&I to O&S to align budget to CAS policy	-	-	\$31,011
Total Transfers	-	-	\$31,011
2018 Pay Raise	-	-	\$59
Adjust for Acquisition O&M	-	-	\$3,580
Annualization of 2017 Pay Raise	-	-	\$21
Total, Pricing Increases	-	-	\$3,660
Total Adjustments-to-Base	-	-	\$34,671
FY 2018 Current Services	31	28	\$39,810
CDM O&M for partner Federal agencies	-	-	\$52,000
Proactive Cyber Protection	24	12	\$1,970
Total, Program Increases	24	12	\$53,970
FY 2018 Request	55	40	\$93,780
FY 2017 TO FY 2018 Change	24	12	\$88,641

PPA Level III Description

NPPD requests \$93.780 million and 55 FTP/40 FTE for the Continuous Diagnostics & Mitigation PPA in the Operations & Support appropriation.

The Continuous Diagnostics & Mitigation (CDM) PPA enhances the overall security posture of Federal agencies' networks by providing Federal agencies with the capability to identify cybersecurity risks, prioritize these risks based upon potential impacts, and mitigate the most significant problems first. CDM assists in protecting agencies against exploitation by unauthorized and unmanaged hardware and software; known vulnerabilities; weak configuration settings (including port, protocols, and services); insider attacks; and loss of confidentiality, integrity, or availability due to unanticipated events and attacks requiring recovery or special responses.

The CDM program consists of the following capability-based phases: Phase 1, Endpoint Management (what is on the network); Phase 2, Manage Accounts for People and Services (who is on the network); Phase 3, Manage Events and Security Lifecycle (what is happening on the network); and a proposed Phase 4 to address data protection on agency networks. In addition, the program will maintain a dashboard to provide situational awareness on a Federal level. D/A Dashboards provide near real-time reporting of agency cybersecurity posture that streamlines compliance and reporting, increases the visibility into vulnerabilities for consistent risk evaluations, and aligns responses to track and respond with mitigations. The CDM Federal Dashboard makes agency summary system security data available to all departments and agencies; enabling government entities to expand their continuous monitoring capabilities by increasing their network sensor capacity, automating sensor collections, and prioritizing risk alerts.

Adjustments to Base Justification

- \$80,000 increase for FY 2018 pay inflation. Of this amount, \$21,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$59,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$80,000 in FY 2017 pay inflation is built into the base, which includes \$16,000 for the annualization of the 2016 pay raise (1.6 percent) and \$64,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$3.580 million increase to align CDM operations and maintenance funding with the planned acquisition profile for FY 2018.

**Continuous Diagnostics and Mitigation – PPA Level III
Personnel Compensation and Benefits**

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Continuous Diagnostics and Mitigation	31	28	\$4,075	\$145.54	31	28	\$4,075	\$145.54	55	40	\$6,124	\$153.1	24	12	\$2,049	\$7.56
Total	31	28	\$4,075	\$145.54	31	28	\$4,075	\$145.54	55	40	\$6,124	\$153.1	24	12	\$2,049	\$7.56
Discretionary - Appropriation	31	28	\$4,075	\$145.54	31	28	\$4,075	\$145.54	55	40	\$6,124	\$153.1	24	12	\$2,049	\$7.56

NARRATIVE EXPLANATION OF CHANGES

- \$80,000 increase for 2018 pay inflation. Of this amount, \$21,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$59,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$1.97 million and 24 FTP/12 FTE increase to expand the Continuous Diagnostics and Mitigation system.

FTE Change FY 2017-2018: 12

PCB Change FY 2017-2018: \$2.049 million

Average Cost Change FY 2017-2018: \$7,560

Continuous Diagnostics and Mitigation – PPA Level III
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$2,800	\$2,800	\$4,208	\$1,408
11.3 Other than Full-Time Permanent	\$32	\$32	\$48	\$16
11.5 Other Personnel Compensation	\$34	\$34	\$51	\$17
12.1 Civilian Personnel Benefits	\$1,209	\$1,209	\$1,817	\$608
Total - Personnel Compensation and Benefits	\$4,075	\$4,075	\$6,124	\$2,049
Positions and FTE				
Positions - Civilian	31	31	55	24
FTE - Civilian	28	28	40	12

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	28	\$4,075	\$145.54	28	\$4,075	\$145.54	40	\$6,124	\$153.10	12	\$2,049	\$8
Other Costs												
Total – Pay Cost Drivers	28	\$4,075	\$145.54	28	\$4,075	\$145.54	40	\$6,124	\$153.10	12	\$2,049	\$8

The FY 2018 request provides additional funding to account for inflation.

**Continuous Diagnostics and Mitigation – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Continuous Diagnostics and Mitigation	\$1,074	\$1,064	\$87,656	\$86,592
Total	\$1,074	\$1,064	\$87,656	\$86,592
Discretionary - Appropriation	\$1,074	\$1,064	\$87,656	\$86,592

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
25.2 Other Services from Non-Federal Sources	\$1,074	\$1,064	\$87,656	\$86,592
Total - Non Pay Object Classes	\$1,074	\$1,064	\$87,656	\$86,592

**Continuous Diagnostics and Mitigation – PPA Level III
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President’s Budget	FY 2017 to FY 2018 Total Changes
CDM Phase 1 Operations and Maintenance	\$1,074	\$1,064	\$79,344	\$78,280
Federal Dashboard	\$0	\$0	\$8,312	\$8,312
Total – Non Pay Cost Drivers	\$1,074	\$1,064	\$87,656	\$86,592

NARRATIVE EXPLANATION OF CHANGES

CDM Phase 1 Operations and Maintenance – FY 2018 request reflects additional funds allocated to Federal Department and Agencies’ Phase 1 product license maintenance costs and associated integration costs in FY 2018, providing another year of operations and maintenance for departments and agencies, and contractor services for engineering support and providing full endpoint protection for Phase 1 agencies. The increase reflects funds moved from the PC&I account to align the budget with the Department’s CAS policy.

Federal Dashboard – FY 2018 request includes follow-on contracts to continue Dashboard integration and evolution, deploying to Departments and agencies (D/As) and preparing the Federal Dashboard to receive feeds from D/As.

National Cybersecurity Protection System – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
National Cybersecurity Protection System	177	106	\$356,261	177	106	\$366,752	177	152	\$341,103	-	46	(\$25,649)
Total	177	106	\$356,261	177	106	\$366,752	177	152	\$341,103	-	46	(\$25,649)
Subtotal Discretionary - Appropriation	177	106	\$356,261	177	106	\$366,752	177	152	\$341,103	-	46	(\$25,649)

National Cybersecurity Protection System – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	177	106	\$367,948
Cyber Facilities and Operational Requirements	-	-	(\$10,733)
TSA Transfer	-	-	(\$950)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$11,683)
FY16 Rescission	-	-	(\$4)
Total Rescissions	-	-	(\$4)
FY 2016 Revised Enacted	177	106	\$356,261
FY 2017 Annualized CR	177	106	\$366,752
FY 2018 Base Budget	177	106	\$366,752
2018 Pay Raise	-	-	\$290
Annualization of 2017 Pay Raise	-	-	\$107
Rightsize FTP/FTE & Salaries and Benefits	-	46	\$8,740
Total, Pricing Increases	-	46	\$9,137
Adjust for Acquisition O&M	-	-	(\$34,786)
Total, Pricing Decreases	-	-	(\$34,786)
Total Adjustments-to-Base	-	46	(\$25,649)
FY 2018 Current Services	177	152	\$341,103
FY 2018 Request	177	152	\$341,103
FY 2017 TO FY 2018 Change	-	46	(\$25,649)

PPA Level III Description

NPPD requests \$341.1 million and 177 FTP/152 FTE for the National Cybersecurity Protection System (NCPS) PPA in the Operations & Support appropriation.

The NCPS budget program funds enhancing the protection of Federal civilian Department and agency IT and communications infrastructure from cyber threats. NCPS, operationally known as EINSTEIN, is an integrated system delivering intrusion detection, advanced analytics, intrusion prevention, and information sharing capabilities that combat and mitigate cyber threats to the Federal

executive branch information and networks.

In FY 2009, EINSTEIN 2 began deployment; EINSTEIN 2 meticulously collects network flow traffic to and from participating Federal executive departments' and agencies' networks, and provides an intrusion detection capability that alerts when a pre-defined specific cyber threat is detected. In FY 2014, EINSTEIN 3 Accelerated (E3A) began deployment; E3A acts on suspected malicious e-mail and domain name server traffic preventing harm to protected agencies' networks. EINSTEIN 2 and E3A network intrusion detection capability uses a set of custom signatures derived from numerous sources. When a signature alerts on a known or suspected cyber threat, E3A will act on that threat to stop malicious traffic and prevent harm to the intended targets.

Adjustments to Base Justification

- \$397,000 increase for FY 2018 pay inflation. Of this amount, \$107,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$290,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$403,000 in FY 2017 pay inflation is built into the base, which includes \$82,000 for the annualization of the 2016 pay raise (1.6 percent) and \$321,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase. Efficiencies were taken in FY 2017 to afford the pay increase.
- \$8.740 million and 46 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$34.786 million decrease to align operations and maintenance funding with the planned acquisition profile for FY 2018.

**National Cybersecurity Protection System – PPA Level III
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
National Cybersecurity Protection System	177	106	\$17,317	\$163.37	177	106	\$20,400	\$192.45	177	152	\$29,538	\$194.33	-	46	\$9,138	\$1.88
Total	177	106	\$17,317	\$163.37	177	106	\$20,400	\$192.45	177	152	\$29,538	\$194.33	-	46	\$9,138	\$1.88
Discretionary - Appropriation	177	106	\$17,317	\$163.37	177	106	\$20,400	\$192.45	177	152	\$29,538	\$194.33	-	46	\$9,138	\$1.88

NARRATIVE EXPLANATION OF CHANGES

- \$397,000 increase for FY 2018 pay inflation. Of this amount, \$107,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$290,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$8.740 million and 46 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

FTE Change FY 2017-2018: 46

PCB Change FY 2017-2018: \$9.138 million

Average Cost Change FY 2017-2018: \$1,880

National Cybersecurity Protection System – PPA Level III Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$11,844	\$13,928	\$20,167	\$6,239
11.3 Other than Full-Time Permanent	\$158	\$206	\$298	\$92
11.5 Other Personnel Compensation	\$122	\$158	\$229	\$71
12.1 Civilian Personnel Benefits	\$5,193	\$6,108	\$8,844	\$2,736
Total - Personnel Compensation and Benefits	\$17,317	\$20,400	\$29,538	\$9,138
Positions and FTE				
Positions - Civilian	177	177	177	-
FTE - Civilian	106	106	152	46

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	106	\$17,317	\$163.37	106	\$20,400	\$192.45	152	\$29,538	\$194.33	46	\$9,138	\$1.88
Total – Pay Cost Drivers	106	\$17,317	\$163.37	106	\$20,400	\$192.45	152	\$29,538	\$194.33	46	\$9,138	\$1.88

The FY 2018 request provides additional funding to account for inflation.

**National Cybersecurity Protection System – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
National Cybersecurity Protection System	\$338,944	\$346,352	\$311,565	(\$34,787)
Total	\$338,944	\$346,352	\$311,565	(\$34,787)
Discretionary - Appropriation	\$338,944	\$346,352	\$311,565	(\$34,787)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$200	\$205	\$184	(\$21)
22.0 Transportation of Things	\$15	\$15	\$13	(\$2)
23.1 Rental Payments to GSA	\$4,497	\$4,605	\$4,142	(\$463)
23.2 Rental Payments to Others	\$359	\$367	\$330	(\$37)
23.3 Communications, Utilities, and Misc. Charges	\$1	\$1	\$1	-
25.1 Advisory and Assistance Services	\$250,953	\$258,887	\$232,886	(\$26,001)
25.2 Other Services from Non-Federal Sources	\$2,169	\$6,249	\$5,621	(\$628)
25.3 Other Goods and Services from Federal Sources	\$28,474	\$34,088	\$30,664	(\$3,424)
25.4 Operation and Maintenance of Facilities	\$2,154	\$2,210	\$1,988	(\$222)
25.5 Research and Development Contracts	\$556	\$569	\$512	(\$57)
25.7 Operation and Maintenance of Equipment	\$19,757	\$20,231	\$18,199	(\$2,032)
25.8 Subsistence & Support of Persons	\$24	\$25	\$22	(\$3)
31.0 Equipment	\$12,432	\$12,731	\$11,454	(\$1,277)
32.0 Land and Structures	\$5,831	\$5,971	\$5,371	(\$600)
42.0 Insurance Claims and Indemnities	\$194	\$198	\$178	(\$20)
94.0 Financial Transfers	\$11,328	-	-	-
Total - Non Pay Object Classes	\$338,944	\$346,352	\$311,565	(\$34,787)

National Cybersecurity Protection System – PPA Level III Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Intrusion Detection and Prevention	\$176,600	\$153,511	\$133,084	\$(20,427)
Analytics	\$26,001	\$27,477	\$37,151	\$9,674
Program, Planning and Operations	\$80,461	\$86,019	\$76,266	\$(9,753)
Core Infrastructure	\$43,002	\$57,582	\$46,203	\$(11,379)
Information Sharing	\$12,880	\$21,763	\$18,861	\$(2,902)
Total – Non Pay Cost Drivers	\$338,944	\$346,352	\$311,566	\$(34,787)

NARRATIVE EXPLANATION OF CHANGES

Intrusion Detection and Prevention – Deploys additional intrusion prevention capabilities via the ISPs, such as web content filtering. The deployment of these additional capabilities (ISP or non-ISP provided) will close gaps from detection to prevention, allowing automated, streaming analytics to find new, previously unknown threats. Also funds E2 expansion, maintenance of sensors at Nests versus TIC/MTIPS, and increases sensor diversity to expand beyond signature-based sensors, including sensors that alert off of network traffic characteristics and machine behavior. The FY 2018 request reflects a decrease in Intrusion Prevention system enhancements and traffic aggregation deployment efforts from FY 2017.

Analytics –

Sustains the Security Incident and Event Management (SIEM), Advanced Malware Analysis Center (AMAC), and Enhanced Analytics capabilities, including: Generation and configuration efforts for aggregating, correlating, and visualizing network flow information across the Federal infrastructure; cyber threat collection, reporting and analysis; increases Mission Operating Environment (MOE) capacity to support the predicted user base expansion from delivery of NCPS InfoShare capabilities; supports deployment of Next Gen MOE capabilities designed in FY 2015; collection, correlation, and exchange of up-to-date malware data and analysis; and packet capture tools. The FY 2018 request includes an increase in the deployment of Analytics system enhancements from FY 2017.

Program, Planning and Operations – Maintains program artifacts and planning, program, and engineering support. Also funds Shared Services and Working Capital Fund. The FY 2018 request reflects a decrease in funding for Shared Services and the Working Capital Fund.

Core Infrastructure – Sustains MOE and Top Secret Mission Operating Environment (TS MOE). The FY 2018 reflects reduces funding for MOE hardware and installation costs.

Information Sharing -- Deploys advanced tools and technologies expanding the cybersecurity community's access to DHS threat information and analysis. Continue integrating processes across multiple security fabrics (Cross Domain Solution). The FY 2018 request decreases funds for Information Sharing deployment efforts. As Information Sharing capabilities mature, transition to operations costs decrease.

*Infrastructure Protection - PPA***Budget Comparison and Adjustments****Comparison of Budget Authority and Request***Dollars in Thousands*

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Infrastructure Capacity Building	337	267	\$110,025	337	267	\$109,588	374	318	\$115,515	37	51	\$5,927
Infrastructure Security Compliance	287	232	\$74,637	287	232	\$76,053	307	255	\$72,440	20	23	(\$3,613)
Total	624	499	\$184,662	624	499	\$185,641	681	573	\$187,955	57	74	\$2,314
Subtotal Discretionary - Appropriation	624	499	\$184,662	624	499	\$185,641	681	573	\$187,955	57	74	\$2,314

Infrastructure Protection – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$186,485		
Transfers & Reprogrammings	(\$1,735)		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	(\$88)		
Revised Enacted/Request	\$184,662	\$185,641	\$187,955
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$184,662	\$185,641	\$187,955
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$184,662	\$185,641	\$187,955
Obligations (Actual/Projections/Estimates)	\$184,475	\$185,452	\$187,765
Personnel: Positions and FTE			
Enacted/Request Positions	624	624	681
Enacted/Request FTE	499	499	573
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	465	624	681
FTE (Actual/Estimates/Projections)	436	499	573

Infrastructure Protection - PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	624	499	\$186,485
TSA Transfer	-	-	(\$1,735)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$1,735)
FY16 Rescission	-	-	(\$88)
Total Rescissions	-	-	(\$88)
FY 2016 Revised Enacted	624	499	\$184,662
FY 2017 Annualized CR	624	499	\$185,641
FY 2018 Base Budget	624	499	\$185,641
2018 Pay Raise	-	-	\$1,072
Annualization of 2017 Pay Raise	-	-	\$394
Balanced Workforce Adjustment FTP/FTE - Salaries and Benefits	39	35	\$5,789
Rightsize FTP/FTE & Salaries and Benefits	-	29	\$4,845
Total, Pricing Increases	39	64	\$12,100
Balanced Workforce Adjustment Program	-	-	(\$6,159)
Efficiency to Program	-	-	(\$1,561)
Total, Pricing Decreases	-	-	(\$7,720)
Total Adjustments-to-Base	39	64	\$4,380
FY 2018 Current Services	663	563	\$190,021
Counterterrorism and IP	-	-	\$3,423
Total, Program Increases	-	-	\$3,423
Expand Operations in Field	17	9	(\$2,147)
Operation Coordination & Mission Support	1	1	(\$3,342)
Total, Program Decreases	18	10	(\$5,489)
FY 2018 Request	681	573	\$187,955
FY 2017 TO FY 2018 Change	57	74	\$2,314

PPA Description

NPPD requests \$187.955 million and 681 FTP/573 FTE for the Infrastructure Protection PPA in the Operations & Support appropriation.

The Infrastructure Protection program leads and coordinates national programs and policies on critical infrastructure security and resilience and develops strong partnerships across government and the private sector. The program conducts and facilitates vulnerability and consequence assessments to help critical infrastructure owners and operators and state, local, tribal, and territorial partners understand and address risks to critical infrastructure. Additionally, it provides information on emerging threats and hazards and offers tools and training to partners to help them manage risks to critical infrastructure.

Adjustments to Base Justification

- \$1.466 million increase for FY 2018 pay inflation. Of this amount, \$394,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$1,072,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$1.484 million in FY 2017 pay inflation is built into the base, which includes \$301,000 for the annualization of the 2016 pay raise (1.6 percent) and \$1.184 million for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$370,000 decrease for balanced workforce adjustment to hire 39 FTP/35 FTE to perform functions previously performed by contractors.
- \$4.845 million and 29 FTE increase for rightsizing of personnel based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$1.561 million decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

**Infrastructure Protection – PPA
Personnel Compensation and Benefits**

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Infrastructure Capacity Building	337	267	\$41,555	\$155.64	337	267	\$41,554	\$155.63	374	318	\$49,971	\$157.14	37	51	\$8,417	\$1.51
Infrastructure Security Compliance	287	232	\$33,598	\$144.82	287	232	\$33,598	\$144.82	307	255	\$38,297	\$150.18	20	23	\$4,699	\$5.36
Total	624	499	\$75,153	\$150.61	624	499	\$75,152	\$150.61	681	573	\$88,268	\$154.05	57	74	\$13,116	\$3.44
Discretionary - Appropriation	624	499	\$75,153	\$150.61	624	499	\$75,152	\$150.61	681	573	\$88,268	\$154.05	57	74	\$13,116	\$3.44

NARRATIVE EXPLANATION OF CHANGES

- \$1.466 million increase for 2018 pay inflation. Of this amount, \$394,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$1,072,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$370,000 decrease for balanced workforce adjustment to hire 39 FTP/35 FTE to perform functions previously performed by contractors.
- \$6.506 million and 40 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$1.661 million and 11 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

FTE Change FY 2017-2018: 74

PCB Change FY 2017-2018: \$13,116,000

Average Cost Change FY 2017-2018: \$3,440

Infrastructure Protection – PPA Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$56,020	\$55,549	\$65,386	\$9,837
11.3 Other than Full-Time Permanent	\$1,065	\$1,091	\$1,274	\$183
11.5 Other Personnel Compensation	\$1,775	\$1,819	\$2,124	\$305
12.1 Civilian Personnel Benefits	\$16,293	\$16,693	\$19,484	\$2,791
Total - Personnel Compensation and Benefits	\$75,153	\$75,152	\$88,268	\$13,116
Positions and FTE				
Positions - Civilian	624	624	681	57
FTE - Civilian	499	499	573	74

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	499	\$75,153	\$150.61	499	\$75,152	\$150.61	573	\$88,268	\$154.05	74	\$13,116	\$3.44
Other Costs												
Total – Pay Cost Drivers	499	\$75,153	\$150.61	499	\$75,152	\$150.61	573	\$88,268	\$154.05	74	\$13,116	\$3.44

The FY 2018 request provides additional funding to account for inflation.

Infrastructure Protection – PPA Non Pay Budget Exhibits

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Infrastructure Capacity Building	\$68,470	\$68,034	\$65,544	(\$2,490)
Infrastructure Security Compliance	\$41,039	\$42,455	\$34,143	(\$8,312)
Total	\$109,509	\$110,489	\$99,687	(\$10,802)
Discretionary - Appropriation	\$109,509	\$110,489	\$99,687	(\$10,802)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$4,908	\$4,888	\$4,381	(\$507)
22.0 Transportation of Things	\$26	\$26	\$47	\$21
23.1 Rental Payments to GSA	\$35	\$35	\$37	\$2
23.2 Rental Payments to Others	\$1,264	\$1,264	\$1,223	(\$41)
23.3 Communications, Utilities, and Misc. Charges	\$80	\$80	\$84	\$4
24.0 Printing and Reproduction	\$71	\$70	\$66	(\$4)
25.1 Advisory and Assistance Services	\$32,996	\$34,475	\$30,971	(\$3,504)
25.2 Other Services from Non-Federal Sources	\$5,550	\$5,508	\$5,687	\$179
25.3 Other Goods and Services from Federal Sources	\$44,068	\$43,822	\$38,201	(\$5,621)
25.4 Operation and Maintenance of Facilities	\$650	\$645	\$677	\$32
25.5 Research and Development Contracts	\$3,856	\$3,824	\$4,028	\$204
25.6 Medical Care	\$3,908	\$3,874	\$4,084	\$210
25.7 Operation and Maintenance of Equipment	\$11,647	\$11,532	\$9,795	(\$1,737)
26.0 Supplies and Materials	\$162	\$158	\$140	(\$18)
31.0 Equipment	\$288	\$288	\$266	(\$22)
Total - Non Pay Object Classes	\$109,509	\$110,489	\$99,687	(\$10,802)

Infrastructure Capacity Building – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Sector Risk Management	132	100	\$39,853	132	100	\$39,658	141	121	\$44,491	9	21	\$4,833
Protective Security Advisors	121	98	\$32,847	121	98	\$32,782	148	122	\$35,677	27	24	\$2,895
Bombing Prevention	20	19	\$14,206	20	19	\$14,122	20	19	\$14,739	-	-	\$617
Infrastructure Information and Sensitive Data Protection	64	50	\$23,119	64	50	\$23,026	65	56	\$20,608	1	6	(\$2,418)
Total	337	267	\$110,025	337	267	\$109,588	374	318	\$115,515	37	51	\$5,927
Subtotal Discretionary - Appropriation	337	267	\$110,025	337	267	\$109,588	374	318	\$115,515	37	51	\$5,927

Infrastructure Capacity Building – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	337	267	\$110,086
FY16 Rescission	-	-	(\$61)
Total Rescissions	-	-	(\$61)
FY 2016 Revised Enacted	337	267	\$110,025
FY 2017 Annualized CR	337	267	\$109,588
FY 2018 Base Budget	337	267	\$109,588
2018 Pay Raise	-	-	\$593
Annualization of 2017 Pay Raise	-	-	\$218
Balanced Workforce Adjustment FTP/FTE - Salaries and Benefits	19	16	\$2,349
Rightsize FTP/FTE & Salaries and Benefits	-	25	\$4,241
Total, Pricing Increases	19	41	\$7,401
Balanced Workforce Adjustment Program	-	-	(\$2,319)
Efficiency to Program	-	-	(\$51)
Total, Pricing Decreases	-	-	(\$2,370)
Total Adjustments-to-Base	19	41	\$5,031
FY 2018 Current Services	356	308	\$114,619
Counterterrorism and IP	-	-	\$3,423
Expand Operations in Field	17	9	\$815
Total, Program Increases	17	9	\$4,238
Operation Coordination & Mission Support	1	1	(\$3,342)
Total, Program Decreases	1	1	(\$3,342)
FY 2018 Request	374	318	\$115,515
FY 2017 TO FY 2018 Change	37	51	\$5,927

PPA Level II Description

NPPD requests \$115.5 million and 374 FTP/318 FTE for the Infrastructure Capacity Building PPA in the Operations & Support appropriation.

The Infrastructure Capacity Building PPA funds increasing the security and resilience of facilities, systems, networks, and surrounding communities to cyber, physical, and human risks through partnership efforts. To this end, NPPD provides analysis, expertise, and other technical assistance to critical infrastructure owners and operators and facilitate access to and exchange of information and intelligence necessary to strengthen the security and resilience of critical infrastructure, including a nationwide framework to guide infrastructure security and resilience efforts. NPPD also enables Federal Departments and Agencies to address cybersecurity challenges; partnering with the private sector, military, and intelligence communities to mitigate vulnerabilities and threats to information technology assets, infrastructure and other connected devices; and facilitating collaboration and partnerships on cyber issues with public and private sector partners. In addition, NPPD provides training, coordination, tools, and guidance to help its Federal, state, local, tribal, territorial and industry partners develop their emergency communications capabilities. In FY 2018, NPPD will continue to improve the delivery of services in the field by integrating physical and cyber threat mitigation actions, providing unity of effort for stakeholders, and eliminating redundancy of business support to allow for increased depth and breadth of services for customers. NPPD has implemented an integrated approach for field operations, including day-to-day coordination of the programs and resources available to stakeholders nationwide operating in the field as well as incident response. This approach includes co-location of NPPD component field staff and mission support staff, coordination with FPS operations; and devolving outreach, exercises, analysis and training, currently performed at headquarters, to regional offices. This PPA also funds support activities necessary to enable these efforts.

The Infrastructure Capacity Building PPA supports 12 budget projects, as outlined below – Critical Infrastructure Partnerships, Critical Cyber Infrastructure Resilience, Emergency Communications Preparedness, Enhanced Cybersecurity Services, Federal Network Resilience, National Infrastructure Protection Plan Management, Priority Telecommunications Services, Protective Security Advisors, Sector Specific Agency Management, Stakeholder Engagement & Requirements, Cybersecurity Education, Outreach & Awareness, and Vulnerability Assessments.

Adjustments to Base Justification

- \$811,000 increase for FY 2018 pay inflation. Of this amount, \$218,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$593,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$821,000 in FY 2017 pay inflation is built into the base, which includes \$166,000 for the annualization of the 2016 pay raise (1.6 percent) and \$654,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.

- \$4.241 million and 25 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$30,000 and 19 FTP/16 FTE increase for balanced workforce adjustment to hire Federal employees to perform functions previously performed by contractors.
- \$51,000 decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

Infrastructure Capacity Building PPA Level II Personnel Compensation and Benefits

Pay Summary *Dollars in Thousands*

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Sector Risk Management	132	100	\$15,052	\$150.52	132	100	\$15,052	\$150.52	141	121	\$18,553	\$153.33	9	21	\$3,501	\$2.81
Protective Security Advisors	121	98	\$16,640	\$169.8	121	98	\$16,640	\$169.8	148	122	\$20,446	\$167.59	27	24	\$3,806	(\$2.21)
Bombing Prevention	20	19	\$2,611	\$137.42	20	19	\$2,610	\$137.37	20	19	\$2,662	\$140.11	-	-	\$52	\$2.74
Infrastructure Information and Sensitive Data Protection	64	50	\$7,252	\$145.04	64	50	\$7,252	\$145.04	65	56	\$8,310	\$148.39	1	6	\$1,058	\$3.35
Total	337	267	\$41,555	\$155.64	337	267	\$41,554	\$155.63	374	318	\$49,971	\$157.14	37	51	\$8,417	\$1.51
Discretionary - Appropriation	337	267	\$41,555	\$155.64	337	267	\$41,554	\$155.63	374	318	\$49,971	\$157.14	37	51	\$8,417	\$1.51

Pay by Object Class *Dollars in Thousands*

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$31,041	\$31,040	\$37,449	\$6,409
11.3 Other than Full-Time Permanent	\$586	\$586	\$698	\$112
11.5 Other Personnel Compensation	\$977	\$977	\$1,164	\$187
12.1 Civilian Personnel Benefits	\$8,951	\$8,951	\$10,660	\$1,709
Total - Personnel Compensation and Benefits	\$41,555	\$41,554	\$49,971	\$8,417
Positions and FTE				
Positions - Civilian	337	337	374	37
FTE - Civilian	267	267	318	51

**Infrastructure Capacity Building – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Sector Risk Management	\$24,801	\$24,606	\$25,938	\$1,332
Protective Security Advisors	\$16,207	\$16,142	\$15,231	(\$911)
Bombing Prevention	\$11,595	\$11,512	\$12,077	\$565
Infrastructure Information and Sensitive Data Protection	\$15,867	\$15,774	\$12,298	(\$3,476)
Total	\$68,470	\$68,034	\$65,544	(\$2,490)
Discretionary - Appropriation	\$68,470	\$68,034	\$65,544	(\$2,490)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$2,366	\$2,353	\$2,342	(\$11)
22.0 Transportation of Things	\$15	\$15	\$38	\$23
23.1 Rental Payments to GSA	\$35	\$35	\$37	\$2
23.2 Rental Payments to Others	\$845	\$843	\$884	\$41
23.3 Communications, Utilities, and Misc. Charges	\$80	\$80	\$84	\$4
24.0 Printing and Reproduction	\$45	\$45	\$46	\$1
25.1 Advisory and Assistance Services	\$15,096	\$15,007	\$15,315	\$308
25.2 Other Services from Non-Federal Sources	\$5,142	\$5,102	\$5,360	\$258
25.3 Other Goods and Services from Federal Sources	\$27,373	\$27,244	\$24,869	(\$2,375)
25.4 Operation and Maintenance of Facilities	\$650	\$645	\$677	\$32
25.5 Research and Development Contracts	\$3,856	\$3,824	\$4,028	\$204
25.6 Medical Care	\$3,908	\$3,874	\$4,084	\$210
25.7 Operation and Maintenance of Equipment	\$8,733	\$8,642	\$7,471	(\$1,171)
26.0 Supplies and Materials	\$84	\$83	\$80	(\$3)
31.0 Equipment	\$242	\$242	\$229	(\$13)
Total - Non Pay Object Classes	\$68,470	\$68,034	\$65,544	(\$2,490)

Sector Risk Management – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Sector Risk Management	132	100	\$39,853	132	100	\$39,658	141	121	\$44,491	9	21	\$4,833
Total	132	100	\$39,853	132	100	\$39,658	141	121	\$44,491	9	21	\$4,833
Subtotal Discretionary - Appropriation	132	100	\$39,853	132	100	\$39,658	141	121	\$44,491	9	21	\$4,833

**Sector Risk Management – PPA Level III
Summary of Budget Changes**

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	132	100	\$39,870
FY16 Rescission	-	-	(\$17)
Total Rescissions	-	-	(\$17)
FY 2016 Revised Enacted	132	100	\$39,853
FY 2017 Annualized CR	132	100	\$39,658
FY 2018 Base Budget	132	100	\$39,658
2018 Pay Raise	-	-	\$215
Annualization of 2017 Pay Raise	-	-	\$79
Balanced Workforce Adjustment FTP/FTE - Salaries and Benefits	9	7	\$1,271
Rightsize FTP/FTE & Salaries and Benefits	-	14	\$2,338
Total, Pricing Increases	9	21	\$3,903
Balanced Workforce Adjustment Program	-	-	(\$1,241)
Efficiency to Program	-	-	(\$687)
Total, Pricing Decreases	-	-	(\$1,928)
Total Adjustments-to-Base	9	21	\$1,975
FY 2018 Current Services	141	121	\$41,633
Counterterrorism and IP	-	-	\$2,858
Total, Program Increases	-	-	\$2,858
FY 2018 Request	141	121	\$44,491
FY 2017 TO FY 2018 Change	9	21	\$4,833

PPA Level III Description

NPPD requests \$44.5 million and 141 FTP/121 FTE for the Sector Risk Management PPA in the Operations & Support appropriation.

The Sector Risk Management PPA funds increasing the security and resilience of facilities, systems, networks, and surrounding communities to cyber, physical, and human risks through partnership efforts. To this end, NPPD provides analysis, expertise, and other technical assistance to critical infrastructure owners and operators and facilitate access to and exchange of information and

intelligence necessary to strengthen the security and resilience of critical infrastructure, including a nationwide framework to guide infrastructure security and resilience efforts. In FY 2018, this PPA will continue to provide for the monitoring and researching of emerging risks, critical infrastructure vulnerabilities, and strategic trends to identify areas where NIPP coordinating structures can increase the overall security and resilience of the Nation by focusing efforts on the strategic environment. In addition, funds will contribute to strategic initiatives to mitigate risks to Position, Navigation and Timing technologies. Funds will also provide for continued implementation of the Interagency Security Committee (ISC) compliance authorities to support adoption of security standards by Federal facilities. Through the partnership model articulated in the NIPP, NPPD manages formal partnerships structures that provide a vital network through which the critical infrastructure community can access and share information and request technical expertise and assistance to enable owners and operators to make sound investment decisions that mitigate cyber and physical risk. The partnership networks also contribute to an overall understanding of national risk to infrastructure, supporting national preparedness planning.

The Sector Risk Management PPA supports two projects- National Implementation Protection Plan (NIPP) Management and Critical Infrastructure (CI) Partnerships.

Adjustments to Base Justification

- \$294,000 increase for 2018 pay inflation. Of this amount, \$79,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$215,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$297,000 in FY 2017 pay inflation is built into the base, which includes \$60,000 for the annualization of the 2016 pay raise (1.6 percent) and \$237,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$2.338 million and 14 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$30,000 and 9 FTP/7 FTE increase for balanced workforce adjustment to hire Federal employees to perform functions previously performed by contractors.
- \$0.687 million decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

**Sector Risk Management – PPA Level III
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Sector Risk Management	132	100	\$15,052	\$150.52	132	100	\$15,052	\$150.52	141	121	\$18,553	\$153.33	9	21	\$3,501	\$2.81
Total	132	100	\$15,052	\$150.52	132	100	\$15,052	\$150.52	141	121	\$18,553	\$153.33	9	21	\$3,501	\$2.81
Discretionary - Appropriation	132	100	\$15,052	\$150.52	132	100	\$15,052	\$150.52	141	121	\$18,553	\$153.33	9	21	\$3,501	\$2.81

NARRATIVE EXPLANATION OF CHANGES

- \$294,000 increase for FY 2018 pay inflation. Of this amount, \$79,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$215,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$2.338 million and 14 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$1.271 million and 9 FTP/7 FTE increase for balanced workforce adjustment to hire Federal employees to perform functions previously performed by contractors (this increase is offset by a decrease to program dollars of \$1,241,000).
- \$50,000 decrease in S&B funding from reduced requirements of Position, Navigation, and Timing PMO.

FTE Change FY 2017-2018: 21

PCB Change FY 2017-2018: \$3,501,000

Average Cost Change FY 2017-2018: \$2,810

Sector Risk Management – PPA Level III

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$11,698	\$11,698	\$14,418	\$2,720
11.3 Other than Full-Time Permanent	\$188	\$188	\$232	\$44
11.5 Other Personnel Compensation	\$311	\$311	\$384	\$73
12.1 Civilian Personnel Benefits	\$2,855	\$2,855	\$3,519	\$664
Total - Personnel Compensation and Benefits	\$15,052	\$15,052	\$18,553	\$3,501
Positions and FTE				
Positions - Civilian	132	132	141	9
FTE - Civilian	100	100	121	21

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	100	\$15,052	\$150.52	100	\$15,052	\$150.52	121	\$18,553	\$153.33	21	\$3,501	\$2.81
Other Costs												
Total – Pay Cost Drivers	100	\$15,052	\$150.52	100	\$15,052	\$150.52	121	\$18,553	\$153.33	21	\$3,501	\$2.81

The FY 2018 request provides additional funding to account for inflation.

**Sector Risk Management – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Sector Risk Management	\$24,801	\$24,606	\$25,938	\$1,332
Total	\$24,801	\$24,606	\$25,938	\$1,332
Discretionary - Appropriation	\$24,801	\$24,606	\$25,938	\$1,332

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$601	\$596	\$628	\$32
22.0 Transportation of Things	\$2	\$2	\$25	\$23
24.0 Printing and Reproduction	\$24	\$24	\$26	\$2
25.1 Advisory and Assistance Services	\$8,664	\$8,610	\$9,053	\$443
25.2 Other Services from Non-Federal Sources	\$4,508	\$4,470	\$4,712	\$242
25.3 Other Goods and Services from Federal Sources	\$3,747	\$3,714	\$3,915	\$201
25.5 Research and Development Contracts	\$3,306	\$3,275	\$3,452	\$177
25.6 Medical Care	\$3,908	\$3,874	\$4,084	\$210
26.0 Supplies and Materials	\$31	\$31	\$32	\$1
31.0 Equipment	\$10	\$10	\$11	\$1
Total - Non Pay Object Classes	\$24,801	\$24,606	\$25,938	\$1,332

Sector Risk Management – PPA Level III Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Sector-Specific & Cross-Sector Support	\$7,694	\$8,461	\$8,061	(\$400)
Infrastructure Development and Recovery	\$2,608	\$1,267	\$1,281	\$14
HSIN-CI Management & Operations	\$3,171	\$4,828	\$4,012	(\$816)
ISC Metrics and Outreach & Compliance Support	\$1,642	\$1,682	\$1,721	\$40
Strategic Planning & Studies Support	\$1,449	\$1,478	\$1,478	(\$0)
Technical Assistance Analytical Products	\$1,060	\$1,060	\$0	(\$1,060)
Space Based Position, Navigation and Timing Support	\$0	\$0	\$4,250	\$4,250
Other Costs	\$7,177	\$5,830	\$5,135	(\$695)
Total – Non Pay Cost Drivers	\$24,801	\$24,606	\$25,938	\$1,332

NARRATIVE EXPLANATION OF CHANGES

Sector-Specific & Cross-Sector Support: Reduction due to contract efficiencies.

Infrastructure Development and Recovery: Increase due to planned contract escalation.

HSIN-CI Management & Operations: Reduction due to contract efficiencies.

ISC Metrics and Outreach & Compliance Support: Increase due to planned contract escalation.

Strategic Planning & Studies Support: No change.

Technical Assistance Analytical Products: Decrease due to removal of the FY 2016 increase for technical assistance analytical products.

Space Based Position, Navigation and Timing Support: Increase due to program change requested for Space Based Position, Navigation and Timing (PNT) Support is requested in FY 2018.

Protective Security Advisors – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Protective Security Advisors	121	98	\$32,847	121	98	\$32,782	148	122	\$35,677	27	24	\$2,895
Total	121	98	\$32,847	121	98	\$32,782	148	122	\$35,677	27	24	\$2,895
Subtotal Discretionary - Appropriation	121	98	\$32,847	121	98	\$32,782	148	122	\$35,677	27	24	\$2,895

Protective Security Advisors – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	121	98	\$32,877
FY16 Rescission	-	-	(\$30)
Total Rescissions	-	-	(\$30)
FY 2016 Revised Enacted	121	98	\$32,847
FY 2017 Annualized CR	121	98	\$32,782
FY 2018 Base Budget	121	98	\$32,782
2018 Pay Raise	-	-	\$237
Annualization of 2017 Pay Raise	-	-	\$87
Balanced Workforce Adjustment FTP/FTE - Salaries and Benefits	10	9	\$1,078
Efficiency to Program	-	-	\$658
Rightsize FTP/FTE & Salaries and Benefits	-	6	\$1,098
Total, Pricing Increases	10	15	\$3,158
Balanced Workforce Adjustment Program	-	-	(\$1,078)
Total, Pricing Decreases	-	-	(\$1,078)
Total Adjustments-to-Base	10	15	\$2,080
FY 2018 Current Services	131	113	\$34,862
Expand Operations in Field	17	9	\$815
Total, Program Increases	17	9	\$815
FY 2018 Request	148	122	\$35,677
FY 2017 TO FY 2018 Change	27	24	\$2,895

PPA Level III Description

NPPD requests \$35,677,000 and 148 FTP/122 FTE for the Protective Security Advisors PPA in the Operations & Support appropriation.

The Protective Security Advisors (PSA) budget project provides proactive engagement with SLTT government mission partners and the private sector to protect the Nation’s critical infrastructure. The PSAs and regional staff are located across the United States in the

localities where critical infrastructure is built, operated and maintained, and serve as onsite critical infrastructure and vulnerability assessment specialists for the Department, while providing a local perspective to the national risk picture by identifying, assessing, monitoring, and minimizing the risk to critical infrastructure at the State, local, and regional levels. Regional staff support planning and operational efforts and tailor the delivery of services directly to stakeholders in communities. The PSAs conduct security surveys and assessments; perform contingency and incident-specific outreach activities; provide support to National Security Special Events (NSSEs) and Special Event Assessment Rating (SEAR) events; provide incident response; and coordinate and facilitate training. These assessments and outreach activities provide infrastructure owners and operators, in both the private and public sectors, with risk, vulnerability and mitigation information that can inform and support investment and corrective actions to make infrastructure more secure and resilient. Building on the successes of PSA regional staff, in FY 2018, NPPD will continue to expand regional staffing to facilitate partnerships and increase and improve product delivery to additional critical infrastructure communities.

The Protective Security Advisors (PSA) PPA supports one budget project- Protective Security Advisors (PSA).

Adjustments to Base Justification

- \$324,000 increase for FY 2018 pay inflation. Of this amount, \$87,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$237,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$329,000 in FY 2017 pay inflation is built into the base, which includes \$67,000 for the annualization of the 2016 pay raise (1.6 percent) and \$262,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$1.098 million and 6 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- Increase of 10 FTP/9 FTE (no dollars) for balanced workforce adjustment to hire Federal employees to perform functions previously performed by contractors.
- \$12,000 decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

**Protective Security Advisors – PPA Level III
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Protective Security Advisors	121	98	\$16,640	\$169.8	121	98	\$16,640	\$169.8	148	122	\$20,446	\$167.59	27	24	\$3,806	(\$2.21)
Total	121	98	\$16,640	\$169.8	121	98	\$16,640	\$169.8	148	122	\$20,446	\$167.59	27	24	\$3,806	(\$2.21)
Discretionary - Appropriation	121	98	\$16,640	\$169.8	121	98	\$16,640	\$169.8	148	122	\$20,446	\$167.59	27	24	\$3,806	(\$2.21)

NARRATIVE EXPLANATION OF CHANGES

- \$324,000 increase for FY 2018 pay inflation. Of this amount, \$87,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$237,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$1.098 million and 6 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- Increase of \$1.078 million and 10 FTP/9 FTE (no dollars) for balanced workforce adjustment to hire Federal employees to perform functions previously performed by contractors (this increase is offset by a decrease to program dollars of \$1.078 million).
- Increase of \$1.485 million and 17 FTP/9 FTE for programmatic expansion of Protective Security Advisors.

FTE Change FY 2017-2018: 24

PCB Change FY 2017-2018: \$3,806,000

Average Cost Change FY 2017-2018: (\$2,210)

Protective Security Advisors – PPA Level III
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$12,147	\$12,147	\$15,026	\$2,879
11.3 Other than Full-Time Permanent	\$250	\$250	\$301	\$51
11.5 Other Personnel Compensation	\$416	\$416	\$502	\$86
12.1 Civilian Personnel Benefits	\$3,827	\$3,827	\$4,617	\$790
Total - Personnel Compensation and Benefits	\$16,640	\$16,640	\$20,446	\$3,806
Positions and FTE				
Positions - Civilian	121	121	148	27
FTE - Civilian	98	98	122	24

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Cost Driver 1	98	\$16,640	\$169.80	98	\$16,640	\$169.80	122	\$20,446	\$167.59	24	\$3,806	\$(2.21)
Other Costs												
Total Pay Cost Drivers	98	\$16,640	\$169.80	98	\$16,640	\$169.80	122	\$20,446	\$167.59	24	\$3,806	\$(2.21)

The FY 2018 request provides additional funding to account for inflation..

**Protective Security Advisors – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Protective Security Advisors	\$16,207	\$16,142	\$15,231	(\$911)
Total	\$16,207	\$16,142	\$15,231	(\$911)
Discretionary - Appropriation	\$16,207	\$16,142	\$15,231	(\$911)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$1,275	\$1,268	\$1,225	(\$43)
22.0 Transportation of Things	\$12	\$12	\$12	-
23.2 Rental Payments to Others	\$5	\$5	\$5	-
24.0 Printing and Reproduction	\$21	\$21	\$20	(\$1)
25.1 Advisory and Assistance Services	\$3,279	\$3,290	\$3,179	(\$111)
25.2 Other Services from Non-Federal Sources	\$110	\$109	\$106	(\$3)
25.3 Other Goods and Services from Federal Sources	\$10,995	\$10,930	\$10,195	(\$735)
25.7 Operation and Maintenance of Equipment	\$350	\$348	\$336	(\$12)
26.0 Supplies and Materials	\$40	\$39	\$37	(\$2)
31.0 Equipment	\$120	\$120	\$116	(\$4)
Total - Non Pay Object Classes	\$16,207	\$16,142	\$15,231	(\$911)

**Protective Security Advisors – PPA Level III
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President’s Budget	FY 2017 to FY 2018 Total Changes
Analytic & Program Support for RRAP Projects	\$3,872	\$1,355	\$1,525	\$170
National Guard Support	\$2,147	\$3,697	\$3,697	\$0
Field-based Personnel Support	\$3,078	\$2,827	\$2,362	(\$465)
Three-Year Plan Strategic Plan for Infrastructure Assessments	\$1,500	\$1,500	\$0	(\$1,500)
Travel	\$1,330	\$1,385	\$1,800	\$415
Working Capital Fund	\$3,100	\$3,117	\$3,304	\$187
Other Costs	\$1,180	\$2,261	\$2,543	\$282
Total – Non Pay Cost Drivers	\$16,207	\$16,142	\$15,231	(\$911)

NARRATIVE EXPLANATION OF CHANGES

Analytic & Program Support for RRAP Projects: Increase due to planned contract escalation.

National Guard Support: No change.

Field-based Personnel Support: Reduction due to contract efficiencies.

Three-Year Plan Strategic Plan for Infrastructure Assessments: Reduction due to finalization of development of FY 2016 funded 3-year Strategic Assessment plan and development and implementation of assessment methodology and assessment analysis.

Travel: Increased travel for regional office staff.

Working Capital Fund: Increased assessment estimate.

Bombing Prevention – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Bombing Prevention	20	19	\$14,206	20	19	\$14,122	20	19	\$14,739	-	-	\$617
Total	20	19	\$14,206	20	19	\$14,122	20	19	\$14,739	-	-	\$617
Subtotal Discretionary - Appropriation	20	19	\$14,206	20	19	\$14,122	20	19	\$14,739	-	-	\$617

Bombing Prevention – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	20	19	\$14,215
FY16 Rescission	-	-	(\$9)
Total Rescissions	-	-	(\$9)
FY 2016 Revised Enacted	20	19	\$14,206
FY 2017 Annualized CR	20	19	\$14,122
FY 2018 Base Budget	20	19	\$14,122
2018 Pay Raise	-	-	\$38
Annualization of 2017 Pay Raise	-	-	\$14
Total, Pricing Increases	-	-	\$52
Total Adjustments-to-Base	-	-	\$52
FY 2018 Current Services	20	19	\$14,174
Counterterrorism and IP	-	-	\$565
Total, Program Increases	-	-	\$565
FY 2018 Request	20	19	\$14,739
FY 2017 TO FY 2018 Change	-	-	\$617

PPA Level III Description

NPPD requests \$14.739 million and 20 FTP/19 FTE for the Bombing Prevention PPA in the Operations & Support appropriation.

The Bombing Prevention programs support the Department of Homeland Security's (DHS) efforts to implement the National Policy for Countering Improvised Explosive Devices (National Counter-IED policy) and enhance the nation's ability to prevent, protect against, respond to, and mitigate the use of explosives against critical infrastructure; the private sector; and federal, state, local, tribal, and territorial entities.

Adjustments to Base Justification

- \$52,000 increase for FY 2018 pay inflation. Of this amount, \$14,000 is for the annualization of the 2.1 percent pay raise in

2017 (one quarter) and \$38,000 is for the 1.9 percent pay raise in 2018 (three quarters).

- In addition, the budget assumes that \$51,000 in FY 2017 pay inflation is built into the base, which includes \$10,000 for the annualization of the 2016 pay raise (1.6 percent) and \$41,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.

**Bombing Prevention – PPA Level III
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Bombing Prevention	20	19	\$2,611	\$137.42	20	19	\$2,610	\$137.37	20	19	\$2,662	\$140.11	-	-	\$52	\$2.74
Total	20	19	\$2,611	\$137.42	20	19	\$2,610	\$137.37	20	19	\$2,662	\$140.11	-	-	\$52	\$2.74
Discretionary - Appropriation	20	19	\$2,611	\$137.42	20	19	\$2,610	\$137.37	20	19	\$2,662	\$140.11	-	-	\$52	\$2.74

NARRATIVE EXPLANATION OF CHANGES

- \$52,000 increase for 2018 pay inflation. Of this amount, \$14,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$38,000 is for the 1.9 percent pay raise in 2018 (three quarters).

FTE Change FY 2017-2018: 0

PCB Change FY 2017-2018: \$52,000

Average Cost Change FY 2017-2018: \$2,740

Bombing Prevention – PPA Level III
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$1,906	\$1,905	\$1,943	\$38
11.3 Other than Full-Time Permanent	\$39	\$39	\$40	\$1
11.5 Other Personnel Compensation	\$65	\$65	\$66	\$1
12.1 Civilian Personnel Benefits	\$601	\$601	\$613	\$12
Total - Personnel Compensation and Benefits	\$2,611	\$2,610	\$2,662	\$52
Positions and FTE				
Positions - Civilian	20	20	20	-
FTE - Civilian	19	19	19	-

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	19	\$2,611	\$137.42	19	\$2,610	\$137.37	19	\$2,662	\$140.11	0	\$52	\$2.74
Total – Pay Cost Drivers	19	\$2,611	\$137.42	19	\$2,610	\$137.37	19	\$2,662	\$140.11	0	\$52	\$2.74

The FY 2018 request provides additional funding to account for inflation..

**Bombing Prevention – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Bombing Prevention	\$11,595	\$11,512	\$12,077	\$565
Total	\$11,595	\$11,512	\$12,077	\$565
Discretionary - Appropriation	\$11,595	\$11,512	\$12,077	\$565

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$400	\$399	\$419	\$20
22.0 Transportation of Things	\$1	\$1	\$1	-
23.1 Rental Payments to GSA	\$35	\$35	\$37	\$2
23.2 Rental Payments to Others	\$840	\$838	\$879	\$41
23.3 Communications, Utilities, and Misc. Charges	\$80	\$80	\$84	\$4
25.1 Advisory and Assistance Services	\$2,500	\$2,454	\$2,574	\$120
25.2 Other Services from Non-Federal Sources	\$500	\$499	\$523	\$24
25.3 Other Goods and Services from Federal Sources	\$3,479	\$3,473	\$3,643	\$170
25.4 Operation and Maintenance of Facilities	\$650	\$645	\$677	\$32
25.5 Research and Development Contracts	\$550	\$549	\$576	\$27
25.7 Operation and Maintenance of Equipment	\$2,500	\$2,479	\$2,601	\$122
26.0 Supplies and Materials	\$5	\$5	\$5	-
31.0 Equipment	\$55	\$55	\$58	\$3
Total - Non Pay Object Classes	\$11,595	\$11,512	\$12,077	\$565

**Bombing Prevention – PPA Level III
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Counter-IED Information Sharing & Decision Support	\$5,225	\$5,257	\$4,952	(\$305)
Counter-IED Capability Analysis & Planning Support	\$2,745	\$2,133	\$2,598	\$465
Working Capital Fund	\$1,252	\$1,526	\$1,618	\$92
Counter-IED Training & Awareness	\$1,238	\$1,432	\$1,377	(\$55)
Coordination of National & Intergovernmental Bombing Prevention	\$922	\$1,046	\$1,138	\$92
Other Costs	\$213	\$118	\$394	\$418
Total – Non Pay Cost Drivers	\$11,595	\$11,512	\$12,077	\$565

NARRATIVE EXPLANATION OF CHANGES

Counter-IED Information Sharing & Decision Support: Decrease based on the expected completion of the TRIPwire modernization effort (-\$870K) and addition of dedicated ISSO and related contract support costs.

Counter-IED Capability Analysis & Planning Support: Increase based on implementing necessary corrective items noted Counter-IED Capability Baseline Analysis.

Working Capital Fund: Increased assessment estimate.

Counter-IED Training & Awareness: Adjusted cost estimate.

Coordination of National & Intergovernmental Bombing Prevention: Increase due to inflation.

Infrastructure Information and Sensitive Data Protection – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Infrastructure Information and Sensitive Data Protection	64	50	\$23,119	64	50	\$23,026	65	56	\$20,608	1	6	(\$2,418)
Total	64	50	\$23,119	64	50	\$23,026	65	56	\$20,608	1	6	(\$2,418)
Subtotal Discretionary - Appropriation	64	50	\$23,119	64	50	\$23,026	65	56	\$20,608	1	6	(\$2,418)

Infrastructure Information and Sensitive Data Protection – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	64	50	\$23,124
FY16 Rescission	-	-	(\$5)
Total Rescissions	-	-	(\$5)
FY 2016 Revised Enacted	64	50	\$23,119
FY 2017 Annualized CR	64	50	\$23,026
FY 2018 Base Budget	64	50	\$23,026
2018 Pay Raise	-	-	\$103
Annualization of 2017 Pay Raise	-	-	\$38
Rightsize FTP/FTE & Salaries and Benefits	-	5	\$805
Total, Pricing Increases	-	5	\$946
Efficiency to Program	-	-	(\$22)
Total, Pricing Decreases	-	-	(\$22)
Total Adjustments-to-Base	-	5	\$924
FY 2018 Current Services	64	55	\$23,950
Operation Coordination & Mission Support	1	1	(\$3,342)
Total, Program Decreases	1	1	(\$3,342)
FY 2018 Request	65	56	\$20,608
FY 2017 TO FY 2018 Change	1	6	(\$2,418)

PPA Level III Description

NPPD requests \$20.608 million and 65 FTP/56 FTE for the Infrastructure Information and Sensitive Data Protection PPA in the Operations & Support appropriation.

The Infrastructure Information & Sensitive Data Protection PPA funds efforts that provide Federal, State, and local governments, and private sector stakeholders with innovative information technology (IT) solutions efficiently gather, manage, share, and protect near-real time situational awareness and physical and cyber risk data for critical physical and cyber infrastructure. The PPA also manages the Infrastructure Protection (IP) Gateway, which is NPPD's signature voluntary IT system, ensuring there is a single, centrally-

managed repository which enables the collection, visualization, storage, retrieval, search, and manipulation of critical infrastructure, cybersecurity, and Federal facility information.

The Infrastructure Information & Sensitive Data Protection PPA supports one budget project- Critical Infrastructure Technology & Architecture (IP Gateway -IT Investment). In FY 2018, NPPD will continue to operate and maintain the IP Gateway suite of capabilities while pursuing enhancements to improve functionality, usability, and performance. NPPD will initiate the planning and alternative of analysis for the migration of the system to a DHS Enterprise Data Center with a priority towards capabilities that leverage cost-effective commodity-based or ‘cloud’ solutions, pursue enhanced information sharing, situational awareness, and dependency analysis of lifeline sectors supporting identified nationally-critical infrastructure. Lastly, in FY 2018, NPPD intends to release an updated Protected Critical Infrastructure Information (PCII) Final Rule after adjudicating comments received during the Public Comment period in FY 2016; this will be the first update to the PCII Final Rule since originally implementing the Critical Infrastructure Information Act of 2002. Investing in the migration of IP Gateway suite of capabilities and the necessary updates to the PCII Final Rule will ensure that NPPD possesses the appropriate tools, resources, policies and procedures to enhance information security and execute key information sharing missions with the critical infrastructure community.

Adjustments to Base Justification

- \$141,000 increase for 2018 pay inflation. Of this amount, \$38,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$103,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$143,000 in FY 2017 pay inflation is built into the base, which includes \$29,000 for the annualization of the 2016 pay raise (1.6 percent) and \$114,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$805,000 and 5 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$22,000 decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

**Infrastructure Information and Sensitive Data Protection – PPA Level III
Personnel Compensation and Benefits**

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Infrastructure Information and Sensitive Data Protection	64	50	\$7,252	\$145.04	64	50	\$7,252	\$145.04	65	56	\$8,310	\$148.39	1	6	\$1,058	\$3.35
Total	64	50	\$7,252	\$145.04	64	50	\$7,252	\$145.04	65	56	\$8,310	\$148.39	1	6	\$1,058	\$3.35
Discretionary - Appropriation	64	50	\$7,252	\$145.04	64	50	\$7,252	\$145.04	65	56	\$8,310	\$148.39	1	6	\$1,058	\$3.35

NARRATIVE EXPLANATION OF CHANGES

- \$141,000 increase for 2018 pay inflation. Of this amount, \$38,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$103,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$805,000 and 5 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$112,000 and 1 FTP/1 FTE increase for IP Gateway expansion.

FTE Change FY 2017-2018: 6

PCB Change FY 2017-2018: \$1.058 million

Average Cost Change FY 2017-2018: \$3,350

Infrastructure Information and Sensitive Data Protection – PPA Level III
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$5,290	\$5,290	\$6,062	\$772
11.3 Other than Full-Time Permanent	\$109	\$109	\$125	\$16
11.5 Other Personnel Compensation	\$185	\$185	\$212	\$27
12.1 Civilian Personnel Benefits	\$1,668	\$1,668	\$1,911	\$243
Total - Personnel Compensation and Benefits	\$7,252	\$7,252	\$8,310	\$1,058
Positions and FTE				
Positions - Civilian	64	64	65	1
FTE - Civilian	50	50	56	6

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	50	\$7,252	\$145.04	50	\$7,252	\$145.04	56	\$8,310	\$148.39	6	\$1,058	\$3
Other Costs												
Total – Pay Cost Drivers	50	\$7,252	\$145.04	50	\$7,252	\$145.04	56	\$8,310	\$148.39	6	\$1,058	\$3

The FY 2018 request provides additional funding to account for inflation..

**Infrastructure Information and Sensitive Data Protection – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Infrastructure Information and Sensitive Data Protection	\$15,867	\$15,774	\$12,298	(\$3,476)
Total	\$15,867	\$15,774	\$12,298	(\$3,476)
Discretionary - Appropriation	\$15,867	\$15,774	\$12,298	(\$3,476)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$90	\$90	\$70	(\$20)
25.1 Advisory and Assistance Services	\$653	\$653	\$509	(\$144)
25.2 Other Services from Non-Federal Sources	\$24	\$24	\$19	(\$5)
25.3 Other Goods and Services from Federal Sources	\$9,152	\$9,127	\$7,116	(\$2,011)
25.7 Operation and Maintenance of Equipment	\$5,883	\$5,815	\$4,534	(\$1,281)
26.0 Supplies and Materials	\$8	\$8	\$6	(\$2)
31.0 Equipment	\$57	\$57	\$44	(\$13)
Total - Non Pay Object Classes	\$15,867	\$15,774	\$12,298	(\$3,476)

**Infrastructure Information and Sensitive Data Protection – PPA Level III
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President’s Budget	FY 2017 to FY 2018 Total Changes
IP Gateway Enhancements	\$6,523	\$2,324	\$2,576	\$252
Maintenance of IP Gateway (incl. SW Licenses/ODCs and Help Desk)	\$5,323	\$6,069	\$6,275	\$206
Administrative, Policy and Programmatic Support	\$1,448	\$857	\$873	\$16
Working Capital Fund	\$2,168	\$2,017	\$2,120	\$103
Other Costs	\$405	\$4,507	\$454	(\$4,053)
Total – Non Pay Cost Drivers	\$15,867	\$15,774	\$12,298	(\$3,476)

NARRATIVE EXPLANATION OF CHANGES

IP Gateway Enhancements: Enhancements to the primary IT system.

Maintenance of IP Gateway (incl. SW Licenses/ODCs and Help Desk): Increased O&M costs for the developed primary IT System.

Administrative, Policy and Programmatic Support: Increase due to inflation.

Working Capital Fund: Increased assessment estimate.

Other Costs: Decrease is driven primary by the non-recur of funding provided above the FY 2016 President’s Budget to expedite development of the IP Gateway.

Infrastructure Security Compliance– PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Infrastructure Security Compliance	287	232	\$74,637	287	232	\$76,053	307	255	\$72,440	20	23	(\$3,613)
Total	287	232	\$74,637	287	232	\$76,053	307	255	\$72,440	20	23	(\$3,613)
Subtotal Discretionary - Appropriation	287	232	\$74,637	287	232	\$76,053	307	255	\$72,440	20	23	(\$3,613)

Infrastructure Security Compliance – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	287	232	\$76,399
TSA Transfer	-	-	(\$1,735)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$1,735)
FY16 Rescission	-	-	(\$27)
Total Rescissions	-	-	(\$27)
FY 2016 Revised Enacted	287	232	\$74,637
FY 2017 Annualized CR	287	232	\$76,053
FY 2018 Base Budget	287	232	\$76,053
2018 Pay Raise	-	-	\$479
Annualization of 2017 Pay Raise	-	-	\$176
Balanced Workforce Adjustment FTP/FTE - Salaries and Benefits	20	19	\$3,440
Rightsize FTP/FTE & Salaries and Benefits	-	4	\$604
Total, Pricing Increases	20	23	\$4,699
Balanced Workforce Adjustment Program	-	-	(\$3,840)
Efficiency to Program	-	-	(\$1,510)
Total, Pricing Decreases	-	-	(\$5,350)
Total Adjustments-to-Base	20	23	(\$651)
FY 2018 Current Services	307	255	\$75,402
Expand Operations in Field	-	-	(\$2,962)
Total, Program Decreases	-	-	(\$2,962)
FY 2018 Request	307	255	\$72,440
FY 2017 TO FY 2018 Change	20	23	(\$3,613)

PPA Level II Description

NPPD requests \$72.440 million and 307 FTP/255 FTE for the Infrastructure Security Compliance PPA in the Operations & Support appropriation.

The Infrastructure Security Compliance PPA funds the securing of the Nation's high-risk chemical facilities through the systematic regulation, inspection, and enforcement under the authority of the Chemical Facility Anti-Terrorism Standards (CFATS). In support of CFATS and explosive precursor security, NPPD provides funding for regulatory mission support, regulation compliance determination, field operations support, and technical engineering for facilities data collection and analysis tools, including the Chemical Security Assessment Tool (CSAT) suite. Improving operations and support processes through IT investments in CSAT will ensure that NPPD remains responsive to changing legislative and regulatory requirements while effectively managing regulatory compliance of chemical facilities, activities necessary to support NPPD's priority of securing high-risk chemical facilities from terrorist attacks.

The Infrastructure Security Compliance PPA supports one budget project- Infrastructure Security Compliance (CSAT -IT Investment).

Adjustments to Base Justification

- \$655,000 increase for FY 2018 pay inflation. Of this amount, \$176,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$479,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$664,000 in FY 2017 pay inflation is built into the base, which includes \$134,000 for the annualization of the 2016 pay raise (1.6 percent) and \$529,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$2.265 million and 15 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$400,000 decrease and 20 FTP/19 FTE increase for balanced workforce adjustment to hire Federal employees to perform functions previously performed by contractors.
- \$1.5 million decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses. The Infrastructure Security Compliance Division (ISCD) of the NPPD Office of Infrastructure Protection (IP) has invested in FY 2016 and FY 2017 in developing program-specific training curricula to ensure continuing growth and development of staff. The anticipated training development effort is planned to conclude in FY 2017, with no further funding needed. The efficiencies anticipated by these critical investments are expected to save NPPD \$1.5 million in FY 2018.

**Infrastructure Security Compliance – PPA Level II
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Infrastructure Security Compliance	287	232	\$33,598	\$144.82	287	232	\$33,598	\$144.82	307	255	\$38,297	\$150.18	20	23	\$4,699	\$5.36
Total	287	232	\$33,598	\$144.82	287	232	\$33,598	\$144.82	307	255	\$38,297	\$150.18	20	23	\$4,699	\$5.36
Discretionary - Appropriation	287	232	\$33,598	\$144.82	287	232	\$33,598	\$144.82	307	255	\$38,297	\$150.18	20	23	\$4,699	\$5.36

NARRATIVE EXPLANATION OF CHANGES

- \$655,000 increase for FY 2018 pay inflation. Of this amount, \$176,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$479,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$2265 million and 15 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$3.440 million increase and 20 FTP/19 FTE increase for balanced workforce adjustment to hire Federal employees to perform functions previously performed by contractors (this increase is offset by a decrease to program dollars of \$3.84 million).
- \$1.661 million and 11 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

FTE Change FY 2017-2018: 23
PCB Change FY 2017-2018: \$4.699 million
Average Cost Change FY 2017-2018: \$5,360

Infrastructure Security Compliance – PPA Level II
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$24,979	\$24,509	\$27,937	\$3,428
11.3 Other than Full-Time Permanent	\$479	\$505	\$576	\$71
11.5 Other Personnel Compensation	\$798	\$842	\$960	\$118
12.1 Civilian Personnel Benefits	\$7,342	\$7,742	\$8,824	\$1,082
Total - Personnel Compensation and Benefits	\$33,598	\$33,598	\$38,297	\$4,699
Positions and FTE				
Positions - Civilian	287	287	307	20
FTE - Civilian	232	232	255	23

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	232	\$33,598	\$144.82	232	\$33,598	\$144.82	255	\$38,297	\$150.18	23	\$4,699	\$5.36
Other Costs												
Total – Pay Cost Drivers	232	\$33,598	\$144.82	232	\$33,598	\$144.82	255	\$38,297	\$150.18	23	\$4,699	\$5.36

The FY 2018 request provides additional funding to account for inflation.

**Infrastructure Security Compliance – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Infrastructure Security Compliance	\$41,039	\$42,455	\$34,143	(\$8,312)
Total	\$41,039	\$42,455	\$34,143	(\$8,312)
Discretionary - Appropriation	\$41,039	\$42,455	\$34,143	(\$8,312)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$2,542	\$2,535	\$2,039	(\$496)
22.0 Transportation of Things	\$11	\$11	\$9	(\$2)
23.2 Rental Payments to Others	\$419	\$421	\$339	(\$82)
24.0 Printing and Reproduction	\$26	\$25	\$20	(\$5)
25.1 Advisory and Assistance Services	\$17,900	\$19,468	\$15,656	(\$3,812)
25.2 Other Services from Non-Federal Sources	\$408	\$406	\$327	(\$79)
25.3 Other Goods and Services from Federal Sources	\$16,695	\$16,578	\$13,332	(\$3,246)
25.7 Operation and Maintenance of Equipment	\$2,914	\$2,890	\$2,324	(\$566)
26.0 Supplies and Materials	\$78	\$75	\$60	(\$15)
31.0 Equipment	\$46	\$46	\$37	(\$9)
Total - Non Pay Object Classes	\$41,039	\$42,455	\$34,143	(\$8,312)

**Infrastructure Security Compliance – PPA Level II
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President’s Budget	FY 2017 to FY 2018 Total Changes
Chemical Security Analysis Tool Hosting & IT Activities	\$9,960	\$10,128	\$10,410	\$283
Site Security Plan and Alternative Security Program Review Support	\$7,195	\$6,800	\$8,306	\$1,506
Chemical Security Analysis Tool Suite Development	\$5,073	\$5,096	\$5,123	\$26
CFATS Review and Analysis Support Services	\$1,022	\$1,083	\$1,148	\$65
Ammonium Nitrate Capabilities Analysis, Testing Analysis, and Outreach	\$4,500	\$4,500	\$0	(\$4,500)
Travel	\$2,500	\$2,500	\$2,500	\$0
Working Capital Fund	\$6,542	\$6,261	\$6,637	\$378
Other Costs	\$4,247	\$6,087	\$18	(\$6,068)
Total – Non Pay Cost Drivers	\$41,039	\$42,455	\$34,143	(\$8,312)

NARRATIVE EXPLANATION OF CHANGES

Chemical Security Analysis Tool Hosting & IT Activities: Increase due to planned contract escalation.

Site Security Plan and Alternative Security Program Review Support: Requesting Additional Services.

Chemical Security Analysis Tool Suite Development: Increase due to planned contract escalation.

CFATS Review and Analysis Support Services: Increase due to planned contract escalation.

Ammonium Nitrate Capabilities Analysis, Testing Analysis, and Outreach: Removal of Ammonium Nitrate funding.

Travel: No change.

Working Capital Fund: Increased assessment estimate.

Other Costs: Decrease is driven primarily by operational efficiencies and the non-pay cost adjustment to the balanced workforce adjustment..

Emergency Communications –PPA

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Emergency Communications Preparedness	96	77	\$43,558	96	77	\$44,163	107	82	\$49,966	11	5	\$5,803
Priority Telecommunications Services	30	26	\$56,993	30	26	\$56,813	30	26	\$63,955	-	-	\$7,142
Total	126	103	\$100,551	126	103	\$100,976	137	108	\$113,921	11	5	\$12,945
Subtotal Discretionary - Appropriation	126	103	\$100,551	126	103	\$100,976	137	108	\$113,921	11	5	\$12,945

Emergency Communications – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$101,303		
Transfers & Reprogrammings	(\$725)		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	(\$27)		
Revised Enacted/Request	\$100,551	\$100,976	\$113,921
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$100,551	\$100,976	\$113,921
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$100,551	\$100,976	\$113,921
Obligations (Actual/Projections/Estimates)	\$100,450	\$100,874	\$113,806
Personnel: Positions and FTE			
Enacted/Request Positions	126	126	137
Enacted/Request FTE	103	103	108
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	97	126	137
FTE (Actual/Estimates/Projections)	99	103	108

Emergency Communications – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	126	103	\$101,303
Cyber Facilities and Operational Requirements	-	-	\$390
TSA Transfer	-	-	(\$215)
Total Above Threshold Reprogrammings/Transfers	-	-	\$175
Cyber Exercises	-	-	(\$900)
Total Below Threshold Reprogrammings	-	-	(\$900)
FY16 Rescission	-	-	(\$27)
Total Rescissions	-	-	(\$27)
FY 2016 Revised Enacted	126	103	\$100,551
FY 2017 Annualized CR	126	103	\$100,976
FY 2018 Base Budget	126	103	\$100,976
Transfer of NGN-PS from PC&I to O&S Aligning Budget with CAS Policy	-	-	\$5,980
Total Transfers	-	-	\$5,980
2018 Pay Raise	-	-	\$245
Adjust for Acquisition O&M	-	-	\$712
Annualization of 2017 Pay Raise	-	-	\$91
Total, Pricing Increases	-	-	\$1,048
Rightsize FTP/FTE & Salaries and Benefits	-	(1)	(\$172)
Total, Pricing Decreases	-	(1)	(\$172)
Total Adjustments-to-Base	-	(1)	\$6,856
FY 2018 Current Services	126	102	\$107,832
Expand Operations in Field	11	6	\$5,723
Priority Communications	-	-	\$366
Total, Program Increases	11	6	\$6,089
FY 2018 Request	137	108	\$113,921
FY 2017 TO FY 2018 Change	11	5	\$12,945

PPA Description

NPPD requests \$113.921 and 137 FTP/108 FTE for the Emergency Communications PPA in the Operations & Support appropriation.

The Emergency Communications program is responsible for advancing the Nation's interoperable emergency communications capabilities to enable first responders and government officials to continue to communicate in the event of disasters.

Adjustments to Base Justification

- \$336,000 increase for 2018 pay inflation. Of this amount, \$91,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$245,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$341,000 in FY 2017 pay inflation is built into the base, which includes \$69,000 for the annualization of the 2016 pay raise (1.6 percent) and \$272,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$1.032 million and 6 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$0.712 million increase to align operations and maintenance funding with the planned acquisition profile for FY 2018.
- \$1.204 million and 7 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.
- \$5.980 million transfer of Next Gen Networks from the Procurement, Construction, & Improvements account to the Operations & Support account to align the budget to Departmental policy for the Common Appropriations Structure.

Emergency Communications – PPA Personnel Compensation and Benefits

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Emergency Communications Preparedness	96	77	\$12,182	\$158.21	96	77	\$12,917	\$167.75	107	82	\$13,685	\$166.89	11	5	\$768	(\$0.86)
Priority Telecommunications Services	30	26	\$3,986	\$153.31	30	26	\$4,363	\$167.81	30	26	\$4,449	\$171.12	-	-	\$86	\$3.31
Total	126	103	\$16,168	\$156.97	126	103	\$17,280	\$167.77	137	108	\$18,134	\$167.91	11	5	\$854	\$0.14
Discretionary - Appropriation	126	103	\$16,168	\$156.97	126	103	\$17,280	\$167.77	137	108	\$18,134	\$167.91	11	5	\$854	\$0.14

NARRATIVE EXPLANATION OF CHANGES

- \$336,000 increase for FY 2018 pay inflation. Of this amount, \$91,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$245,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$1.032 million and 6 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$1.204 million and 7 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.
- \$688,000 and 11 FTP/6 FTE increase to expand the State, Local, Tribal and Territorial Planning and Assessment Program.

FTE Change FY 2017-2018: 5

PCB Change FY 2017-2018: \$0.854 million

Average Cost Change FY 2017-2018: \$140

Emergency Communications – PPA
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$12,056	\$12,888	\$13,526	\$638
11.3 Other than Full-Time Permanent	\$181	\$192	\$202	\$10
11.5 Other Personnel Compensation	\$161	\$170	\$177	\$7
12.1 Civilian Personnel Benefits	\$3,770	\$4,030	\$4,229	\$199
Total - Personnel Compensation and Benefits	\$16,168	\$17,280	\$18,134	\$854
Positions and FTE				
Positions - Civilian	126	126	137	11
FTE - Civilian	103	103	108	5

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	103	\$16,168	\$156.97	103	\$17,280	\$167.77	108	\$18,134	\$167.91	5	\$854	\$0.14
Other Costs												
Total – Pay Cost Drivers	103	\$16,168	\$156.97	103	\$17,280	\$167.77	108	\$18,134	\$167.91	5	\$854	\$0.14

The FY 2018 request includes additional personnel required to ensure State, local, tribal, and territorial governments have interoperable emergency communications systems. The request additionally rightsizes FTEs based on actual current hiring projections and historical execution, providing funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

Emergency Communications – PPA Non Pay Budget Exhibits

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Emergency Communications Preparedness	\$31,376	\$31,246	\$36,281	\$5,035
Priority Telecommunications Services	\$53,007	\$52,450	\$59,506	\$7,056
Total	\$84,383	\$83,696	\$95,787	\$12,091
Discretionary - Appropriation	\$84,383	\$83,696	\$95,787	\$12,091

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$897	\$896	\$1,094	\$198
22.0 Transportation of Things	\$3	\$3	\$3	-
23.1 Rental Payments to GSA	\$501	\$500	\$553	\$53
23.3 Communications, Utilities, and Misc. Charges	\$67	\$66	\$77	\$11
24.0 Printing and Reproduction	\$20	\$20	\$23	\$3
25.1 Advisory and Assistance Services	\$34,323	\$34,038	\$40,962	\$6,924
25.2 Other Services from Non-Federal Sources	\$188	\$189	\$212	\$23
25.3 Other Goods and Services from Federal Sources	\$41,731	\$41,602	\$45,506	\$3,904
25.4 Operation and Maintenance of Facilities	\$49	\$49	\$50	\$1
25.7 Operation and Maintenance of Equipment	\$4,227	\$4,211	\$4,823	\$612
26.0 Supplies and Materials	\$17	\$17	\$29	\$12
31.0 Equipment	\$150	\$150	\$185	\$35
41.0 Grants, Subsidies, and Contributions	\$1,959	\$1,955	\$2,270	\$315
94.0 Financial Transfers	\$251	-	-	-
Total - Non Pay Object Classes	\$84,383	\$83,696	\$95,787	\$12,091

Emergency Communications – PPA Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Emergency Communications Preparedness	\$31,376	\$31,246	\$36,281	\$5,035
GETS/WPS/SRAS/TSP	\$53,007	\$52,450	\$53,726	\$1,276
NGN-Priority Services	\$0	\$0	\$5,780	\$5,780
Total – Non Pay Cost Drivers	\$84,383	\$83,696	\$95,787	\$12,091

NARRATIVE EXPLANATION OF CHANGES

Emergency Communications Preparedness – FY 2018 request provides support to State, local, tribal, and territorial (SLTT) partners for planning and assessment of existing and/or potential communications risks and removal of a demonstration program that maximized its scope.

GETS/WPS/SRAS/TSP – FY 2018 request provides support for an Information System Security Officer (ISSO) for the Priority Telecommunications Services (PTS) program.

NGN-Priority Services – FY 2018 request funds shared services and working capital costs for the program.

Emergency Communication Preparedness – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Emergency Communications Preparedness	96	77	\$43,558	96	77	\$44,163	107	82	\$49,966	11	5	\$5,803
Total	96	77	\$43,558	96	77	\$44,163	107	82	\$49,966	11	5	\$5,803
Subtotal Discretionary - Appropriation	96	77	\$43,558	96	77	\$44,163	107	82	\$49,966	11	5	\$5,803

Emergency Communication Preparedness – PPA Level II
Summary of Budget Changes
Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	96	77	\$44,306
TSA Transfer	-	-	(\$85)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$85)
Cyber Exercises	-	-	(\$650)
Total Below Threshold Reprogrammings	-	-	(\$650)
FY16 Rescission	-	-	(\$13)
Total Rescissions	-	-	(\$13)
FY 2016 Revised Enacted	96	77	\$43,558
FY 2017 Annualized CR	96	77	\$44,163
FY 2018 Base Budget	96	77	\$44,163
2018 Pay Raise	-	-	\$184
Annualization of 2017 Pay Raise	-	-	\$68
Total, Pricing Increases	-	-	\$252
Rightsize FTP/FTE & Salaries and Benefits	-	(1)	(\$172)
Total, Pricing Decreases	-	(1)	(\$172)
Total Adjustments-to-Base	-	(1)	\$80
FY 2018 Current Services	96	76	\$44,243
Expand Operations in Field	11	6	\$5,723
Total, Program Increases	11	6	\$5,723
FY 2018 Request	107	82	\$49,966
FY 2017 TO FY 2018 Change	11	5	\$5,803

PPA Level II Description

NPPD requests \$49.966 million and 107 FTP/82 FTE for the Emergency Communication Preparedness PPA in the Operations & Support appropriation.

The Emergency Communications Preparedness PPA provides specialized modeling and analysis to predict and mitigate the effect of communications failures during times of crisis. Through these analyses, it provides critical risk assessments for the Communications sector during response to man-made or natural disasters, in addition to assisting restoration and recovery efforts.

Adjustments to Base Justification

- \$252,000 increase for FY 2018 pay inflation. Of this amount, \$68,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$184,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$255,000 in FY 2017 pay inflation is built into the base, which includes \$52,000 for the annualization of the 2016 pay raise (1.6 percent) and \$203,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$1.032 million and 6 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$1.204 million and 7 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

**Emergency Communication Preparedness – PPA Level II
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Emergency Communications Preparedness	96	77	\$12,182	\$158.21	96	77	\$12,917	\$167.75	107	82	\$13,685	\$166.89	11	5	\$768	(\$0.86)
Total	96	77	\$12,182	\$158.21	96	77	\$12,917	\$167.75	107	82	\$13,685	\$166.89	11	5	\$768	(\$0.86)
Discretionary - Appropriation	96	77	\$12,182	\$158.21	96	77	\$12,917	\$167.75	107	82	\$13,685	\$166.89	11	5	\$768	(\$0.86)

NARRATIVE EXPLANATION OF CHANGES

- \$252,000 increase for 2018 pay inflation. Of this amount, \$68,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$184,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$1.032 million and 6 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$1.204 million and 7 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.
- \$688,000 and 11 FTP/6 FTE increase to expand the State, Local, Tribal and Territorial Planning and Assessment Program

FTE Change FY 2017-2018: 5

PCB Change FY 2017-2018: \$768,000

Average Cost Change FY 2017-2018: (\$860)

Emergency Communication Preparedness – PPA Level II

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$9,105	\$9,654	\$10,228	\$574
11.3 Other than Full-Time Permanent	\$135	\$143	\$152	\$9
11.5 Other Personnel Compensation	\$95	\$101	\$107	\$6
12.1 Civilian Personnel Benefits	\$2,847	\$3,019	\$3,198	\$179
Total - Personnel Compensation and Benefits	\$12,182	\$12,917	\$13,685	\$768
Positions and FTE				
Positions - Civilian	96	96	107	11
FTE - Civilian	77	77	82	5

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	77	\$12,182	\$158.21	77	\$12,917	\$167.75	82	\$13,685	\$166.89	5	\$768	(\$1)
Other Costs												
Total – Pay Cost Drivers	77	\$12,182	\$158.21	77	\$12,917	\$16.75	82	\$13,685	\$166.89	5	\$768	(\$1)

The FY 2018 request includes additional personnel required to ensure State, local, tribal, and territorial governments have interoperable emergency communications systems. The request additionally rightsizes FTEs based on actual current hiring projections and historical execution, providing funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.

**Emergency Communication Preparedness – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Emergency Communications Preparedness	\$31,376	\$31,246	\$36,281	\$5,035
Total	\$31,376	\$31,246	\$36,281	\$5,035
Discretionary - Appropriation	\$31,376	\$31,246	\$36,281	\$5,035

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$833	\$832	\$966	\$134
22.0 Transportation of Things	\$3	\$3	\$3	-
23.1 Rental Payments to GSA	\$301	\$300	\$348	\$48
23.3 Communications, Utilities, and Misc. Charges	\$67	\$66	\$77	\$11
24.0 Printing and Reproduction	\$20	\$20	\$23	\$3
25.1 Advisory and Assistance Services	\$11,919	\$11,826	\$13,732	\$1,906
25.2 Other Services from Non-Federal Sources	\$78	\$79	\$92	\$13
25.3 Other Goods and Services from Federal Sources	\$14,699	\$14,671	\$17,035	\$2,364
25.7 Operation and Maintenance of Equipment	\$1,333	\$1,330	\$1,544	\$214
26.0 Supplies and Materials	\$17	\$17	\$20	\$3
31.0 Equipment	\$147	\$147	\$171	\$24
41.0 Grants, Subsidies, and Contributions	\$1,959	\$1,955	\$2,270	\$315
Total - Non Pay Object Classes	\$31,376	\$31,246	\$36,281	\$5,035

**Emergency Communication Preparedness – PPA Level II
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
National Communications Emergency Plan (NCEP) Implementation & Grant Coordination	\$4,088	\$4,088	\$9,123	\$5,035
Interoperable Communications Technical Assistance Program	\$12,663	\$12,663	\$12,663	\$0
Public Safety & National Security/Emergency Preparedness (NS/EP) Governance	\$11,354	\$11,354	\$11,354	\$0
Emergency Communications Support	\$3,271	\$3,141	\$3,141	\$0
Total – Non Pay Cost Drivers	\$31,376	\$31,246	\$36,281	\$5,035

NARRATIVE EXPLANATION OF CHANGES

NCEP Implementation & Grant Coordination– FY 2018 request includes additional funding for contractor services and stakeholder support to enhance the SLTT Planning and Assessment Program, tasked to assist SLTT governments with mitigating identified emergency communications gaps, and elimination of the Rural Emergency Medical Communications project, a demonstration project with limited scope.

Interoperable Communications Technical Assistance Program – No change

Public Safety & NS/EP Governance – No change

Emergency Communications Support – No change

Priority Telecommunications Services – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
GETS/WPS/SRAS/TSP	17	15	\$55,169	17	15	\$54,992	17	15	\$56,319	-	-	\$1,327
Next Generation Networks Priority Services	13	11	\$1,824	13	11	\$1,821	13	11	\$7,636	-	-	\$5,815
Total	30	26	\$56,993	30	26	\$56,813	30	26	\$63,955	-	-	\$7,142
Subtotal Discretionary - Appropriation	30	26	\$56,993	30	26	\$56,813	30	26	\$63,955	-	-	\$7,142

Priority Telecommunications Services – PPA Level II
Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	30	26	\$56,997
Cyber Facilities and Operational Requirements	-	-	\$390
TSA Transfer	-	-	(\$130)
Total Above Threshold Reprogrammings/Transfers	-	-	\$260
Cyber Exercises	-	-	(\$250)
Total Below Threshold Reprogrammings	-	-	(\$250)
FY16 Rescission	-	-	(\$14)
Total Rescissions	-	-	(\$14)
FY 2016 Revised Enacted	30	26	\$56,993
FY 2017 Annualized CR	30	26	\$56,813
FY 2018 Base Budget	30	26	\$56,813
Transfer of NGN-PS from PC&I to O&S Aligning Budget with CAS Policy	-	-	\$5,980
Total Transfers	-	-	\$5,980
2018 Pay Raise	-	-	\$61
Adjust for Acquisition O&M	-	-	\$712
Annualization of 2017 Pay Raise	-	-	\$23
Total, Pricing Increases	-	-	\$796
Total Adjustments-to-Base	-	-	\$6,776
FY 2018 Current Services	30	26	\$63,589
Priority Communications	-	-	\$366
Total, Program Increases	-	-	\$366
FY 2018 Request	30	26	\$63,955
FY 2017 TO FY 2018 Change	-	-	\$7,142

PPA Level II Description

NPPD requests \$63.955 million and 30 FTP/26 FTE for the Priority Telecommunications Services (PTS) PPA in the Operations & Support appropriation.

The PTS PPA leverages the Nation's telecommunications networks, enabling voice communications for response and recovery coordination efforts and maintaining essential government functions and operations during an emergency. PTS accomplishes this by maintaining priority services that provide National Security/Emergency Preparedness (NS/EP) voice telecommunications for all levels of the Government and industry organizations during times when networks are congested or degraded. The PPA also ensures new network infrastructures are capable of satisfying priority telecommunications requirements as carriers evolve to next-generation networks.

Adjustments to Base Justification

- \$84,000 increase for FY 2018 pay inflation. Of this amount, \$23,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$61,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$86,000 in FY 2017 pay inflation is built into the base, which includes \$17,000 for the annualization of the 2016 pay raise (1.6 percent) and \$69,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$0.712 million increase to align operations and maintenance funding with the planned acquisition profile for FY 2018.
- \$5.980 million transfer of Next Gen Networks from the Procurement, Construction, & Improvements account to the Operations & Support account to align the budget to Departmental policy for the Common Appropriations Structure.

**Priority Telecommunications Services – PPA Level II
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
GETS/WPS/SRAS/TSP	17	15	\$2,162	\$144.13	17	15	\$2,542	\$169.47	17	15	\$2,592	\$172.8	-	-	\$50	\$3.33
Next Generation Networks Priority Services	13	11	\$1,824	\$165.82	13	11	\$1,821	\$165.55	13	11	\$1,857	\$168.82	-	-	\$36	\$3.27
Total	30	26	\$3,986	\$153.31	30	26	\$4,363	\$167.81	30	26	\$4,449	\$171.12	-	-	\$86	\$3.31
Discretionary - Appropriation	30	26	\$3,986	\$153.31	30	26	\$4,363	\$167.81	30	26	\$4,449	\$171.12	-	-	\$86	\$3.31

Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$2,951	\$3,234	\$3,298	\$64
11.3 Other than Full-Time Permanent	\$46	\$49	\$50	\$1
11.5 Other Personnel Compensation	\$66	\$69	\$70	\$1
12.1 Civilian Personnel Benefits	\$923	\$1,011	\$1,031	\$20
Total - Personnel Compensation and Benefits	\$3,986	\$4,363	\$4,449	\$86
Positions and FTE				
Positions - Civilian	30	30	30	-
FTE - Civilian	26	26	26	-

**Priority Telecommunications Services – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
GETS/WPS/SRAS/TSP	\$53,007	\$52,450	\$53,727	\$1,277
Next Generation Networks Priority Services	-	-	\$5,779	\$5,779
Total	\$53,007	\$52,450	\$59,506	\$7,056
Discretionary - Appropriation	\$53,007	\$52,450	\$59,506	\$7,056

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$64	\$64	\$128	\$64
23.1 Rental Payments to GSA	\$200	\$200	\$205	\$5
25.1 Advisory and Assistance Services	\$22,404	\$22,212	\$27,230	\$5,018
25.2 Other Services from Non-Federal Sources	\$110	\$110	\$120	\$10
25.3 Other Goods and Services from Federal Sources	\$27,032	\$26,931	\$28,471	\$1,540
25.4 Operation and Maintenance of Facilities	\$49	\$49	\$50	\$1
25.7 Operation and Maintenance of Equipment	\$2,894	\$2,881	\$3,279	\$398
26.0 Supplies and Materials	-	-	\$9	\$9
31.0 Equipment	\$3	\$3	\$14	\$11
94.0 Financial Transfers	\$251	-	-	-
Total - Non Pay Object Classes	\$53,007	\$52,450	\$59,506	\$7,056

GETS/WPS/SRAS/TSP – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
GETS/WPS/SRAS/TSP	17	15	\$55,169	17	15	\$54,992	17	15	\$56,319	-	-	\$1,327
Total	17	15	\$55,169	17	15	\$54,992	17	15	\$56,319	-	-	\$1,327
Subtotal Discretionary - Appropriation	17	15	\$55,169	17	15	\$54,992	17	15	\$56,319	-	-	\$1,327

GETS/WPS/SRAS/TSP – PPA Level III

Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	17	15	\$55,173
Cyber Facilities and Operational Requirements	-	-	\$390
TSA Transfer	-	-	(\$130)
Total Above Threshold Reprogrammings/Transfers	-	-	\$260
Cyber Exercises	-	-	(\$250)
Total Below Threshold Reprogrammings	-	-	(\$250)
FY16 Rescission	-	-	(\$14)
Total Rescissions	-	-	(\$14)
FY 2016 Revised Enacted	17	15	\$55,169
FY 2017 Annualized CR	17	15	\$54,992
FY 2018 Base Budget	17	15	\$54,992
2018 Pay Raise	-	-	\$36
Adjust for Acquisition O&M	-	-	\$912
Annualization of 2017 Pay Raise	-	-	\$13
Total, Pricing Increases	-	-	\$961
Total Adjustments-to-Base	-	-	\$961
FY 2018 Current Services	17	15	\$55,953
Priority Communications	-	-	\$366
Total, Program Increases	-	-	\$366
FY 2018 Request	17	15	\$56,319
FY 2017 TO FY 2018 Change	-	-	\$1,327

PPA Level III Description

NPPD requests \$56.319 million and 17 FTP/15 FTE for the Government Emergency Telecommunications Service/Wireless Priority Service/Special Routing Arrangement Service/Telecommunications Service Priority (GETS/WPS/SRAS/TSP) PPA in the Operations & Support appropriation.

The GETS/WPS/SRAS/TSP PPA funds national communication capabilities used by Public Safety (PS), National Security (NS), and Emergency Preparedness (EP) personnel to communicate in the event of natural disasters, acts of terrorism, or other man-made disasters. The PPA supports a nationwide landline telephone service enabling priority communications for the President, Federal, State and local governments, and industry organizations by providing priority voice calling via the existing public switched network; NS/EP users with priority restoration and provisioning of telecommunications services that are vital to maintaining readiness or response to an incident; and provides the highest level of priority telecommunications service during times of severe public switched network congestion or disruption as may result from acts of war.

Adjustments to Base Justification

- \$49,000 increase for FY 2018 pay inflation. Of this amount, \$13,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$36,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$50,000 in FY 2017 pay inflation is built into the base, which includes \$10,000 for the annualization of the 2016 pay raise (1.6 percent) and \$40,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$0.912 million decrease to align operations and maintenance funding with the planned acquisition profile for FY 2018.

**GETS/WPS/SRAS/TSP – PPA Level III
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
GETS/WPS/SRAS/TSP	17	15	\$2,162	\$144.13	17	15	\$2,542	\$169.47	17	15	\$2,592	\$172.8	-	-	\$50	\$3.33
Total	17	15	\$2,162	\$144.13	17	15	\$2,542	\$169.47	17	15	\$2,592	\$172.8	-	-	\$50	\$3.33
Discretionary - Appropriation	17	15	\$2,162	\$144.13	17	15	\$2,542	\$169.47	17	15	\$2,592	\$172.8	-	-	\$50	\$3.33

NARRATIVE EXPLANATION OF CHANGES

\$50,000 increase for FY 2018 pay inflation. Of this amount, \$13,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$36,000 is for the 1.9 percent pay raise in 2018 (three quarters).

FTE Change FY 2017-2018: 0

PCB Change FY 2017-2018: \$50,000

Average Cost Change FY 2017-2018: \$3,330

GETS/WPS/SRAS/TSP – PPA Level III

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$1,623	\$1,908	\$1,946	\$38
11.3 Other than Full-Time Permanent	\$18	\$22	\$22	-
11.5 Other Personnel Compensation	\$16	\$19	\$19	-
12.1 Civilian Personnel Benefits	\$505	\$593	\$605	\$12
Total - Personnel Compensation and Benefits	\$2,162	\$2,542	\$2,592	\$50
Positions and FTE				
Positions - Civilian	17	17	17	-
FTE - Civilian	15	15	15	-

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	15	\$2,162	\$144.13	15	\$2,542	\$169.47	15	\$2,592	\$172.80	0	\$50	\$3
Other Costs												
Total – Pay Cost Drivers	15	\$2,162	\$144.13	15	\$2,542	\$169.47	15	\$2,592	\$172.80	0	\$50	\$3

The FY 2018 request provides additional funding to account for inflation..

GETS/WPS/SRAS/TSP – PPA Level III

Non Pay Budget Exhibits

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
GETS/WPS/SRAS/TSP	\$53,007	\$52,450	\$53,727	\$1,277
Total	\$53,007	\$52,450	\$53,727	\$1,277
Discretionary - Appropriation	\$53,007	\$52,450	\$53,727	\$1,277

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$64	\$64	\$66	\$2
23.1 Rental Payments to GSA	\$200	\$200	\$205	\$5
25.1 Advisory and Assistance Services	\$22,404	\$22,212	\$22,752	\$540
25.2 Other Services from Non-Federal Sources	\$110	\$110	\$113	\$3
25.3 Other Goods and Services from Federal Sources	\$27,032	\$26,931	\$27,587	\$656
25.4 Operation and Maintenance of Facilities	\$49	\$49	\$50	\$1
25.7 Operation and Maintenance of Equipment	\$2,894	\$2,881	\$2,951	\$70
31.0 Equipment	\$3	\$3	\$3	-
94.0 Financial Transfers	\$251	-	-	-
Total - Non Pay Object Classes	\$53,007	\$52,450	\$53,727	\$1,277

GETS/WPS/SRAS/TSP – PPA Level III

Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
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NS/EP Priority Communications Services	\$50,829	\$50,272	\$51,549	\$1,277
National Communication Capabilities Support	\$2,178	\$2,178	\$2,178	\$0
Total – Non Pay Cost Drivers	\$53,007	\$52,450	\$53,727	\$1,277

NARRATIVE EXPLANATION OF CHANGES

NS/EP Priority Communications Services – FY 2018 request includes additional contract services and stakeholder support for priority communications planning, provisioning and restoration in the event of a disaster. This includes the provisioning of an Information System Security Officer.

National Communication Capabilities Support – No change..

Next Generation Networks Priority Services – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Next Generation Networks Priority Services	13	11	\$1,824	13	11	\$1,821	13	11	\$7,636	-	-	\$5,815
Total	13	11	\$1,824	13	11	\$1,821	13	11	\$7,636	-	-	\$5,815
Subtotal Discretionary - Appropriation	13	11	\$1,824	13	11	\$1,821	13	11	\$7,636	-	-	\$5,815

Next Generation Networks Priority Services – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	13	11	\$1,824
FY 2016 Revised Enacted	13	11	\$1,824
FY 2017 Annualized CR	13	11	\$1,821
FY 2018 Base Budget	13	11	\$1,821
Transfer of NGN-PS from PC&I to O&S Aligning Budget with CAS Policy	-	-	\$5,980
Total Transfers	-	-	\$5,980
2018 Pay Raise	-	-	\$25
Annualization of 2017 Pay Raise	-	-	\$10
Total, Pricing Increases	-	-	\$35
Adjust for Acquisition O&M	-	-	(\$200)
Total, Pricing Decreases	-	-	(\$200)
Total Adjustments-to-Base	-	-	\$5,815
FY 2018 Current Services	13	11	\$7,636
FY 2018 Request	13	11	\$7,636
FY 2017 TO FY 2018 Change	-	-	\$5,815

PPA Level III Description

Services NPPD requests \$7,636 million and 13 FTP/11 FTE for the Next Generation Network - Priority Services (NGN-PS) PPA in the Operations & Support appropriation.

The Next Generation Network - Priority Services (NGN-PS) program responds to Executive Order 13618, which directs the Secretary of DHS to oversee the development, testing, implementation, and sustainment of National Security/Emergency Preparedness (NS/EP) communications, including: communications that support Continuity of Government; Federal, State, local, territorial, and tribal emergency preparedness and response communications. Service Providers are replacing their aging circuit-switched networks with packet-switched networks creating the operational gap met by NGN-PS. NGN-PS addresses a capability gap by providing highly survivable, commercial telecomm assets to provide the Government with priority communications capabilities over robust and diverse

nationwide networks at a fraction of the cost required to build a Government-owned system. NGN-PS is a multi-phase/multi-increment tech insertion.

Adjustments to Base Justification

- \$35,000 increase for 2018 pay inflation. Of this amount, \$10,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$25,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$36,000 in FY 2017 pay inflation is built into the base, which includes \$7,000 for the annualization of the 2016 pay raise (1.6 percent) and \$29,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$0.200 million decrease to align operations and maintenance funding with the planned acquisition profile for FY 2018.
- \$5.980 million transfer of Next Gen Networks from the Procurement, Construction, & Improvements account to the Operations & Support account to align the budget to Departmental policy for the Common Appropriations Structure.

**Next Generation Networks Priority Services – PPA Level III
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Next Generation Networks Priority Services	13	11	\$1,824	\$165.82	13	11	\$1,821	\$165.55	13	11	\$1,857	\$168.82	-	-	\$36	\$3.27
Total	13	11	\$1,824	\$165.82	13	11	\$1,821	\$165.55	13	11	\$1,857	\$168.82	-	-	\$36	\$3.27
Discretionary - Appropriation	13	11	\$1,824	\$165.82	13	11	\$1,821	\$165.55	13	11	\$1,857	\$168.82	-	-	\$36	\$3.27

NARRATIVE EXPLANATION OF CHANGES

\$36,000 increase for FY 2018 pay inflation. Of this amount, \$10,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$25,000 is for the 1.9 percent pay raise in 2018 (three quarters).

FTE Change FY 2017-2018: 0

PCB Change FY 2017-2018: \$36,000

Average Cost Change FY 2017-2018: \$3,270

Next Generation Networks Priority Services – PPA Level III

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$1,328	\$1,326	\$1,352	\$26
11.3 Other than Full-Time Permanent	\$28	\$27	\$28	\$1
11.5 Other Personnel Compensation	\$50	\$50	\$51	\$1
12.1 Civilian Personnel Benefits	\$418	\$418	\$426	\$8
Total - Personnel Compensation and Benefits	\$1,824	\$1,821	\$1,857	\$36
Positions and FTE				
Positions - Civilian	13	13	13	-
FTE - Civilian	11	11	11	-

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	11	\$1,824	\$165.82	11	\$1,821	\$165.55	11	\$1,857	\$168.82	0	\$36	\$3
Other Costs												
Total – Pay Cost Drivers	11	\$1,824	\$165.82	11	\$1,821	\$165.55	11	\$1,857	\$168.82	0	\$36	\$3

The FY 2018 request provides additional funding to account for inflation.

**Next Generation Networks Priority Services – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Next Generation Networks Priority Services	-	-	\$5,779	\$5,779
Total	-	-	\$5,779	\$5,779
Discretionary - Appropriation	-	-	\$5,779	\$5,779

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	-	-	\$62	\$62
25.1 Advisory and Assistance Services	-	-	\$4,478	\$4,478
25.2 Other Services from Non-Federal Sources	-	-	\$7	\$7
25.3 Other Goods and Services from Federal Sources	-	-	\$884	\$884
25.7 Operation and Maintenance of Equipment	-	-	\$328	\$328
26.0 Supplies and Materials	-	-	\$9	\$9
31.0 Equipment	-	-	\$11	\$11
Total - Non Pay Object Classes	-	-	\$5,779	\$5,779

**Next Generation Networks Priority Services – PPA Level III
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President-s Budget	FY 2017 to FY 2018 Total Changes
Priority Deployment	\$0	\$0	\$5,779	\$5,779

Total – Non Pay Cost Drivers	\$0	\$0	\$5,779	\$5,779
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NARRATIVE EXPLANATION OF CHANGES

Priority Deployment – The FY 2018 request supports required Shared Services and Working Capital Funds for the Next Generation Networks – Priority Services program.

*Integrated Operations –PPA***Budget Comparison and Adjustments****Comparison of Budget Authority and Request***Dollars in Thousands*

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Cyber and Infrastructure Analysis	110	69	\$41,354	110	69	\$43,597	148	116	\$43,322	38	47	(\$275)
Critical Infrastructure Situational Awareness	39	34	\$13,702	39	34	\$13,648	51	41	\$21,222	12	7	\$7,574
Stakeholder Engagement and Requirements	113	104	\$50,108	113	104	\$50,089	118	102	\$46,904	5	(2)	(\$3,185)
Strategy, Policy, and Plans	72	58	\$13,388	72	58	\$13,365	74	63	\$14,448	2	5	\$1,083
Total	334	265	\$118,552	334	265	\$120,699	391	322	\$125,896	57	57	\$5,197
Subtotal Discretionary - Appropriation	334	265	\$118,552	334	265	\$120,699	391	322	\$125,896	57	57	\$5,197

Integrated Operations – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$121,097		
Transfers & Reprogrammings	(\$2,500)		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	(\$45)		
Revised Enacted/Request	\$118,552	\$120,699	\$125,896
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$118,552	\$120,699	\$125,896
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$118,552	\$120,699	\$125,896
Obligations (Actual/Projections/Estimates)	\$118,431	\$120,575	\$125,768
Personnel: Positions and FTE			
Enacted/Request Positions	334	334	391
Enacted/Request FTE	265	265	322
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	277	334	391
FTE (Actual/Estimates/Projections)	250	265	322

Integrated Operations – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	334	265	\$121,097
Cyber Facilities and Operational Requirements	-	-	(\$2,400)
TSA Transfer	-	-	(\$100)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$2,500)
FY16 Rescission	-	-	(\$45)
Total Rescissions	-	-	(\$45)
FY 2016 Revised Enacted	334	265	\$118,552
FY 2017 Annualized CR	334	265	\$120,699
FY 2018 Base Budget	334	265	\$120,699
Transfer of I.A. from O&S to PC&I Aligning Budget with CAS Policy	-	-	(\$500)
Transfers of NISAC from O&S to R&D to Align Budget with CAS Policy	-	-	(\$4,000)
Total Transfers	-	-	(\$4,500)
2018 Pay Raise	-	-	\$630
Annualization of 2017 Pay Raise	-	-	\$231
Balanced Workforce Adjustment FTP/FTE - Salaries and Benefits	2	1	\$170
Rightsize FTP/FTE & Salaries and Benefits	-	26	\$4,008
Total, Pricing Increases	2	27	\$5,039
Efficiency to Program	-	-	(\$2,248)
Total, Pricing Decreases	-	-	(\$2,248)
Total Adjustments-to-Base	2	27	(\$1,709)
FY 2018 Current Services	336	292	\$118,990
Operation Coordination & Mission Support	50	27	\$7,321
Total, Program Increases	50	27	\$7,321
Expand Operations in Field	5	3	(\$415)
Total, Program Decreases	5	3	(\$415)
FY 2018 Request	391	322	\$125,896
FY 2017 TO FY 2018 Change	57	57	\$5,197

PPA Description

NPPD requests \$125.896 million and 391 FTP/322 FTE for the Integrated Operations PPA in the Operations & Support appropriation.

The Integrated Operations program ensures domain awareness through the sustainment of command and control, coordination, information sharing, and situational awareness in support of multiple mission programs. This program includes various organizations that carry out functions such as consequence analysis, decision support and modeling, 24x7 critical infrastructure watch operations, emergency preparedness, stakeholder engagement, external affairs, privacy, and strategic planning.

Adjustments to Base Justification

- \$861,000 increase for 2018 pay inflation. Of this amount, \$231,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$630,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$871,000 in FY 2017 pay inflation is built into the base, which includes \$176,000 for the annualization of the 2016 pay raise (1.6 percent) and \$695,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$7.797 million and 48 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$0.170 million and 2 FTP/1 FTE increase for balanced workforce adjustment to hire Federal employees to perform functions previously performed by contractors.
- \$6.037 million and 22 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.
- \$4.000 million transfer to the Research & Development account to the Operations & Support account for the National Infrastructure Simulation Analysis Center to align the budget to Departmental policy for the Common Appropriations Structure
- \$0.500 million transfer to the Procurement, Construction, & Improvements account from the Operations & Support account for infrastructure analysis systems development to align the budget to Departmental policy for the Common Appropriations Structure.

**Integrated Operations – PPA
Personnel Compensation and Benefits**

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Cyber and Infrastructure Analysis	110	69	\$11,303	\$163.81	110	69	\$13,703	\$198.59	148	116	\$20,962	\$180.71	38	47	\$7,259	(\$17.88)
Critical Infrastructure Situational Awareness	39	34	\$5,492	\$161.53	39	34	\$5,492	\$161.53	51	41	\$7,454	\$181.8	12	7	\$1,962	\$20.27
Stakeholder Engagement and Requirements	113	104	\$15,956	\$153.42	113	104	\$16,055	\$154.38	118	102	\$15,502	\$151.98	5	(2)	(\$553)	(\$2.4)
Strategy, Policy, and Plans	72	58	\$8,854	\$152.66	72	58	\$8,854	\$152.66	74	63	\$9,937	\$157.73	2	5	\$1,083	\$5.07
Total	334	265	\$41,605	\$157	334	265	\$44,104	\$166.43	391	322	\$53,855	\$167.25	57	57	\$9,751	\$0.82
Discretionary - Appropriation	334	265	\$41,605	\$157	334	265	\$44,104	\$166.43	391	322	\$53,855	\$167.25	57	57	\$9,751	\$0.82

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$29,820	\$31,751	\$39,225	\$7,474
11.3 Other than Full-Time Permanent	\$1,294	\$1,330	\$1,436	\$106
11.5 Other Personnel Compensation	\$598	\$650	\$852	\$202
12.1 Civilian Personnel Benefits	\$9,893	\$10,373	\$12,342	\$1,969
Total - Personnel Compensation and Benefits	\$41,605	\$44,104	\$53,855	\$9,751
Positions and FTE				
Positions - Civilian	334	334	391	57
FTE - Civilian	265	265	322	57

Integrated Operations – PPA Non Pay Budget Exhibits

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Cyber and Infrastructure Analysis	\$30,051	\$29,894	\$22,360	(\$7,534)
Critical Infrastructure Situational Awareness	\$8,210	\$8,156	\$13,768	\$5,612
Stakeholder Engagement and Requirements	\$34,152	\$34,034	\$31,402	(\$2,632)
Strategy, Policy, and Plans	\$4,534	\$4,511	\$4,511	-
Total	\$76,947	\$76,595	\$72,041	(\$4,554)
Discretionary - Appropriation	\$76,947	\$76,595	\$72,041	(\$4,554)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$5,745	\$5,716	\$5,736	\$20
22.0 Transportation of Things	\$85	\$85	\$78	(\$7)
23.1 Rental Payments to GSA	\$1,456	\$1,446	\$1,604	\$158
23.2 Rental Payments to Others	\$274	\$272	\$251	(\$21)
23.3 Communications, Utilities, and Misc. Charges	\$2,273	\$2,686	\$2,885	\$199
25.1 Advisory and Assistance Services	\$32,390	\$36,124	\$37,754	\$1,630
25.2 Other Services from Non-Federal Sources	\$531	\$860	\$753	(\$107)
25.3 Other Goods and Services from Federal Sources	\$31,416	\$26,654	\$19,843	(\$6,811)
25.4 Operation and Maintenance of Facilities	\$796	\$790	\$936	\$146
25.7 Operation and Maintenance of Equipment	\$1,700	\$1,685	\$1,909	\$224
26.0 Supplies and Materials	\$173	\$170	\$176	\$6
31.0 Equipment	\$108	\$107	\$116	\$9
Total - Non Pay Object Classes	\$76,947	\$76,595	\$72,041	(\$4,554)

Cyber and Infrastructure Analysis – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
National Infrastructure Simulation Analysis Center (NISAC)	-	-	\$18,650	-	-	\$18,569	-	-	\$8,912	-	-	(\$9,657)
Infrastructure Analysis	110	69	\$22,704	110	69	\$25,028	148	116	\$34,410	38	47	\$9,382
Total	110	69	\$41,354	110	69	\$43,597	148	116	\$43,322	38	47	(\$275)
Subtotal Discretionary - Appropriation	110	69	\$41,354	110	69	\$43,597	148	116	\$43,322	38	47	(\$275)

Cyber and Infrastructure Analysis – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	110	69	\$43,763
Cyber Facilities and Operational Requirements	-	-	(\$2,400)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$2,400)
FY16 Rescission	-	-	(\$9)
Total Rescissions	-	-	(\$9)
FY 2016 Revised Enacted	110	69	\$41,354
FY 2017 Annualized CR	110	69	\$43,597
FY 2018 Base Budget	110	69	\$43,597
Transfer of I.A. from O&S to PC&I Aligning Budget with CAS Policy	-	-	(\$500)
Transfers of NISAC from O&S to R&D to Align Budget with CAS Policy	-	-	(\$4,000)
Total Transfers	-	-	(\$4,500)
2018 Pay Raise	-	-	\$195
Annualization of 2017 Pay Raise	-	-	\$72
Rightsize FTP/FTE & Salaries and Benefits	-	26	\$3,978
Total, Pricing Increases	-	26	\$4,245
Total Adjustments-to-Base	-	26	(\$255)
FY 2018 Current Services	110	95	\$43,342
Operation Coordination & Mission Support	38	21	(\$20)
Total, Program Decreases	38	21	(\$20)
FY 2018 Request	148	116	\$43,322
FY 2017 TO FY 2018 Change	38	47	(\$275)

PPA Level II Description

NPPD requests \$43.322 million and 148 FTP/116 FTE for the Cyber and Infrastructure Analysis PPA in the Operations & Support appropriation.

The Cyber and Infrastructure Analysis PPA funds efforts to protect the Nation's critical infrastructure through an integrated analytical approach evaluating the potential consequences of disruption from physical or cyber threats and incidents through the Office of Cyber and Infrastructure Analysis (OCIA). This analysis informs decisions to strengthen infrastructure security and resilience, as well as response and recovery efforts during natural, man-made, or cyber incidents.

OCIA analytic products are distributed to 21,114 recipients at DHS as well as other Federal agencies; State, local, tribal, and territorial governments; and the private sector. OCIA provides analysis to support the following efforts:

- **Prioritization:** OCIA enables cross-functional national-level understanding of what systems and assets constitute critical infrastructure across 16 sectors. Prioritization supports steady-state and incident management decision making by providing prioritized lists of critical infrastructure. In FY 2018, OCIA will continue to maintain the National Critical Infrastructure Prioritization Program (NCIPP) list that identifies infrastructure that, if disrupted, could cause catastrophic impacts (developed consistent with the Implementing Recommendations of the 9/11 Commission Act of 2007). OCIA will also maintain the Cyber-Dependent Critical Infrastructure List that identifies infrastructure where a cybersecurity incident could result in catastrophic impacts (developed consistent with E.O. 13636). Finally, OCIA will develop Infrastructure of Concern (IOC) lists in advance of or during homeland security incidents. IOC lists are tailored to a location and potential critical infrastructure impacts (e.g., physical and economic) specific to a particular incident. The lists help in the prioritization of Federal, State, and local response and recovery activities as they relate to critical infrastructure.
- **Strategic Analysis:** OCIA assesses the likelihood and consequence of emerging and future risks to depict a holistic risk horizon for critical infrastructure across sectors and regions. This analysis identifies and provides risk management and mitigation options regarding vulnerabilities, consequences, and threats to critical infrastructure. A National Risk Estimate, an example of a major strategic analysis, provides a focused analysis of current and emerging critical infrastructure risks from a specific threat or event across a three- to five-year timeframe.
- **Operational Analysis:** OCIA identifies and characterizes potential impacts to specific critical infrastructure sectors, as well as cross-sector consequences, caused by a homeland security incident or threat. In addition, OCIA plans, prepares for, and manages OCIA crisis action activities by coordinating with partners, developing Standard Operating Procedures, participating in exercises, and managing the development of decision support products for DHS leadership and public-private sector critical infrastructure partners. This includes surging during a threat or incident, identifying appropriate staffing, planning for shifts and rotations, managing requests for information, and training and deploying OCIA liaisons to FEMA and other organizations as the situation warrants. OCIA also produces and promulgates regular products and reports, provides risk briefings, and directs and coordinates

the activities of the Infrastructure Analysis Cell to provide near-real-time integrated analysis to NPPD operational centers. OCIA will release all-hazard, risk-based products to partners, including regional critical infrastructure analysts and State urban area fusion centers.

All of these activities are supported by OCIA's modeling, simulation, and advanced analytic capabilities. OCIA builds and leverages unique capabilities of critical infrastructure modeling, simulation, and advanced analytic resources of the National Infrastructure Simulation and Analysis Center (NISAC) to understand the impact and cascading effects of infrastructure failures and disruptions. NISAC conducts modeling, simulation, and advanced analytics to support planning and risk management, including in-depth studies on critical infrastructure dependencies and interdependencies, and provides crisis action support for quick-turn analysis. In FY 2018, OCIA will continue to develop advanced analytic capabilities to support homeland security decision making, including an integrated environment to host OCIA analytic capabilities.

Adjustments to Base Justification

- \$267,000 increase for FY 2018 pay inflation. Of this amount, \$72,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$195,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$271,000 in FY 2017 pay inflation is built into the base, which includes \$55,000 for the annualization of the 2016 pay raise (1.6 percent) and \$216,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$3.978 million and 26 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$4.000 million transfer to the Research & Development account to the Operations & Support account for the National Infrastructure Simulation Analysis Center to align the budget to Departmental policy for the Common Appropriations Structure.
- \$0.500 million transfer to the Procurement, Construction, & Improvements account from the Operations & Support account for infrastructure analysis systems development to align the budget to Departmental policy for the Common Appropriations Structure.

**Cyber and Infrastructure Analysis – PPA Level II
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Infrastructure Analysis	110	69	\$11,303	\$163.81	110	69	\$13,703	\$198.59	148	116	\$20,962	\$180.71	38	47	\$7,259	(\$17.88)
Total	110	69	\$11,303	\$163.81	110	69	\$13,703	\$198.59	148	116	\$20,962	\$180.71	38	47	\$7,259	(\$17.88)
Discretionary - Appropriation	110	69	\$11,303	\$163.81	110	69	\$13,703	\$198.59	148	116	\$20,962	\$180.71	38	47	\$7,259	(\$17.88)

Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$8,785	\$10,650	\$16,291	\$5,641
11.3 Other than Full-Time Permanent	\$141	\$171	\$262	\$91
11.5 Other Personnel Compensation	\$233	\$283	\$433	\$150
12.1 Civilian Personnel Benefits	\$2,144	\$2,599	\$3,976	\$1,377
Total - Personnel Compensation and Benefits	\$11,303	\$13,703	\$20,962	\$7,259
Positions and FTE				
Positions - Civilian	110	110	148	38
FTE - Civilian	69	69	116	47

**Cyber and Infrastructure Analysis – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
National Infrastructure Simulation Analysis Center (NISAC)	\$18,650	\$18,569	\$8,912	(\$9,657)
Infrastructure Analysis	\$11,401	\$11,325	\$13,448	\$2,123
Total	\$30,051	\$29,894	\$22,360	(\$7,534)
Discretionary - Appropriation	\$30,051	\$29,894	\$22,360	(\$7,534)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$199	\$197	\$234	\$37
22.0 Transportation of Things	\$2	\$2	\$2	-
23.1 Rental Payments to GSA	\$1,026	\$1,018	\$1,209	\$191
23.3 Communications, Utilities, and Misc. Charges	\$2,273	\$2,686	\$2,885	\$199
25.1 Advisory and Assistance Services	\$4,893	\$8,711	\$7,624	(\$1,087)
25.2 Other Services from Non-Federal Sources	\$368	\$697	\$595	(\$102)
25.3 Other Goods and Services from Federal Sources	\$20,467	\$15,768	\$8,844	(\$6,924)
25.4 Operation and Maintenance of Facilities	\$791	\$785	\$931	\$146
26.0 Supplies and Materials	\$16	\$15	\$18	\$3
31.0 Equipment	\$16	\$15	\$18	\$3
Total - Non Pay Object Classes	\$30,051	\$29,894	\$22,360	(\$7,534)

National Infrastructure Simulation Analysis Center (NISAC) – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
National Infrastructure Simulation Analysis Center (NISAC)	-	-	\$18,650	-	-	\$18,569	-	-	\$8,912	-	-	(\$9,657)
Total	-	-	\$18,650	-	-	\$18,569	-	-	\$8,912	-	-	(\$9,657)
Subtotal Discretionary - Appropriation	-	-	\$18,650	-	-	\$18,569	-	-	\$8,912	-	-	(\$9,657)

National Infrastructure Simulation Analysis Center (NISAC) – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$18,650
FY 2016 Revised Enacted	-	-	\$18,650
FY 2017 Annualized CR	-	-	\$18,569
FY 2018 Base Budget	-	-	\$18,569
Transfers of NISAC from O&S to R&D to Align Budget with CAS Policy	-	-	(\$4,000)
Total Transfers	-	-	(\$4,000)
Total Adjustments-to-Base	-	-	(\$4,000)
FY 2018 Current Services	-	-	\$14,569
Operation Coordination & Mission Support	-	-	(\$5,657)
Total, Program Decreases	-	-	(\$5,657)
FY 2018 Request	-	-	\$8,912
FY 2017 TO FY 2018 Change	-	-	(\$9,657)

PPA Level III Description

NPPD requests \$8.912 million and 0 FTP/0 FTE for the National Infrastructure Simulation Analysis Center PPA in the Operations & Support appropriation.

The National Infrastructure Simulation Analysis Center (NISAC) PPA leverages the advanced modeling and simulation capabilities of Sandia National Laboratories (SNL), Los Alamos National Laboratories (LANL), and Pacific Northwest National Laboratories (PNNL) to model and understand regional- and National-level direct and cascading impacts of failures and disruptions to infrastructure. NISAC is a modeling, simulation, and analysis program within the Department of Homeland Security (DHS) and Department of Energy (DOE). NISAC develops capabilities through work conducted at SNL, LANL, and PNNL.

Through the NISAC PPA, OCIA conducts modeling, simulation, and advanced analytics to support planning and risk management, including in-depth studies on critical infrastructure dependencies and interdependencies, and provides crisis action support for quick-turn analysis.

Originally designed to focus on the consequences associated with terrorist threats, OCIA's mission has broadened to encompass consequence analysis of impacts to infrastructure from all hazards. OCIA has provided support before, during, and after every major hurricane since its inception. OCIA has focused on developing modeling, simulation, and analytic capabilities for disruptions to critical infrastructure including hurricanes, earthquakes, tsunamis, floods, pandemics, industrial accidents, disruptions to the retail payment system, and weapons of mass effect. The foundational capabilities required for these analyses include geospatial hydrology models for flooding, the ability to model damage to the electric power grid, supply chains and network topologies, and infrastructure fragility modeling. NISAC enables homeland security decision makers to leverage modeling and simulation capabilities to support both operational efforts and strategic planning.

NISAC provides strategic, multidisciplinary analyses of interdependencies and the consequences of infrastructure disruptions across all 16 critical infrastructure sectors at national, regional, and local levels. NISAC experts have developed and are employing tools to address the complexities of interdependent national infrastructure, including process-based systems dynamics models, mathematical network optimization models, physics-based models of existing infrastructure, and high-fidelity agent-based simulations of systems. The collaboration between NISAC and the national laboratories taps into the Nation's scientific computational capabilities and modeling/analysis expertise to discover previously unknown relationships and develop insights about infrastructure vulnerabilities to natural disasters and intentional and unintentional manmade events. The collaboration allows NISAC to foster the unique capabilities of each national laboratory to provide analysis and simulation not available elsewhere. These collaborative capabilities support DHS's mission to protect and defend our Nation's critical infrastructures by aiding decision makers in the areas of policy analysis; investment and mitigation planning; education and training; and near real-time assistance to crisis response organizations.

Adjustments to Base Justification

- \$4.000 million transfer to the Research & Development account from the Operations & Support account for the National Infrastructure Simulation Analysis Center to align the budget to Departmental policy for the Common Appropriations Structure.

**National Infrastructure Simulation Analysis Center (NISAC) – PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
National Infrastructure Simulation Analysis Center (NISAC)	\$18,650	\$18,569	\$8,912	(\$9,657)
Total	\$18,650	\$18,569	\$8,912	(\$9,657)
Discretionary - Appropriation	\$18,650	\$18,569	\$8,912	(\$9,657)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
23.3 Communications, Utilities, and Misc. Charges	-	\$431	\$207	(\$224)
25.1 Advisory and Assistance Services	-	\$3,845	\$1,845	(\$2,000)
25.2 Other Services from Non-Federal Sources	-	\$329	\$158	(\$171)
25.3 Other Goods and Services from Federal Sources	\$18,650	\$13,964	\$6,702	(\$7,262)
Total - Non Pay Object Classes	\$18,650	\$18,569	\$8,912	(\$9,657)

**National Infrastructure Simulation Analysis Center (NISAC) – PPA Level III
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
NISAC	\$14,610	\$6,750	\$5,000	(\$1,750)
Visualization	\$500	\$1,000	\$1,200	\$200
Future Analysis	\$0	\$600	\$600	\$0
Other Costs	\$3,540	\$10,219	\$2,112	(\$8,107)
Total – Non Pay Cost Drivers	\$18,650	\$18,569	\$8,912	(\$9,657)

NARRATIVE EXPLANATION OF CHANGES

NISAC: Works with Sandia, Los Alamos and Pacific Northwest National Laboratories: FY 16 funding reflects an additional \$5.657 million received from Congress for High Risk Infrastructure Vulnerabilities. FY 2018 request reflects a \$4 million transfer to R&D to support NISAC capability development, and \$0.500 million transfer to PC&I to support MCTE. NISAC provides strategic, multidisciplinary analyses of interdependencies and the consequences of infrastructure disruptions across all 16 critical infrastructure sectors at national, regional, and local levels.

Visualization: Supports the development of complex national security critical infrastructure risk visualizations, interactive graphics, and graphics to enhance written products to depict national security related issues.

Future Analysis: Supports the development of Future Environment Net Assessments by performing research and analysis on emerging and evolving topics that are likely to affect the future environment for critical infrastructure.

Other Costs: The \$8.1 million reduction is due to non-recurring costs associated with high risk vulnerability mitigation. This led to a reduction in costs from \$10.2 million for FY 2017 to \$2.1 million for FY 2018.

Infrastructure Analysis – PPA Level III

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Infrastructure Analysis	110	69	\$22,704	110	69	\$25,028	148	116	\$34,410	38	47	\$9,382
Total	110	69	\$22,704	110	69	\$25,028	148	116	\$34,410	38	47	\$9,382
Subtotal Discretionary - Appropriation	110	69	\$22,704	110	69	\$25,028	148	116	\$34,410	38	47	\$9,382

Infrastructure Analysis – PPA Level III Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	110	69	\$25,113
Cyber Facilities and Operational Requirements	-	-	(\$2,400)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$2,400)
FY16 Rescission	-	-	(\$9)
Total Rescissions	-	-	(\$9)
FY 2016 Revised Enacted	110	69	\$22,704
FY 2017 Annualized CR	110	69	\$25,028
FY 2018 Base Budget	110	69	\$25,028
Transfer of I.A. from O&S to PC&I Aligning Budget with CAS Policy	-	-	(\$500)
Total Transfers	-	-	(\$500)
2018 Pay Raise	-	-	\$195
Annualization of 2017 Pay Raise	-	-	\$72
Rightsize FTP/FTE & Salaries and Benefits	-	26	\$3,978
Total, Pricing Increases	-	26	\$4,245
Total Adjustments-to-Base	-	26	\$3,745
FY 2018 Current Services	110	95	\$28,773
Operation Coordination & Mission Support	38	21	\$5,637
Total, Program Increases	38	21	\$5,637
FY 2018 Request	148	116	\$34,410
FY 2017 TO FY 2018 Change	38	47	\$9,382

PPA Level III Description

NPPD requests \$34.410 million and 148 FTP/116 FTE for the Infrastructure Analysis PPA in the Operations & Support appropriation.

The Infrastructure Analysis PPA funds efforts to protect the Nation's critical infrastructure through an integrated analytical approach evaluating the potential consequences of disruption from physical or cyber threats and incidents through the Office of Cyber and Infrastructure Analysis (OCIA). This analysis informs decisions to strengthen infrastructure security and resilience, as well as response and recovery efforts during natural, man-made, or cyber incidents.

OCIA analytic products are distributed to 21,114 recipients at DHS as well as other Federal agencies; State, local, tribal, and territorial governments; and the private sector. OCIA provides analysis to support the following efforts:

- **Prioritization:** OCIA enables cross-functional national-level understanding of what systems and assets constitute critical infrastructure across 16 sectors. Prioritization supports steady-state and incident management decision making by providing prioritized lists of critical infrastructure. In FY 2018, OCIA will continue to maintain the National Critical Infrastructure Prioritization Program (NCIPP) list that identifies infrastructure that, if disrupted, could cause catastrophic impacts (developed consistent with the Implementing Recommendations of the 9/11 Commission Act of 2007). OCIA will also maintain the Cyber-Dependent Critical Infrastructure List that identifies infrastructure where a cybersecurity incident could result in catastrophic impacts (developed consistent with E.O. 13636). Finally, OCIA will develop Infrastructure of Concern (IOC) lists in advance of or during homeland security incidents. IOC lists are tailored to a location and potential critical infrastructure impacts (e.g., physical and economic) specific to a particular incident. The lists help in the prioritization of Federal, State, and local response and recovery activities as they relate to critical infrastructure.
- **Strategic Analysis:** OCIA assesses the likelihood and consequence of emerging and future risks to depict a holistic risk horizon for critical infrastructure across sectors and regions. This analysis identifies and provides risk management and mitigation options regarding vulnerabilities, consequences, and threats to critical infrastructure. A National Risk Estimate, an example of a major strategic analysis, provides a focused analysis of current and emerging critical infrastructure risks from a specific threat or event across a three- to five-year timeframe.
- **Operational Analysis:** OCIA identifies and characterizes potential impacts to specific critical infrastructure sectors, as well as cross-sector consequences, caused by a homeland security incident or threat. In addition, OCIA plans, prepares for, and manages OCIA crisis action activities by coordinating with partners, developing Standard Operating Procedures, participating in exercises, and managing the development of decision support products for DHS leadership and public-private sector critical infrastructure partners. This includes surging during a threat or incident, identifying appropriate staffing, planning for shifts and rotations, managing requests for information, and training and deploying OCIA liaisons to FEMA and other organizations

as the situation warrants. OCIA also produces and promulgates regular products and reports, provides risk briefings, and directs and coordinates the activities of the Infrastructure Analysis Cell to provide near-real-time integrated analysis to NPPD operational centers. OCIA will release all-hazard, risk-based products to partners, including regional critical infrastructure analysts and State urban area fusion centers.

All of these activities are supported by OCIA's modeling, simulation, and advanced analytic capabilities. OCIA builds and leverages unique capabilities of critical infrastructure modeling, simulation, and advanced analytic resources of the National Infrastructure Simulation and Analysis Center (NISAC) to understand the impact and cascading effects of infrastructure failures and disruptions. NISAC conducts modeling, simulation, and advanced analytics to support planning and risk management, including in-depth studies on critical infrastructure dependencies and interdependencies, and provides crisis action support for quick-turn analysis. In FY 2018, OCIA will continue to develop advanced analytic capabilities to support homeland security decision making, including an integrated environment to host OCIA analytic capabilities.

Adjustments to Base Justification

- \$267,000 increase for 2018 pay inflation. Of this amount, \$72,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$195,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$271,000 in FY 2017 pay inflation is built into the base, which includes \$55,000 for the annualization of the 2016 pay raise (1.6 percent) and \$216,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$3.978 million and 26 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$0.500 million transfer to the Procurement, Construction, & Improvements account from the Operations & Support account for infrastructure analysis systems development to align the budget to Departmental policy for the Common Appropriations Structure.

**Infrastructure Analysis – PPA Level III
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Infrastructure Analysis	110	69	\$11,303	\$163.81	110	69	\$13,703	\$198.59	148	116	\$20,962	\$180.71	38	47	\$7,259	(\$17.88)
Total	110	69	\$11,303	\$163.81	110	69	\$13,703	\$198.59	148	116	\$20,962	\$180.71	38	47	\$7,259	(\$17.88)
Discretionary - Appropriation	110	69	\$11,303	\$163.81	110	69	\$13,703	\$198.59	148	116	\$20,962	\$180.71	38	47	\$7,259	(\$17.88)

NARRATIVE EXPLANATION OF CHANGES

- \$267,000 increase for FY 2018 pay inflation. Of this amount, \$72,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$195,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$3.978 million and 26 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$3,013,000 and 38 FTP/21 FTE increase to increase operational analysis.

FTE Change FY 2017-2018: 47

PCB Change FY 2017-2018: \$7.259 million

Average Cost Change FY 2017-2018: (\$17,880)

Infrastructure Analysis – PPA Level III

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$8,785	\$10,650	\$16,291	\$5,641
11.3 Other than Full-Time Permanent	\$141	\$171	\$262	\$91
11.5 Other Personnel Compensation	\$233	\$283	\$433	\$150
12.1 Civilian Personnel Benefits	\$2,144	\$2,599	\$3,976	\$1,377
Total - Personnel Compensation and Benefits	\$11,303	\$13,703	\$20,962	\$7,259
Positions and FTE				
Positions - Civilian	110	110	148	38
FTE - Civilian	69	69	116	47

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	69	\$11,303	\$163.81	69	\$13,703	\$198.59	116	\$20,962	\$180.71	47	\$7,259	(\$18)
Other Costs												
Total – Pay Cost Drivers	69	\$11,303	\$163.81	69	\$13,703	\$198.59	116	\$20,962	\$180.71	47	\$7,259	(\$18)

The FY 2018 request provides additional funding to account for inflation.

**Infrastructure Analysis PPA Level III
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Infrastructure Analysis	\$11,401	\$11,325	\$13,448	\$2,123
Total	\$11,401	\$11,325	\$13,448	\$2,123
Discretionary - Appropriation	\$11,401	\$11,325	\$13,448	\$2,123

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$199	\$197	\$234	\$37
22.0 Transportation of Things	\$2	\$2	\$2	-
23.1 Rental Payments to GSA	\$1,026	\$1,018	\$1,209	\$191
23.3 Communications, Utilities, and Misc. Charges	\$2,273	\$2,255	\$2,678	\$423
25.1 Advisory and Assistance Services	\$4,893	\$4,866	\$5,779	\$913
25.2 Other Services from Non-Federal Sources	\$368	\$368	\$437	\$69
25.3 Other Goods and Services from Federal Sources	\$1,817	\$1,804	\$2,142	\$338
25.4 Operation and Maintenance of Facilities	\$791	\$785	\$931	\$146
26.0 Supplies and Materials	\$16	\$15	\$18	\$3
31.0 Equipment	\$16	\$15	\$18	\$3
Total - Non Pay Object Classes	\$11,401	\$11,325	\$13,448	\$2,123

Infrastructure Analysis – PPA Level III

Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Technical Mission Support	\$2,141	\$2,152	\$2,500	\$348
GIS Support Services	\$1,277	\$1,812	\$1,812	\$0
GIS Licenses	\$152	\$160	\$165	\$5
Other Costs	\$7,828	\$7,201	\$8,971	\$1,770
Total – Non Pay Cost Drivers	\$11,401	\$11,325	\$13,448	\$2,123

NARRATIVE EXPLANATION OF CHANGES

Technical Mission Support: Provides analytic intelligence planning, program/project management support.

GIS Support: Provides geospatial technical support services to NPPD, CI community and the homeland security enterprise.

GIS Licenses: GIS Licenses: Software licenses for OCIA staff to utilize geospatial software in developing analytical products.

Critical Infrastructure Situational Awareness – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Critical Infrastructure Situational Awareness	39	34	\$13,702	39	34	\$13,648	51	41	\$21,222	12	7	\$7,574
Total	39	34	\$13,702	39	34	\$13,648	51	41	\$21,222	12	7	\$7,574
Subtotal Discretionary - Appropriation	39	34	\$13,702	39	34	\$13,648	51	41	\$21,222	12	7	\$7,574

Critical Infrastructure Simulation Awareness – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	39	34	\$13,712
FY16 Rescission	-	-	(\$10)
Total Rescissions	-	-	(\$10)
FY 2016 Revised Enacted	39	34	\$13,702
FY 2017 Annualized CR	39	34	\$13,648
FY 2018 Base Budget	39	34	\$13,648
2018 Pay Raise	-	-	\$78
Annualization of 2017 Pay Raise	-	-	\$29
Rightsize FTP/FTE & Salaries and Benefits	-	1	\$174
Total, Pricing Increases	-	1	\$281
Efficiency to Program	-	-	(\$48)
Total, Pricing Decreases	-	-	(\$48)
Total Adjustments-to-Base	-	1	\$233
FY 2018 Current Services	39	35	\$13,881
Operation Coordination & Mission Support	12	6	\$7,341
Total, Program Increases	12	6	\$7,341
FY 2018 Request	51	41	\$21,222
FY 2017 TO FY 2018 Change	12	7	\$7,574

PPA Level II Description

NPPD requests \$21,222,000 and 51 FTP/41 FTE for the Critical Infrastructure Simulation Awareness PPA in the Operations & Support appropriation.

The Critical Infrastructure Situational Awareness PPA funds the coordination and information sharing of operation centers that maintain situational awareness of the nation's critical infrastructure for the federal government. By facilitating cross-domain physical security and cybersecurity coordination, these operation centers advance integrated cyber and physical risk management beyond the critical infrastructure owners and operators to include all of the federal interagency partners. This integrated approach to planning,

information and data sharing, and enhanced situational awareness maximizes the ability for leadership to make informed strategic and operational decisions around critical infrastructure security and resilience in both steady state and incident-driven situations, resulting in more synchronized response, mitigation, and recovery efforts.

The Critical Infrastructure Situational Awareness PPA supports one budget project- Critical Infrastructure Situational Awareness formerly known as the National Infrastructure Critical Coordination. In FY 2018, NPPD will continue to drive cross communication and information sharing with owners and operators through Cyber and Infrastructure Awareness and Reporting and Critical Infrastructure Interagency Coordination.

Adjustments to Base Justification

- \$107,000 increase for FY 2018 pay inflation. Of this amount, \$29,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$78,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$108,000 in FY 2017 pay inflation is built into the base, which includes \$22,000 for the annualization of the 2016 pay raise (1.6 percent) and \$86,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$174,000 and 1 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$48,000 decrease as a result of purchase card efficiencies. An analysis was done using FY 2014 actual expenditures against FY 2015 planned spending (as listed in project spend plans). Based on this analysis, NPPD is able to reduce purchase card spending by \$48,000 in FY 2018.

**Critical Infrastructure Simulation Awareness – PPA Level II
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Critical Infrastructure Situational Awareness	39	34	\$5,492	\$161.53	39	34	\$5,492	\$161.53	51	41	\$7,454	\$181.8	12	7	\$1,962	\$20.27
Total	39	34	\$5,492	\$161.53	39	34	\$5,492	\$161.53	51	41	\$7,454	\$181.8	12	7	\$1,962	\$20.27
Discretionary - Appropriation	39	34	\$5,492	\$161.53	39	34	\$5,492	\$161.53	51	41	\$7,454	\$181.8	12	7	\$1,962	\$20.27

NARRATIVE EXPLANATION OF CHANGES

- \$107,000 increase for 2018 pay inflation. Of this amount, \$29,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$78,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$174,000 and 1 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$856,000 and 12 FTP/6 FTE increase to expand CI Interagency Coordination.

FTE Change FY 2017-2018: 7

PCB Change FY 2017-2018: \$1,962,000

Average Cost Change FY 2017-2018: \$20,270

Critical Infrastructure Simulation Awareness – PPA Level II

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$4,009	\$4,009	\$5,441	\$1,432
11.3 Other than Full-Time Permanent	\$83	\$83	\$112	\$29
11.5 Other Personnel Compensation	\$138	\$138	\$188	\$50
12.1 Civilian Personnel Benefits	\$1,262	\$1,262	\$1,713	\$451
Total - Personnel Compensation and Benefits	\$5,492	\$5,492	\$7,454	\$1,962
Positions and FTE				
Positions - Civilian	39	39	51	12
FTE - Civilian	34	34	41	7

Pay Cost Drivers

Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	34	\$5,492	\$161.53	34	\$5,492	\$161.53	41	\$7,454	\$181.80	7	\$1,962	\$20.27
Other Costs												
Total – Pay Cost Drivers	34	\$5,492	\$161.53	34	\$5,492	\$161.53	41	\$7,454	\$181.80	7	\$1,962	\$20.27

The FY 2018 request provides additional funding to account for inflation..

**Critical Infrastructure Simulation Awareness – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Critical Infrastructure Situational Awareness	\$8,210	\$8,156	\$13,768	\$5,612
Total	\$8,210	\$8,156	\$13,768	\$5,612
Discretionary - Appropriation	\$8,210	\$8,156	\$13,768	\$5,612

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$89	\$88	\$148	\$60
25.1 Advisory and Assistance Services	\$6,341	\$6,320	\$10,669	\$4,349
25.2 Other Services from Non-Federal Sources	\$10	\$10	\$17	\$7
25.3 Other Goods and Services from Federal Sources	\$1,270	\$1,247	\$2,105	\$858
25.7 Operation and Maintenance of Equipment	\$471	\$463	\$781	\$318
26.0 Supplies and Materials	\$13	\$12	\$20	\$8
31.0 Equipment	\$16	\$16	\$28	\$12
Total - Non Pay Object Classes	\$8,210	\$8,156	\$13,768	\$5,612

Critical Infrastructure Simulation Awareness – PPA Level II
Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
NICC Watch Operations Contract	\$4,475	\$4,564	\$4,607	\$43
Contingency Planning Support Contract and EA Support	\$1,074	\$1,074	\$1,297	\$223
Data Strategy/Implementation for Near Real Time Situational Awareness	\$0	\$0	\$2,000	\$2,000
Transition to NPPD OCW	\$0	\$0	\$5,341	\$5,341
Other Costs	\$2,661	\$2,518	\$523	\$(1,995)
Total – Non Pay Cost Drivers	\$8,210	\$8,156	\$13,768	\$5,612

NARRATIVE EXPLANATION OF CHANGES

NICC Watch Operations Contract: Increase because of planned contract escalation and an additional transition out cost as the last option is exercised. The contract will be re-competed for FY 2019.

Contingency Planning Support Contract and EA Support: FY 2018 reflects the cost estimate as the contract award in FY 2017 is not finalized.

Data Strategy/Implementation for Near Real Time Situational Awareness: Funding request to provide situational awareness capability for NPPD.

Transition to NPPD Operations Coordination and Watch Center (OCW): Funding request to provide integrated, near real-time situational awareness, briefing and reporting product interagency; State, local, tribal and territorial; and owner/operator partners to organize synchronized response, mitigation, and recovery efforts.

Stakeholder Engagement and Requirements – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Stakeholder Engagement and Requirements	113	104	\$50,108	113	104	\$50,089	118	102	\$46,904	5	(2)	(\$3,185)
Total	113	104	\$50,108	113	104	\$50,089	118	102	\$46,904	5	(2)	(\$3,185)
Subtotal Discretionary - Appropriation	113	104	\$50,108	113	104	\$50,089	118	102	\$46,904	5	(2)	(\$3,185)

Stakeholder Engagement and Requirements – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	113	104	\$50,232
TSA Transfer	-	-	(\$100)
Total Above Threshold Reprogrammings/Transfers	-	-	(\$100)
FY16 Rescission	-	-	(\$24)
Total Rescissions	-	-	(\$24)
FY 2016 Revised Enacted	113	104	\$50,108
FY 2017 Annualized CR	113	104	\$50,089
FY 2018 Base Budget	113	104	\$50,089
2018 Pay Raise	-	-	\$230
Annualization of 2017 Pay Raise	-	-	\$84
Total, Pricing Increases	-	-	\$314
Efficiency to Program	-	-	(\$2,200)
Rightsize FTP/FTE & Salaries and Benefits	-	(5)	(\$884)
Total, Pricing Decreases	-	(5)	(\$3,084)
Total Adjustments-to-Base	-	(5)	(\$2,770)
FY 2018 Current Services	113	99	\$47,319
Expand Operations in Field	5	3	(\$415)
Total, Program Decreases	5	3	(\$415)
FY 2018 Request	118	102	\$46,904
FY 2017 TO FY 2018 Change	5	(2)	(\$3,185)

PPA Level II Description

NPPD requests \$46.904 million and 118 FTP/102 FTE for the Stakeholder Engagement & Requirements PPA in the Operations & Support appropriation.

The Stakeholder Engagement & Requirements budget project funds enhancing domestic cybersecurity and communications partnerships in critical infrastructure sectors, building partnerships which advance national cybersecurity and emergency communications objectives, providing an information exchange between government and industry, and supporting outreach and awareness activities. It funds national planning efforts to mature national cyber and communications resiliency efforts, and implement cybersecurity strategies that build assurance and resilience across the cyber sector community.

Adjustments to Base Justification

- \$314,000 increase for FY 2018 pay inflation. Of this amount, \$84,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$230,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$317,000 in FY 2017 pay inflation is built into the base, which includes \$64,000 for the annualization of the 2016 pay raise (1.6 percent) and \$253,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$1.980 million and 12 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$2.2 million decrease as a result of operational efficiencies in the mission support PPA. As NPPD proceeds with the anticipated realignment of our security mission activities, stakeholder engagement programs which currently operate in parallel will be brought under unified management, enabling enhanced partnership across organizational elements. Because this increased partnership will result in fewer duplicative engagements and an ability to leverage communications platforms for multiple program activities, NPPD anticipates increased mission efficiency and reductions in programmatic costs due to the realignment of these partnership elements.

**Stakeholder Engagement and Requirements – PPA Level II
Personnel Compensation and Benefits**

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Stakeholder Engagement and Requirements	113	104	\$15,956	\$153.42	113	104	\$16,055	\$154.38	118	102	\$15,502	\$151.98	5	(2)	(\$553)	(\$2.4)
Total	113	104	\$15,956	\$153.42	113	104	\$16,055	\$154.38	118	102	\$15,502	\$151.98	5	(2)	(\$553)	(\$2.4)
Discretionary - Appropriation	113	104	\$15,956	\$153.42	113	104	\$16,055	\$154.38	118	102	\$15,502	\$151.98	5	(2)	(\$553)	(\$2.4)

NARRATIVE EXPLANATION OF CHANGES

- \$314,000 increase for 2018 pay inflation. Of this amount, \$84,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$230,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$1.980 million and 12 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$2.864 million and 17 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.
- \$572,000 and 8 FTP/5 FTE increase to expand field forces and stakeholder support.

FTE Change FY 2017-2018: 0

PCB Change FY 2017-2018: (\$553,000)

Average Cost Change FY 2017-2018: (\$2.40)

Stakeholder Engagement and Requirements – PPA Level II
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$10,720	\$10,786	\$10,415	(\$371)
11.3 Other than Full-Time Permanent	\$923	\$929	\$897	(\$32)
11.5 Other Personnel Compensation	\$163	\$165	\$159	(\$6)
12.1 Civilian Personnel Benefits	\$4,150	\$4,175	\$4,031	(\$144)
Total - Personnel Compensation and Benefits	\$15,956	\$16,055	\$15,502	(\$553)
Positions and FTE				
Positions - Civilian	113	113	118	5
FTE - Civilian	104	104	102	(2)

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	104	\$15,956	\$153.42	104	\$16,055	\$154.38	102	\$15,502	\$151.98	(2)	(\$553)	(\$2.40)
Other Costs												
Total – Pay Cost Drivers	104	\$15,956	\$153.42	104	\$16,055	\$154.38	102	\$15,502	\$151.98	(2)	(\$553)	(\$2.40)

The FY 2018 request provides additional funding to account for inflation.

**Stakeholder Engagement and Requirements – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Stakeholder Engagement and Requirements	\$34,152	\$34,034	\$31,402	(\$2,632)
Total	\$34,152	\$34,034	\$31,402	(\$2,632)
Discretionary - Appropriation	\$34,152	\$34,034	\$31,402	(\$2,632)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$992	\$988	\$911	(\$77)
22.0 Transportation of Things	\$83	\$83	\$76	(\$7)
23.1 Rental Payments to GSA	\$430	\$428	\$395	(\$33)
23.2 Rental Payments to Others	\$274	\$272	\$251	(\$21)
25.1 Advisory and Assistance Services	\$21,156	\$21,093	\$19,461	(\$1,632)
25.2 Other Services from Non-Federal Sources	\$153	\$153	\$141	(\$12)
25.3 Other Goods and Services from Federal Sources	\$9,679	\$9,639	\$8,894	(\$745)
25.4 Operation and Maintenance of Facilities	\$5	\$5	\$5	-
25.7 Operation and Maintenance of Equipment	\$1,229	\$1,222	\$1,128	(\$94)
26.0 Supplies and Materials	\$75	\$75	\$70	(\$5)
31.0 Equipment	\$76	\$76	\$70	(\$6)
Total - Non Pay Object Classes	\$34,152	\$34,034	\$31,402	(\$2,632)

**Stakeholder Engagement and Requirements – PPA Level II
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President’s Budget	FY 2017 to FY 2018 Total Changes
Cyber Engagement & Resilience Support	\$19,851	\$19,785	\$16,859	\$(2,926)
Technical Support for RRAP Projects	\$9,494	\$9,268	\$9,268	\$0
National Guard Support	\$1,700	\$1,700	\$1,700	\$0
Analytic & Program Support for RRAP Projects	\$1,147	\$1,153	\$1,153	\$0
Other Costs	\$1,960	\$2,128	\$2,422	\$294
Total – Non Pay Cost Drivers	\$34,152	\$34,034	\$31,402	\$(2,632)

NARRATIVE EXPLANATION OF CHANGES

Cyber Engagement & Resilience Support – FY 2018 request includes additional contract services support for Section 9 outreach efforts, elimination of the Software Assurance program and Information Sharing and Analysis Organizations (ISAO) grant, and efficiencies gained due to the proposed NPPD organizational transition.

Strategy, Policy, and Plans – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Strategy, Policy, and Plans	72	58	\$13,388	72	58	\$13,365	74	63	\$14,448	2	5	\$1,083
Total	72	58	\$13,388	72	58	\$13,365	74	63	\$14,448	2	5	\$1,083
Subtotal Discretionary - Appropriation	72	58	\$13,388	72	58	\$13,365	74	63	\$14,448	2	5	\$1,083

Strategy, Policy, and Plans – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	72	58	\$13,390
FY16 Rescission	-	-	(\$2)
Total Rescissions	-	-	(\$2)
FY 2016 Revised Enacted	72	58	\$13,388
FY 2017 Annualized CR	72	58	\$13,365
FY 2018 Base Budget	72	58	\$13,365
2018 Pay Raise	-	-	\$127
Annualization of 2017 Pay Raise	-	-	\$46
Balanced Workforce Adjustment FTP/FTE - Salaries and Benefits	2	1	\$170
Rightsize FTP/FTE & Salaries and Benefits	-	4	\$740
Total, Pricing Increases	2	5	\$1,083
Total Adjustments-to-Base	2	5	\$1,083
FY 2018 Current Services	74	63	\$14,448
FY 2018 Request	74	63	\$14,448
FY 2017 TO FY 2018 Change	2	5	\$1,083

PPA Level II Description

NPPD requests \$14.448 million and 74 FTP/63 FTE for the Strategy, Policy and Plans PPA in the Operations & Support appropriation.

Strategy, Policy and Plans is responsible for articulating the long term strategic vision for NPPD; developing and implementing component-level strategy, policy, and planning that enables the enterprise strategic management process; coordinating NPPD international policy, strategy, plans and engagements; leading the development of integrated strategic, resource, and programmatic planning guidance; conducting strategic, operational, and program evaluations; and managing external audits and inspections in order to support senior leadership and guide operations to enhance the resilience of the nation's physical and cyber infrastructure.

Adjustments to Base Justification

- \$173,000 increase for FY 2018 pay inflation. Of this amount, \$46,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$127,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$175,000 in FY 2017 pay inflation is built into the base, which includes \$35,000 for the annualization of the 2016 pay raise (1.6 percent) and \$139,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$1.665 million and 9 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$0.170 million and 2 FTP/1 FTE increase for balanced workforce adjustment to hire Federal employees to perform functions previously performed by contractors.
- \$0.925 million and 5 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

**Strategy, Policy, and Plans – PPA Level II
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Strategy, Policy, and Plans	72	58	\$8,854	\$152.66	72	58	\$8,854	\$152.66	74	63	\$9,937	\$157.73	2	5	\$1,083	\$5.07
Total	72	58	\$8,854	\$152.66	72	58	\$8,854	\$152.66	74	63	\$9,937	\$157.73	2	5	\$1,083	\$5.07
Discretionary - Appropriation	72	58	\$8,854	\$152.66	72	58	\$8,854	\$152.66	74	63	\$9,937	\$157.73	2	5	\$1,083	\$5.07

NARRATIVE EXPLANATION OF CHANGES

- \$173,000 increase for FY 2018 pay inflation. Of this amount, \$46,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$127,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$1.665 million and 9 FTE increase based on actual current hiring projections and historical execution, to provide funding for previously unfunded positions in order to ensure that all FTE counts are fully funded.
- \$0.170 million and 2 FTP/1 FTE increase for balanced workforce adjustment to hire Federal employees to perform functions previously performed by contractors.
- \$0.925 million and 5 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

FTE Change FY 2017-2018: 5

PCB Change FY 2017-2018: \$1,083,000

Average Cost Change FY 2017-2018: \$5,070

Strategy, Policy, and Plans – PPA Level II
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$6,306	\$6,306	\$7,078	\$772
11.3 Other than Full-Time Permanent	\$147	\$147	\$165	\$18
11.5 Other Personnel Compensation	\$64	\$64	\$72	\$8
12.1 Civilian Personnel Benefits	\$2,337	\$2,337	\$2,622	\$285
Total - Personnel Compensation and Benefits	\$8,854	\$8,854	\$9,937	\$1,083
Positions and FTE				
Positions - Civilian	72	72	74	2
FTE - Civilian	58	58	63	5

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	58	\$8,854	\$152.66	58	\$8,854	\$152.66	63	\$9,937	\$157.73	5	\$1,083	\$5
Total – Pay Cost Drivers	58	\$8,854	\$152.66	58	\$8,854	\$152.66	63	\$9,937	\$157.73	5	\$1,083	\$5

The FY 2018 request provides additional funding to account for inflation.

**Strategy, Policy, and Plans – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Strategy, Policy, and Plans	\$4,534	\$4,511	\$4,511	-
Total	\$4,534	\$4,511	\$4,511	-
Discretionary - Appropriation	\$4,534	\$4,511	\$4,511	-

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$4,465	\$4,443	\$4,443	-
26.0 Supplies and Materials	\$69	\$68	\$68	-
Total - Non Pay Object Classes	\$4,534	\$4,511	\$4,511	-

Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Cyber Strategy, Policy & Plans	\$394	\$389	\$389	\$0
IP Strategy, Policy & Plans	\$1,642	\$1,681	\$1,721	\$39
Other Costs	\$2,498	\$2,440	\$2,400	(\$39)
Total – Non Pay Cost Drivers	\$4,534	\$4,511	\$4,511	\$0

NARRATIVE EXPLANATION OF CHANGES

Cyber Strategy, Policy & Plans – No change.

IP Strategy, Policy & Plans -- Increase due to planned contract escalation.

*Office of Biometric Identity Management –PPA***Budget Comparison and Adjustments****Comparison of Budget Authority and Request***Dollars in Thousands*

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Identity and Screening Program Operations	170	161	\$69,827	170	161	\$69,534	170	154	\$68,826	-	(7)	(\$708)
IDENT/Homeland Advanced Recognition Technology Operations and Maintenance	-	-	\$145,425	-	-	\$145,149	-	-	\$150,603	-	-	\$5,454
Total	170	161	\$215,252	170	161	\$214,683	170	154	\$219,429	-	(7)	\$4,746
Subtotal Discretionary - Appropriation	170	161	\$215,252	170	161	\$214,683	170	154	\$219,429	-	(7)	\$4,746

Office of Biometric Identity Management PPA
Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$215,253		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	(\$1)		
Revised Enacted/Request	\$215,252	\$214,683	\$219,429
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$215,252	\$214,683	\$219,429
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$215,252	\$214,683	\$219,429
Obligations (Actual/Projections/Estimates)	\$214,890	\$214,467	\$219,209
Personnel: Positions and FTE			
Enacted/Request Positions	170	170	170
Enacted/Request FTE	161	161	154
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	158	170	170
FTE (Actual/Estimates/Projections)	161	161	154

Office of Biometric Identity Management – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	170	161	\$215,253
FY16 Rescission	-	-	(\$1)
Total Rescissions	-	-	(\$1)
FY 2016 Revised Enacted	170	161	\$215,252
FY 2017 Annualized CR	170	161	\$214,683
FY 2018 Base Budget	170	161	\$214,683
2018 Pay Raise	-	-	\$322
Adjust for Acquisition O&M	-	-	\$5,454
Annualization of 2017 Pay Raise	-	-	\$118
Total, Pricing Increases	-	-	\$5,894
Rightsize FTP/FTE & Salaries and Benefits	-	(7)	(\$1,148)
Total, Pricing Decreases	-	(7)	(\$1,148)
Total Adjustments-to-Base	-	(7)	\$4,746
FY 2018 Current Services	170	154	\$219,429
FY 2018 Request	170	154	\$219,429
FY 2017 TO FY 2018 Change	-	(7)	\$4,746

PPA Description

NPPD requests \$219.4 million and 170 FTP/154 FTE for the Office of Biometric Identity Management PPA in the Operations & Support appropriation.

The Office of Biometric Identity Management provides biometric identification services to help federal, state, and local government partners to accurately identify people they encounter to determine if they pose a risk to the U.S. This program supplies the technology for collecting and storing biometric data. The program shares information, provides analyses, updates watchlists, and ensures the integrity of the data.

Adjustments to Base Justification

- \$440,000 increase for FY 2018 pay inflation. Of this amount, \$118,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$322,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$445,000 in FY 2017 pay inflation is built into the base, which includes \$90,000 for the annualization of the 2016 pay raise (1.6 percent) and \$355,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$1.148 million and 7 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.
- \$5.45 million increase to align operations and maintenance funding with the planned acquisition profile for FY 2018.

**Office of Biometric Identity Management – PPA
Personnel Compensation and Benefits**

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Identity and Screening Program Operations	170	161	\$22,551	\$140.07	170	161	\$22,551	\$140.07	170	154	\$21,843	\$141.84	-	(7)	(\$708)	\$1.77
Total	170	161	\$22,551	\$140.07	170	161	\$22,551	\$140.07	170	154	\$21,843	\$141.84	-	(7)	(\$708)	\$1.77
Discretionary - Appropriation	170	161	\$22,551	\$140.07	170	161	\$22,551	\$140.07	170	154	\$21,843	\$141.84	-	(7)	(\$708)	\$1.77

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$16,658	\$16,611	\$16,089	(\$522)
11.3 Other than Full-Time Permanent	\$216	\$218	\$211	(\$7)
11.5 Other Personnel Compensation	\$103	\$104	\$101	(\$3)
12.1 Civilian Personnel Benefits	\$5,574	\$5,618	\$5,442	(\$176)
Total - Personnel Compensation and Benefits	\$22,551	\$22,551	\$21,843	(\$708)
Positions and FTE				
Positions - Civilian	170	170	170	-
FTE - Civilian	161	161	154	(7)

Office of Biometric Identity Management – PPA
Non Pay Budget Exhibits

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Identity and Screening Program Operations	\$47,276	\$46,983	\$46,983	-
IDENT/Homeland Advanced Recognition Technology Operations and Maintenance	\$145,425	\$145,149	\$150,603	\$5,454
Total	\$192,701	\$192,132	\$197,586	\$5,454
Discretionary - Appropriation	\$192,701	\$192,132	\$197,586	\$5,454

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$125	\$124	\$124	-
22.0 Transportation of Things	\$70	\$70	\$70	-
23.1 Rental Payments to GSA	\$414	\$412	\$412	-
23.3 Communications, Utilities, and Misc. Charges	\$8,597	\$8,552	\$8,552	-
25.1 Advisory and Assistance Services	\$731	\$727	\$727	-
25.2 Other Services from Non-Federal Sources	\$24,260	\$24,096	\$24,096	-
25.3 Other Goods and Services from Federal Sources	\$12,977	\$12,900	\$12,900	-
25.7 Operation and Maintenance of Equipment	\$145,425	\$145,149	\$150,603	\$5,454
26.0 Supplies and Materials	\$102	\$102	\$102	-
Total - Non Pay Object Classes	\$192,701	\$192,132	\$197,586	\$5,454

Identity and Screening Program Operations – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Identity and Screening Program Operations	170	161	\$69,827	170	161	\$69,534	170	154	\$68,826	-	(7)	(\$708)
Total	170	161	\$69,827	170	161	\$69,534	170	154	\$68,826	-	(7)	(\$708)
Subtotal Discretionary - Appropriation	170	161	\$69,827	170	161	\$69,534	170	154	\$68,826	-	(7)	(\$708)

Identity and Screening Program Operations – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	170	161	\$69,828
FY16 Rescission	-	-	(\$1)
Total Rescissions	-	-	(\$1)
FY 2016 Revised Enacted	170	161	\$69,827
FY 2017 Annualized CR	170	161	\$69,534
FY 2018 Base Budget	170	161	\$69,534
2018 Pay Raise	-	-	\$322
Annualization of 2017 Pay Raise	-	-	\$118
Total, Pricing Increases	-	-	\$440
Rightsize FTP/FTE & Salaries and Benefits	-	(7)	(\$1,148)
Total, Pricing Decreases	-	(7)	(\$1,148)
Total Adjustments-to-Base	-	(7)	(\$708)
FY 2018 Current Services	170	154	\$68,826
FY 2018 Request	170	154	\$68,826
FY 2017 TO FY 2018 Change	-	(7)	(\$708)

PPA Level II Description

NPPD requests \$68.826 million and 170 FTP/154 FTE for the Office of Biometric Identity Management PPA in the Operations & Support appropriation.

Identity and Screening Program Operations is comprised of Program Operations and Identity and Screening Services.

Program Operations: Program Operations consists of Mission Support Services, Corporate Information Technology, and Systems Engineering. Mission Support Services include activities such as the Working Capital Fund (including General Services Administration rent), Federal employee training, travel expenses, Biometric Support Center-West (BSC) rent, and logistical support. Corporate Information Technology consists of hardware, software (maintenance and licensing agreements), data circuit maintenance costs, information backup and storage, Tier 1/2/3 help desk and application support, and network and telecommunication services for

employee desktop support. OBIM utilizes Systems Engineering to plan for and sustain information technology services. Systems Engineering activities include capacity planning, and analyses promoting consistent and efficient information technology planning, design, development, testing, and deployment. Other services performed under Systems Engineering include monitoring system availability and system capacity, and performance and service quality analysis to mitigate system failures and sustain system operations to meet customer requirements.

Identity and Screening Services: Identity and Screening Services consist of three components: the BSC, Identity Information Sharing and Reporting, and Biometric Standards.

The tables below illustrate the historic workload of the BSC for each of the biometric verification services since FY 2011:

History of Biometric Verifications

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
10-Print Verifications Completed	599,837	625,636	693,308	631,348	543,308	646,223	338,657
Urgent Verification Requests	183,007	191,852	181,175	239,154	180,255	232,881	142,922

*Data as of March 31, 2017.

History of Latent Comparisons and Identifications

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Latent Comparisons Completed	4,194,714	4,483,604	4,624,869	4,422,948	4,478,961	4,096,546	2,032,343
Latent Identifications	343	1,041	1,207	2,318	1,348	545	277

*Data as of March 31, 2017.

History of Biometric Watchlist Enrollments, Biometric Searches, Unknown/Deceased Identifications, and Biometric Record Requests

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Biometric Searches	5,241	4,186	4,326	3,793	2,718	2,104	676
Unknown Deceased Request Identifications	173	132	100	218	158	193	96
Biometric Record Requests			454	371	253	296	160

*Data as of March 31, 2017.

Biometric Support Center

BSC is a 24x7x365 operation providing manual 10-print verification, latent print services, and supplemental biometric services. BSC provides expert fingerprint identification services to verify automated matches and to analyze latent fingerprint submissions. Approximately 99.5 percent of all transactions are matched through a search of IDENT; BSC fingerprint examiners manually verify the remaining 0.5 percent. Manual fingerprint verification is necessary to analyze poor quality fingerprints and ensure derogatory data

is not erroneously associated with an individual. Latent print examiners compare and verify known fingerprints with previously unidentified latent fingerprints collected by agencies at crime scenes and terrorist incidents. Biometric Searches are manual comparisons of fingerprints submitted by OBIM clients, while Biometric Requests respond to client agency requests for a set of biometric records within IDENT. BSC strives to complete urgent fingerprint verifications in less than 10 minutes, non-urgent verifications within 24 hours, and enrollment and verification of terrorism-related prints in two hours or less.

Identity Information Sharing and Reporting

Identity Information Sharing and Reporting, provides person-centric identity management services focusing on biometrics that respond to analytical, investigative, and operational requests from law enforcement, intelligence agencies, external agencies, and foreign partners. OBIM Identity Analysts:

- Coordinate with the FBI TSC to enroll KSTs information into IDENT;
- Support identity fraud detection activities; and,
- Provide notification to customers of recently established derogatory information.

Identity Analysts research, process, and coordinate biometric matches with existing OBIM domestic and international partners and support the extension of services to additional partners. Identity Analysts also continue to produce Information Bulletins.

Biometric Standards

Biometric Standards resources are utilized to comply with Executive Order 13356 (2004), which strives to develop common standards for sharing of terrorism information by agencies within the Intelligence Community. OBIM continues to provide domain and steering committee leadership for the DHS/DOJ National Information Exchange Model and Center for Identification Technology Research. Participation in these organizations enables OBIM to engage with DHS partners to disseminate DHS biometric standards and mature the DHS biometric enterprise architecture.

Adjustments to Base Justification

- \$440,000 increase for FY 2018 pay inflation. Of this amount, \$118,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$322,000 is for the 1.9 percent pay raise in 2018 (three quarters).
 - In addition, the budget assumes that \$445,000 in FY 2017 pay inflation is built into the base, which includes \$90,000 for the annualization of the 2016 pay raise (1.6 percent) and \$355,000 for the 2017 pay raise (2.1 percent). Efficiencies were taken in FY 2017 to afford the pay increase.
- \$1.148 million and 7 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

**Identity and Screening Program Operations – PPA Level II
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Identity and Screening Program Operations	170	161	\$22,551	\$140.07	170	161	\$22,551	\$140.07	170	154	\$21,843	\$141.84	-	(7)	(\$708)	\$1.77
Total	170	161	\$22,551	\$140.07	170	161	\$22,551	\$140.07	170	154	\$21,843	\$141.84	-	(7)	(\$708)	\$1.77
Discretionary - Appropriation	170	161	\$22,551	\$140.07	170	161	\$22,551	\$140.07	170	154	\$21,843	\$141.84	-	(7)	(\$708)	\$1.77

NARRATIVE EXPLANATION OF CHANGES

- \$440,000 increase for FY 2018 pay inflation. Of this amount, \$118,000 is for the annualization of the 2.1 percent pay raise in 2017 (one quarter) and \$322,000 is for the 1.9 percent pay raise in 2018 (three quarters).
- \$1.148 million and 7 FTE decrease as a result of operational efficiencies in the mission support PPA eliminating duplication or unnecessary expenses.

FTE Change FY 2017-2018: (7)

PCB Change FY 2017-2018: (\$708,000)

Average Cost Change FY 2017-2018: \$1,770

Identity and Screening Program Operations – PPA Level II
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$16,658	\$16,611	\$16,089	(\$522)
11.3 Other than Full-Time Permanent	\$216	\$218	\$211	(\$7)
11.5 Other Personnel Compensation	\$103	\$104	\$101	(\$3)
12.1 Civilian Personnel Benefits	\$5,574	\$5,618	\$5,442	(\$176)
Total - Personnel Compensation and Benefits	\$22,551	\$22,551	\$21,843	(\$708)
Positions and FTE				
Positions - Civilian	170	170	170	-
FTE - Civilian	161	161	154	(7)

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Civilian Total	161	\$22,551	\$140.07	161	\$22,551	\$140.07	154	\$21,843	\$141.84	(7)	(\$708)	\$2
Other Costs												
Total – Pay Cost Drivers	161	\$22,551	\$140.07	161	\$22,551	\$140.07	154	\$21,843	\$141.84	(7)	(\$708)	\$2

The FY 2018 request provides additional funding to account for inflation.

**Identity and Screening Program Operations – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Identity and Screening Program Operations	\$47,276	\$46,983	\$46,983	-
Total	\$47,276	\$46,983	\$46,983	-
Discretionary - Appropriation	\$47,276	\$46,983	\$46,983	-

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$125	\$124	\$124	-
22.0 Transportation of Things	\$70	\$70	\$70	-
23.1 Rental Payments to GSA	\$414	\$412	\$412	-
23.3 Communications, Utilities, and Misc. Charges	\$8,597	\$8,552	\$8,552	-
25.1 Advisory and Assistance Services	\$731	\$727	\$727	-
25.2 Other Services from Non-Federal Sources	\$24,260	\$24,096	\$24,096	-
25.3 Other Goods and Services from Federal Sources	\$12,977	\$12,900	\$12,900	-
26.0 Supplies and Materials	\$102	\$102	\$102	-
Total - Non Pay Object Classes	\$47,276	\$46,983	\$46,983	-

**Identity and Screening Program Operations – PPA Level II
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Biometric Verification	\$10,644	\$10,882	\$10,882	\$0

Corporate Systems	\$5,549	\$7,514	\$7,514	\$0
Biometric Identity Support	\$504	\$5,883	\$5,883	\$0
Logistics Support	\$3,302	\$4,606	\$4,608	\$2
Systems Engineering	\$13,090	\$9,786	\$9,786	\$0
Other Costs	\$24,276	\$19,194	\$19,192	\$(2)
Total – Non Pay Cost Drivers	\$47,276	\$46,983	\$46,983	\$0

NARRATIVE EXPLANATION OF CHANGES

Biometric Verification – No change.

Corporate Systems – No change.

Biometric Identity Support – No change.

Logistics Support – Decrease in cost due to expected program changes.

Systems Engineering – No change.

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IDENT/Homeland Advanced Recognition Technology Operations & Maintenance – PPA Level II

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
IDENT/Homeland Advanced Recognition Technology Operations and Maintenance	-	-	\$145,425	-	-	\$145,149	-	-	\$150,603	-	-	\$5,454
Total	-	-	\$145,425	-	-	\$145,149	-	-	\$150,603	-	-	\$5,454
Subtotal Discretionary - Appropriation	-	-	\$145,425	-	-	\$145,149	-	-	\$150,603	-	-	\$5,454

IDENT/Homeland Advanced Recognition Technology Operations & Maintenance-PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$145,425
FY 2016 Revised Enacted	-	-	\$145,425
FY 2017 Annualized CR	-	-	\$145,149
FY 2018 Base Budget	-	-	\$145,149
Adjust for Acquisition O&M	-	-	\$5,454
Total, Pricing Increases	-	-	\$5,454
Total Adjustments-to-Base	-	-	\$5,454
FY 2018 Current Services	-	-	\$150,603
FY 2018 Request	-	-	\$150,603
FY 2017 TO FY 2018 Change	-	-	\$5,454

PPA Level II Description

NPPD requests \$150.603 million and 0 FTP/0 FTE for the IDENT/Homeland Advanced Recognition Technology Operations & Maintenance PPA in the Operations & Support appropriation.

IDENT/HART System Operations consist of Data Center Operations (Level 1 and 2 Services), Application Management (Level 3 Services), Application Software, Lifecycle Replacement, and Quality Assurance/Independent Verification and Validation (IV&V) and Testing.

In FY 2018, OBIM will continue to maintain IDENT while concurrently working on HART Increment 1 while initiating efforts for Increment 2. Once Increment 1 has been completed, HART will reach Initial Operating Capability and most IDENT operations and maintenance (O&M) capabilities will begin to transition to HART.

Data Center Operations

Data Center Operations (DCO) include IT security, hardware maintenance, network services, and system maintenance agreements. It also provides for facility services, including physical security, environmental services (power, air conditioning, and fire protection), shipping and receiving services, and custodial services.

In addition to facilities services, DCO contains Level 1 and 2 Services, which provide:

- Level 1 – Basic hardware hosting services include, but are not limited to: equipment installation including site preparation, scheduling, and readiness reviews; rack and cable management; management of hardware and software maintenance; software license agreements; inventory management and disposal.
- Level 2 – Services for operation system level support include, but are not limited to: operating system installation and configuration; patch and operating system management; installation and maintenance of system-level software, critical security patches, and management of shared file systems; backups of server data to tape or other media; restoration of server volumes or reinstatement of data files; management of Level 2 service desk and communication and coordination with other help desks across DHS Components; receiving, recording, processing, and resolving incidents within an IT system management system.

Application Management (Level 3 Services)

Level 3 Services provide application-level support of internal system code and configurations for adaptive, preventive, and perfective maintenance, release and configuration management, interface support, and troubleshooting. Technical support for problem resolution is provided 24x7x365.

Application Software

Application Software is utilized to perform system functions for system specific tasks and to improve system productivity and efficiency. Software licensing includes, but is not limited to database, security, and load balancing software. Enterprise licensing agreements are utilized for economies of scale and cost savings.

Lifecycle Replacement

Lifecycle Replacement includes industry standard technical refreshes of outdated hardware and software. Hardware and software matures over time and is no longer supported by the manufacturer. Manufacturer support varies by product and is replaced by new technology resulting in enhanced performance and operational efficiencies.

Quality Assurance (QA)/Independent Verification & Validation (IV&V) and Testing

QA/IV&V and Testing include activities associated with deployed system applications and affiliated system change requests. IV&V tests products or system changes in an operational environment by assessing operational effectiveness and suitability of OBIM products.

The following table provides the actual and estimated growth in annual transaction volumes and gallery records for IDENT/HART through FY 2022 based on current customers and their requirements. Transaction volumes and gallery size are projected to continue to grow rapidly as new populations are on-boarded. In particular, gallery size will face large increases as HART Increments 1 and 2 add facial and iris capabilities. By the end of FY 2017, IDENT/HART is projected to contain the fingerprints of approximately 221 million unique identities.

Actual and Projected Growth for IDENT/HART*

(in millions)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017 (est)	FY 2018 (est)	FY 2019 (est)	FY 2020 (est)	FY 2021 (est)	FY 2022 (est)
Annual Transaction Volumes	55	66	74	81	88	95	103	124	135	146	158	169	181
Gallery Size (records)	120	132	146	161	176	192	211	221	235	249	264	278	293

*As of April 20, 2017 - Estimates are for fingerprints only. As HART becomes functional with multi-modal capabilities, OBIM expects a major increase in gallery size and a modest increase in transaction volume.

As the data illustrates, IDENT has grown significantly in transaction volume and number of stored biometrics and has added or expanded existing capabilities. These workload demands greatly exceeded the original design. This growth, combined with the inability of IDENT to expand to handle new biometric modalities, provides the basis for the replacement of IDENT with HART.

In addition to forecasting, OBIM also tracks and monitors customer transaction requests, which assists OBIM planning efforts and in meeting customer demands. The table illustrates the transaction workload performed during FY 2016:

FY 2016 OBIM Transactions by Customer

FY2016 OBIM Transactions and Watchlist Hits by Customer							
Customers	Organizations Supported	Subjects Processed	Percentage of Operations Processed	KST Matches Identified	Percentage of KST Matches	Watchlist Matches Identified	Percentage of Watchlist Matches
	CBP Ports of Entry	68,586,655	67%	302	0%	600,459	19%
	DOJ	12,574,126	12%	154,727	80%	1,788,436	56%
	DOS	12,671,834	12%	564	0%	237,814	7%
	USCIS	3,343,654	3%	217	0%	280,668	9%
	DHS Enforcement	1,630,814	2%	361	0%	125,866	4%
	OPM	1,652,322	2%	7	0%	15,564	0%
	DoD	78,123	0%	24,895	13%	50,012	2%
	USCG	1,074	0%	0	0%	70	0%
	TSA	547,913	1%	6	0%	15,247	0%
	International	454,624	0%	80	0%	7,902	0%
	FEMA	15,698	0%	0	0%	12	0%
	OSCO	6,706	0%	0	0%	32	0%
	Ad Hoc	1,441,325	1%	13,211	7%	80,093	3%
TOTAL	103,004,868	100%	194,370	100%	3,202,175	100%	

Note: IDENT receives DoD’s Biometrically Enabled Watchlist (BEWL), many of which result in nominations to the FBI TSC. These numbers do not necessarily indicate DoD’s first match to a KST, but a rather a positive affirmation that a derogatory DoD encounter resulted in an enrollment to the TSC’s data base.

Adjustments to Base Justification

- \$5.454 million increase to align operations and maintenance funding with the planned acquisition profile for FY 2018.

**IDENT/Homeland Advanced Recognition Technology Operations & Maintenance-PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
IDENT/Homeland Advanced Recognition Technology Operations and Maintenance	\$145,425	\$145,149	\$150,603	\$5,454
Total	\$145,425	\$145,149	\$150,603	\$5,454
Discretionary - Appropriation	\$145,425	\$145,149	\$150,603	\$5,454

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
25.7 Operation and Maintenance of Equipment	\$145,425	\$145,149	\$150,603	\$5,454
Total - Non Pay Object Classes	\$145,425	\$145,149	\$150,603	\$5,454

**IDENT/Homeland Advanced Recognition Technology Operations & Maintenance-PPA Level II
Non Pay Cost Drivers**

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Data Center Operations	68,316	68,186	70,748	2,562
Application Management	66,660	66,533	69,033	2,500
Application Software	5,157	5,147	5,340	193
Lifecycle Replacement	1,906	1,902	1,973	71
QA/IV&V Testing	3,388	3,381	3,509	127
Total – Non Pay Cost Drivers	\$145,425	\$145,149	\$150,603	\$5,454

NARRATIVE EXPLANATION OF CHANGES

Data Center Operations – Increase in accordance with acquisition profile for operations and support costs.

Application Management – Increase in accordance with acquisition profile for operations and support costs.

Application Software – Increase in accordance with acquisition profile for operations and support costs.

Lifecycle Replacement – Increase in accordance with acquisition profile for operations and support costs.

QA/IV&V Testing – Increase in accordance with acquisition profile for operations and support costs.

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Department of Homeland Security
National Protection and Programs Directorate
Procurement, Construction, and Improvements



Fiscal Year 2018
Congressional Justification

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Procurement, Construction, and Improvements
Budget Comparison and Adjustments

Comparison of Budget Authority and Request
Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Cybersecurity	\$189,173	\$188,813	\$241,309	\$52,496
Emergency Communications	\$78,550	\$78,401	\$48,905	(\$29,496)
Biometric Identity Management	\$65,800	\$65,675	\$40,100	(\$25,575)
Integrated Operations Assets and Infrastructure	-	-	\$500	\$500
Infrastructure Protection	-	-	\$4,219	\$4,219
Total	\$333,523	\$332,889	\$335,033	\$2,144
Discretionary - Appropriation	\$333,523	\$332,889	\$335,033	\$2,144

Overview

NPPD's Procurement, Construction, and Improvements (PC&I) appropriation supports activities which enhance the security and resilience of infrastructure terrorist attacks, cyber events, natural disasters, other large-scale incidents, including national security special events. Secure and resilient infrastructure is essential for national security, economic vitality, and public health and safety. This includes activities to understand and manage risk from natural disasters, terrorist attacks, or other disasters to the Nation's critical infrastructure, systems, and assets. Critical infrastructure security and resilience efforts must address all hazards from terrorism and other criminal activities to natural disasters to cybersecurity threats.

PC&I provides funds necessary for the planning, operational development, engineering and purchase of one or more assets (which hereinafter also refers to end items) prior to sustainment. Information Technology (IT) -related PC&I may consist of one or more end items which provide useful software and/or hardware in an operational (production) environment, including non-tangible assets.

Unless otherwise stipulated by regulation or statute, an end item, or improvement project, purchased with PC&I funding has:

- Personal Property, a unit cost of greater than \$250,000, or
- Real Property, a unit cost of greater than \$2 million.

The PC&I Appropriation is a zero based budget request. All investments within the appropriation are justified for the budget year with previous year's investment levels provided.

Activities are organized according to the following program/project/activity (PPA) structure:

- **Cybersecurity** – This PPA contains the Continuous Diagnostics & Mitigation (CDM) and National Cybersecurity Protection System (NCPS) investment programs.

CDM enhances the overall security posture of Federal agencies' networks by providing Federal agencies with the capability to identify cybersecurity risks, prioritize these risks based upon potential impacts, and mitigate the most significant problems first. CDM assists in protecting agencies against exploitation by unauthorized and unmanaged hardware and software; known vulnerabilities; weak configuration settings (including port, protocols, and services); insider attacks; and loss of confidentiality, integrity, or availability due to unanticipated events and attacks requiring recovery or special responses. The CDM program consists of the following capability-based phases: Phase 1, provides network discovery and endpoint laptops/desk tops/servers, and management tools allowing Agencies to track all deployed assets and ensure they are configured properly so that they are not open to an attack; Phase 2, provides strong authentication for users with elevated privileges and for general users protecting an Agency against adversaries from gaining access to critical systems; Phase 3, strengthens protections by standardizing incident reporting, management and mitigation, and providing extended security for agency high value assets. This gives Agencies additional information needed to address advanced persistent threats and other events happening in their networks. D/A Dashboards provide near real-time reporting of agency cybersecurity posture that streamlines compliance and reporting, increases the visibility into vulnerabilities for consistent risk evaluations, and aligns responses to track and respond with mitigations. The CDM Federal Dashboard makes agency summary system security data available to all departments and agencies; enabling government entities to expand their continuous monitoring capabilities by increasing their network sensor capacity, automating sensor collections, and prioritizing risk alerts. This approach lowers the operational risk of information security systems and .gov networks. This allows NPPD to support "the implementation of agency information security policies and practices for information systems" consistent with its responsibilities as established by the Federal Information Security Modernization Act of 2014 policies and directives established by the Office of Management and Budget (OMB).

NCPS (operationally known as EINSTEIN) is an integral part of the cybersecurity community, providing near real-time protection and information to federal civilian Departments and Agencies; cyber centers; and other federal, state and local authorities. NCPS consists of the hardware, software, supporting processes, training, and services being developed and acquired in direct support of the Department of Homeland Security's mission requirements delineated in the Comprehensive National Cybersecurity Initiative (CNCI) and mandated in National Security Presidential Directives 54 (NSPD-54) / Homeland Security Presidential Directive 23 (HSPD-23). NCPS provides a wide range of cybersecurity capabilities for the .gov domain: intrusion detection, intrusion prevention, advanced cyber analytics, information sharing, and core infrastructure using classified and unclassified information.

- **Emergency Communications** - Emergency Communications is responsible for advancing the Nation's interoperable emergency communications capabilities to enable first responders and government officials to continue to communicate in the event of disasters.
- **Next Generation Network Priority Services** – Program responds to Executive Order 13618, which directs the Secretary of DHS to oversee the development, testing, implementation, and sustainment of National Security/Emergency Preparedness communications, including: communications that support Continuity of Government; and Federal, State, local, territorial, and tribal emergency preparedness and response communications. In Commercial Service Provider's circuit switched networks, the legacy Priority Telecommunication Services provides priority access for National Security/Emergency Preparedness users, however, this capability will be lost as the Service Provider's replace aging networks with packet-switched networks or Internet Protocol based next generation networks. These Internet Protocol based next generation networks will not support the legacy Priority Telecommunication Services routing protocols leaving an operational gap for priority access for Next Generation Network Priority Services users. Next Generation Network Priority Services addresses the capability gap by providing highly survivable, commercial telecomm assets to provide the Government with priority communications capabilities over robust and diverse nationwide networks at a fraction of the cost required to build a Government-owned system.
- **Biometric Identity Management** – The Office of Biometric Identity Management provides biometric identification services to help federal, state, and local government partners to accurately identify people they encounter to determine if they pose a risk to the U.S. This program supplies the technology for collecting and storing biometric data. The program shares information, provides analyses, updates watchlists, and ensures the integrity of the data. This PPA contains the Homeland Advanced Recognition Technology (HART) program.

The HART system replaces the legacy Automated Biometric Identity System (IDENT) system with improved, efficient and more cost effective biometric identity services capabilities. The value to the Department of Homeland Security (DHS) of having a single authoritative biometric system, used across all DHS components and missions, is proven in both the effectiveness of the identifications that result from data sharing, and in the efficiency of having one system instead of many. HART will, at Full Operational Capability (FOC), support 250 million unique identities and 720,000 daily fingerprint transactions. In the future, HART will provide multi-modal capabilities (e.g., iris-scanning and facial recognition modalities in addition to fingerprints), provide operational flexibility, and increased accuracy.

- **Integrated Operations Assets and Infrastructure** - Integrated Operations Assets and Infrastructure ensures domain awareness through the sustainment of command and control, coordination, information sharing, and situational awareness in

support of multiple mission programs. This program includes PCI funds supporting the Office of Cyber and Infrastructure, which carries out procurement actions in relation to consequence analysis, decision support and modeling, 24x7 critical infrastructure watch operations, emergency preparedness, stakeholder engagement, external affairs, privacy, and strategic planning.

In FY 2018, this PPA includes funds for the investment Modeling Capability Transition Environment (MCTE), which will help execute these efforts. MCTE is an IT environment that analysts can integrate, refine and run analytical models, run simulations, and perform geospatial and calculated analyses in a risk analytics workflow system, allowing analysts to systematically integrate risk analytical models to create an automated workflow system for infrastructure modeling. It will also allow for the deployment of an automated workflow system in an environment that OCIA performers can access and run their own risk analysis within an automated workflow system. This capability will allow OCIA to perform a wide variety of risk analysis while providing a single integrated environment, reducing analytical time frames, and providing more accurate model results.

- **Infrastructure Protection** - Infrastructure Protection program leads and coordinates national programs and policies on critical infrastructure security and resilience and develops strong partnerships across government and the private sector. The program conducts and facilitates vulnerability and consequence assessments to help critical infrastructure owners and operators and state, local, tribal, and territorial partners understand and address risks to critical infrastructure. Additionally, it provides information on emerging threats and hazards and offers tools and training to partners to help them manage risks to critical infrastructure.

This PPA includes funds for the Infrastructure Protection Gateway (IP Gateway) investment, which supports the Office of Infrastructure Protection in meeting its mission of assessing key assets (e.g., bridge, power grid, dam, and subways) and critical infrastructure vulnerabilities and taking action to mitigate vulnerabilities, enhance security, and ensure continuity and necessary redundancy. The IP Gateway system provides a secure, encrypted, controlled-access web interface to a suite of specialized tools to DHS Components, Federal agencies, State, Local, Tribal, and Territorial governments, and owner/operators of our nation's critical infrastructure. A consistent assessment methodology supports asset-to-asset comparisons, robust analytics, and cross-government sharing of critical infrastructure information. Textual and geospatial presentations aid user understanding of the underlying data.

Procurement, Construction, and Improvements Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$333,523		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$333,523	\$332,889	\$335,033
Carryover and/or Recoveries (Actual/Estimates/Projections)	\$136,121	\$65,800	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$469,644	\$398,689	\$335,033
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$469,644	\$398,689	\$335,033
Obligations (Actual/Projections/Estimates)	\$264,862	\$353,729	\$274,804
Personnel: Positions and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

PPA DESCRIPTION:

NPPD Requests \$335.033 million for the PC&I appropriation.

The PC&I appropriation funds NPPD efforts to manage risks to infrastructure directly. This includes activities to support integrated intrusion detection, analytics, information sharing, intrusion prevention, diagnostics, and mitigation capabilities to protect Federal networks. This also includes support for capabilities to maintain essential government functions and operations. The PC&I appropriation provides the

funds, above certain threshold amounts, necessary for the manufacture, purchase and/or enhancement of one or more assets (which hereinafter also refers to end items) prior to sustainment.

- A. Procurement – the obtaining of one or more end items through purchase, transfer, exchange, or other means. The configuration of an end item required to meet the asset’s intended use is part of procurement.
- B. Construction – the erection, installation, or assembly of something (i.e., new facilities, improvements, vessels, and aircrafts); the addition, expansion, extension, alteration, conversion, or replacement of an existing facility; or the relocation of a facility from one installation to another.
- C. Improvement – the act or process of obtaining an increase in capability and/or capacity.

Procurement, Construction, and Improvements Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$333,523
FY 2016 Revised Enacted	-	-	\$333,523
FY 2017 Annualized CR	-	-	\$332,889
FY 2018 Base Budget	-	-	\$36,991
CDM Transfer to O&S to Align with CAS Guidance	-	-	(\$31,011)
NGN-PS Transfer to O&S to Align with CAS Guidance	-	-	(\$5,980)
Transfer of MCTE from O&S to PC&I Aligning Budget with CAS Policy	-	-	\$500
Total Transfers	-	-	(\$36,491)
Total Adjustments-to-Base	-	-	(\$36,491)
Continuous Diagnostics and Mitigation Investment	-	-	\$185,180
Homeland Advanced Recognition Technology Investment	-	-	\$40,100
Infrastructure Protection PC&I Investment	-	-	\$4,219
National Cybersecurity Protection System Investment	-	-	\$56,129
Next Generation Networks Priority Services Investment	-	-	\$48,905
Total Investment Elements	-	-	\$334,533
FY 2018 Current Services	-	-	\$335,033
FY 2018 Request	-	-	\$335,033
FY 2017 TO FY 2018 Change	-	-	\$2,144

NPPD reports the following budget changes:

1. A transfer for Modeling Capabilities Transition Environment (MCTE) to align with CAS policy - \$.500 Million
2. A transfer for Continuous Diagnostics and Mitigation (CDM) to align with CAS policy – (\$31.0 Million)
3. A transfer for Next Generation Network – Priority Services (NGN-PS) to align with CAS policy – (\$6.00 Million)

Procurement, Construction, and Improvements

Non Pay Budget Exhibits

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$9	\$9	\$17	\$8
22.0 Transportation of Things	-	\$6	\$11	\$5
23.1 Rental Payments to GSA	\$4,147	\$4,147	\$4,449	\$302
23.2 Rental Payments to Others	\$293	\$293	\$558	\$265
25.1 Advisory and Assistance Services	\$52,618	\$39,291	\$44,226	\$4,935
25.2 Other Services from Non-Federal Sources	\$74	\$74	\$138	\$64
25.3 Other Goods and Services from Federal Sources	\$135,781	\$134,038	\$181,825	\$47,787
25.4 Operation and Maintenance of Facilities	\$885	\$721	\$1,373	\$652
25.7 Operation and Maintenance of Equipment	\$5,275	\$5,275	\$8,690	\$3,415
26.0 Supplies and Materials	-	\$3	\$6	\$3
31.0 Equipment	\$132,970	\$147,561	\$90,939	(\$56,622)
32.0 Land and Structures	\$1,471	\$1,471	\$2,801	\$1,330
Total - Non Pay Object Classes	\$333,523	\$332,889	\$335,033	\$2,144

**Procurement, Construction, and Improvements
Capital Investments Exhibits**

Capital Investments

Dollars in Thousands

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Continuous Diagnostics and Mitigation	024-000009571	1	Procurement	IT	Yes	\$97,435	\$97,250	\$185,180
National Cybersecurity Protection System	024-000009508	1	Procurement	IT	Yes	\$91,738	\$91,563	\$56,129
Next Generation Networks Priority Services	024-000009540	1	Procurement	IT	Yes	\$78,550	\$78,401	\$48,905
Homeland Advanced Recognition Technology (HART)	024-000009560	1	Procurement	IT	Yes	\$65,800	\$65,675	\$40,100
Infrastructure Protection (IP) Gateway	024-000009567	3	Procurement	IT	No	-	-	\$4,219
Modeling Capability Transition Environment	Not assigned at this	Non-Major	Procurement	IT	No	-	-	\$500

*Cybersecurity – PPA***Budget Comparison and Adjustments****Comparison of Budget Authority and Request***Dollars in Thousands*

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Cybersecurity	\$189,173	\$188,813	\$241,309	\$52,496
Emergency Communications	\$78,550	\$78,401	\$48,905	(\$29,496)
Biometric Identity Management	\$65,800	\$65,675	\$40,100	(\$25,575)
Integrated Operations Assets and Infrastructure	-	-	\$500	\$500
Infrastructure Protection	-	-	\$4,219	\$4,219
Total	\$333,523	\$332,889	\$335,033	\$2,144
Discretionary - Appropriation	\$333,523	\$332,889	\$335,033	\$2,144

Cybersecurity – PPA
Budget Authority and Obligations
Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$189,173		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$189,173	\$188,813	\$241,309
Carryover and/or Recoveries (Actual/Estimates/Projections)	\$136,121	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$325,294	\$188,813	\$241,309
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$325,294	\$188,813	\$241,309
Obligations (Actual/Projections/Estimates)	\$187,097	\$163,585	\$194,452
Personnel: Positions and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

Cybersecurity – This PPA contains the Continuous Diagnostics & Mitigation (CDM) and National Cybersecurity Protection System (NCPS) investment programs.

CDM enhances the overall security posture of Federal agencies' networks by providing Federal agencies with the capability to identify cybersecurity risks, prioritize these risks based upon potential impacts, and mitigate the most significant problems first. CDM assists in protecting agencies against exploitation by unauthorized and unmanaged hardware and software; known vulnerabilities; weak configuration settings (including port, protocols, and services); insider attacks; and loss of confidentiality, integrity, or availability due to unanticipated events and attacks requiring recovery or special responses. The CDM program consists of the following capability-

based phases: Phase 1, Endpoint Management (what is on the network); Phase 2, Manage Accounts for People and Services (who is on the network); Phase 3, Manage Events and Security Lifecycle (what is happening on the network); and a proposed Phase 4 to address data protection on agency networks.

NCPS (operationally known as EINSTEIN) is an integral part of the cybersecurity community, providing near real-time protection and information to federal civilian Departments and Agencies; cyber centers; and other federal, state and local authorities. NCPS consists of the hardware, software, supporting processes, training, and services being developed and acquired in direct support of the Department of Homeland Security's mission requirements delineated in the Comprehensive National Cybersecurity Initiative (CNCI) and mandated in National Security Presidential Directives 54 (NSPD-54) / Homeland Security Presidential Directive 23 (HSPD-23). NCPS provides a wide range of cybersecurity capabilities for the .gov domain: intrusion detection, intrusion prevention, advanced cyber analytics, information sharing, and core infrastructure using classified and unclassified information.

Cybersecurity – PPA
Summary of Budget Changes
Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$189,173
FY 2016 Revised Enacted	-	-	\$189,173
FY 2017 Annualized CR	-	-	\$188,813
FY 2018 Base Budget	-	-	\$31,011
CDM Transfer to O&S to Align with CAS Guidance	-	-	(\$31,011)
Total Transfers	-	-	(\$31,011)
Total Adjustments-to-Base	-	-	(\$31,011)
Continuous Diagnostics and Mitigation Investment	-	-	\$185,180
National Cybersecurity Protection System Investment	-	-	\$56,129
Total Investment Elements	-	-	\$241,309
FY 2018 Request	-	-	\$241,309
FY 2017 TO FY 2018 Change	-	-	\$52,496

NPPD requests \$241.3 million for the Cybersecurity PPA in the PC&I appropriation. This request includes \$185.2 million for Continuous Diagnostics & Mitigation (CDM) and \$56.1 million for National Cybersecurity Protection System (NCPS).

The request of \$185.2 for CDM will provide additional resources to complete Phase 1 deployment, integrate and complete Phase 2 deployment, begin Phase 3 capability deployment, and provide continued efforts on the Federal dashboard and agency dashboards. Originally conceived as a three-phased program, the ever-changing cybersecurity landscape requires the CDM program to evolve beyond network protections to include data protections. This will significantly enhance Federal civilian agency capabilities to strengthen their ability to prepare for and respond to incident management, as well as protect data through stronger boundary protection and other means.

The request of \$56.1 for NCPS (operationally known as EINSTEIN) will keep providing near real-time protection and information to federal civilian Departments and Agencies; cyber centers; and other federal, state and local authorities. This investment would allow NCPS to continue to build on already deployed capabilities and expand access to DHS threat information and analysis.

**Cybersecurity – PPA
Non Pay Budget Exhibits**

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$9	\$9	\$17	\$8
22.0 Transportation of Things	-	\$6	\$11	\$5
23.1 Rental Payments to GSA	\$1,454	\$1,454	\$2,769	\$1,315
23.2 Rental Payments to Others	\$293	\$293	\$558	\$265
25.1 Advisory and Assistance Services	\$37,657	\$24,330	\$34,894	\$10,564
25.2 Other Services from Non-Federal Sources	\$72	\$72	\$137	\$65
25.3 Other Goods and Services from Federal Sources	\$75,950	\$74,356	\$140,378	\$66,022
25.4 Operation and Maintenance of Facilities	\$885	\$721	\$1,373	\$652
25.7 Operation and Maintenance of Equipment	\$4,216	\$4,216	\$8,028	\$3,812
26.0 Supplies and Materials	-	\$3	\$6	\$3
31.0 Equipment	\$67,166	\$81,882	\$50,337	(\$31,545)
32.0 Land and Structures	\$1,471	\$1,471	\$2,801	\$1,330
Total - Non Pay Object Classes	\$189,173	\$188,813	\$241,309	\$52,496

**Cybersecurity – PPA
Non Pay Cost Drivers**

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
CDM Investment Cost	\$97,435	\$97,250	\$185,180	\$87,930
NCPS Investment Cost	\$91,738	\$91,563	\$56,129	(\$35,434)
Total – Non Pay Cost Drivers	\$189,173	\$188,813	\$241,309	\$52,496

NARRATIVE EXPLANATION OF CHANGES

CDM Investment Cost - Increase in accordance with acquisition profile.

- CDM LCCE Re-baseline of \$77 million due to Phase 1 gaps that occurred resulting from underreporting of assets by D/A.
- NPPD re-designation of \$11.4 million to CDM program in support of Phase 1 and 2 task orders.
- CDM Task Order (TO) 2 groups A-E contracts are executed from FY15 – FY18, group F from FY15 - FY19.
- Phase 1 and 2: Release follow on task orders to continue dashboard services and Phase 3 capabilities.
- Phase 2: Interagency Operations Centers (IOC) – Planned for September 2018.
- Phase 3: Capability deployment will begin in FY 2018, focusing on boundary protection, managing events, managing and preparing for events and incidents, and strengthening lifecycle security management. Release follow-on task orders to continue dashboard services and begin deploying Phase 3 capabilities.

NCPS Investment Cost – Decrease in accordance with acquisition profile.

- NCPS Program decrease of \$35,434:
 - The Intrusion Detection and Prevention change from FY 2017 Annualized CR to FY 2018 President’s Budget is primarily associated with the decrease in Intrusion Prevention system enhancements and traffic aggregation deployment efforts from the prior year.
 - The Core Infrastructure change from FY 2017 Annualized CR to FY 2018 President’s Budget is primarily associated with the decrease in Mission Operating Environment (MOE) hardware and installation costs from the prior year.

The Information Sharing change from FY 2017 Annualized CR to FY 2018 President’s Budget is primarily associated with the decrease in Information Sharing capability deployment efforts from the prior year. As Information Sharing capabilities mature and transition to operations and maintenance, costs will decrease.

**Cybersecurity – PPA
Capital Investments Exhibits**

Capital Investments

Dollars in Thousands

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Continuous Diagnostics and Mitigation	024-000009571	1	Procurement	IT	Yes	\$97,435	\$97,250	\$185,180
National Cybersecurity Protection System	024-000009508	1	Procurement	IT	Yes	\$91,738	\$91,563	\$56,129

Continuous Diagnostics and Mitigation – Investment

Capital Investments Exhibits

Procurement/Acquisition Programs

Continuous Diagnostics and Mitigation (CDM)

Procurement, Construction, and Investments Funding

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Continuous Diagnostics and Mitigation	024-000009571	1	Procurement	IT	Yes	\$97,435	\$97,250	\$185,180

Investment Description

The current threat environment requires a dynamic approach to fortifying federal and other government cyber networks. With Continuous Diagnostics and Mitigation (CDM), .gov systems are being automatically assessed to identify cyber risks and flaws for priority resolution. The CDM program provides cybersecurity tools, integration services, and dashboards to all participating agencies to enable them to improve their respective security postures by reducing the attack surface of their networks.

Since 2012, OMB identified the importance of continually monitoring federal information technology networks by establishing it as one of its 14 cross-agency priority (CAP) goals (in accordance with the [Government Performance and Results Modernization Act](#)). This is expected to be a continuing federal priority. In 2016, OMB released Memorandum 16-04, *Cybersecurity Strategy and Implementation Plan* for the Federal Government, which commits the Department of Homeland Security (DHS) to accelerate the deployment of CDM and EINSTEIN capabilities to all participating federal agencies to enhance detection of cyber vulnerabilities and protection from cyber threats.

In addition, DHS is deploying a dashboard to provide situational awareness on a federal level.

Justification

The request will allow CDM to accelerate the availability and expand the capabilities across the entire civilian Federal domain. Originally conceived as a three-phased program, the ever-changing cybersecurity landscape requires the CDM program to evolve beyond network protections to include data protections. This will significantly enhance Federal civilian agency capabilities to strengthen their ability to prepare for and respond to incident management, as well as protect data through stronger boundary protection and other means.

CDM Phase 1 provides network discovery and endpoint (laptops/desk tops/servers) management tools, allowing the agency to continuously know what software and hardware they have on their network and to understand whether or not those assets are vulnerable and are configured securely. CDM Phase 1 enables Departments and agencies to manage identified assets and properly configure them so they are no longer open to attack. In FY 2018, CDM plans to complete Phase 1 deployment.

CDM Phase 2 provides tools to ensure agency employees do not access information or systems beyond their established privileges, credentials, and training. Agencies will be able to manage user accounts and protect against adversaries from gaining access to critical systems. In FY 2018, CDM plans to integrate and complete Phase 2 deployment of capabilities that will strengthen account management in the Federal civilian workspace.

CDM Phase 3 capability deployment will begin in FY 2018, focusing on boundary protection, managing events, managing and preparing for events and incidents, and strengthening lifecycle security management. CDM Phase 3 will provide capability to Federal civilian Departments and agencies against anomalous activity inside Federal networks and alerting security personnel for expedited remediation. In this case, anomalous activity includes an adversary's attempt to move across a network and access sensitive data.

CDM Phase 4 discovery will begin in FY 2018, developing a government wide acquisition contract to enable multiple funding sources. CDM Phase 4 focuses on protecting data on the network.

FY 2018 will also include continued efforts on Federal and agency dashboards, deploying dashboards at each agency while simultaneously preparing deployment of the Federal Dashboard to receive feeds from the agencies. The CDM Federal and agency dashboards will compile, analyze, and report on the cyber health of the government. The dashboard is comprised of three major sub-elements: 1) Dashboard Development; 2) Dashboard Integration; and 3) Dashboard Proactive Technology Management (PTM).

FY 2018 requested funds, outlined in the table below, will allow CDM to significantly improve the security posture of the Federal civilian .gov networks. By using input from the sensors and agency-level dashboards, officials at each agency will be able to quickly identify which problems to fix first, and empower technical managers to prioritize and mitigate risks. This will ultimately improve the effectiveness and efficiency by which federal networks are secured; build maturity into the continuous monitoring/diagnostics program across the Federal enterprise; develop a federal network infrastructure that is solidly based on secure engineering principles; and transfer risk to where it appropriately belongs within an organization to establish and maintain accountability.

CDM Program (SK)	FY 2018 President's Budget
Phase 1	\$10,543
Phase 2	\$32,000
Phase 3	\$89,618
Phase 4	\$10,000
Dashboard	\$43,019
PC&I Total:	\$185,180

FY 2016 Key Milestone Events (Prior Year)

- Phase 1: System Acceptance Test for first large agency - Achieved April 2016.
- Phase 1: Enhanced agency network visibility by deploying CDM Phase 1 tools to civilian CFO Act agencies.
- Phase 1: Initial Operational Capability (IOC) – Achieved December 2016. Program IOC is defined as when the CDM Program has made available to five participating Federal Civilian Agencies the ability to manage: (1) What is on their networks (Phase One); (2) An Agency Dashboard to receive and display Phase One data feeds; and (3) A Federal Dashboard to receive, aggregate and display summary data received from Agency Dashboards and to transmit to Agencies policy and other requests, as appropriate.
- Phase 2: Awarded two contracts for Phase 2 capabilities available to 65 agencies, including the 23 civilian CFO Act agencies.
- Phase 2: Awarded shared services contract to provide CDM Phases 1 and 2 tools and integration services to 40+ non-CFO Act agencies.
- Phase 3: Defined technical requirements for all Phase 3 capabilities.
- Phase 3: Approved addition of tools to CDM blanket purchase agreements for Phase 3 capabilities, making them available for purchase and deployment.
- Dashboard: User Acceptance Test for agency level dashboard Release 1 - Achieved April 2016.
- Dashboard: Deployed agency dashboards to 11 agencies, enabling near real-time awareness of their cybersecurity posture.
- Dashboard: Deployed first release of Federal dashboard.

FY 2017 Planned Key Milestone Events (Year of Execution)

- Phase 1: Deploy balance of CDM Phase 1 tools to agencies.
- Phase 1: Provide CDM tools via shared services approach to non-CFO Act agencies.
- Phase 2: Provide strong authentication and enable participating agencies to manage user accounts by deploying Phase 2 tools.
- Phase 2: Continue providing CDM shared services to non-CFO Act agencies.
- Phase 3: Finalize acquisition strategy to provide dashboard integration and Phase 3 capabilities to agencies.

- Dashboard: Operational Test and Readiness Review for Federal Dashboard Release 2 – Planned for July 2017.
- Dashboard: Make Federal dashboard available for agency connectivity.
- Dashboard: Connect all Phase 1 tools to agency dashboards.
- Dashboard: Connect agency dashboards to Federal dashboard and begin identifying trends and collecting metrics.
- Dashboard: Develop risk scoring approach to enhance agencies' ability to fix their worst problems first.

FY 2018 Planned Key Milestone Events (Budget year)

- Phase 1: Release follow on task orders to continue dashboard services and Phase 3 capabilities.
- Phase 2: Release follow on task orders to continue dashboard services and Phase 3 capabilities.
- Phase 2: IOC – Planned for September 2018.
- Phase 3: Release follow-on task orders to continue dashboard services and begin deploying Phase 3 capabilities
- Phase 4: Discovery will begin in FY 2018, developing a government wide acquisition contract to enable multiple funding sources.

Overall Investment Funding

	Prior Years	FY 2016	FY 2017	FY 2018
Operations and Support		\$5,149	\$5,139	\$93,780
Procurement, Construction, and Investments		\$97,435	\$97,250	\$185,180
Research and Development		\$0	\$0	\$0
Project Funding	\$577,947	\$97,435	\$97,250	\$185,180
Obligations	\$569,891	\$95,044	\$29,178	
Expenditures	\$393,801	\$32,765	\$312	

Contract Information (Current/Execution Year, Budget Year)

Contract Number	Contractor	Type	Award Date (mo/yr)	Start Date (mo/yr)	End Date (mo/yr)	EVM in Contract	Total Value
HSHQDC15F00050	Knight Point Systems LLC	Interagency Agreement	02/15	02/15	02/18	No	\$1,530
GSQ0014AJ0058	Metrica Team Venture	Contract	03/14	03/14	03/19	Yes	\$47,330
GSQ0015AJ0041	Knowledge Consulting Group	Task Order	02/15	02/15	02/18	No	\$38,160
GSQ0015AJ0052	Booz Hamilton, Inc	Task Order	04/15	04/15	04/18	No	\$49,320
GSQ0015AJ0086	Booz Hamilton, Inc	Task Order	08/15	08/15	08/18	No	\$82,930
GSQ0015AJ0087	HP Enterprise Services, LLC	Task Order	09/15	09/15	08/18	No	\$24,560
GSQ0015AJ0097	Northrop Grumman	Task Order	09/15	09/15	09/18	No	\$59,590
GSQ0016AJ0045	Booz Hamilton, Inc	Task Order	02/16	02/16	02/19	No	\$50,420
GSQ0016AJ0056	Knowledge Consulting Group	Task Order	06/16	06/16	06/19	No	\$85,430
GSQ0017AJ0005	CGI Federal, Inc.	Task Order	11/16	11/16	10/19	No	\$102,470
GSQ0016AJ0087	ManTech Advanced Systems International, Inc.	Task Order	06/16	06/16	06/19	No	\$25,550

Contract Number	Contractor	Type	Award Date (mo/yr)	Start Date (mo/yr)	End Date (mo/yr)	EVM in Contract	Total Value
HSSA0313C5101	JHU/APL	Contract	09/13	09/13	09/18	No	\$24,690
HSHQDC15X00193	NIST	Interagency Agreement	10/15	10/15	09/20	No	\$12,740
HSSA0314X6203	Sandia	Contract	05/16	05/16	04/17	No	\$\$350

Significant Changes to Investment since Prior Year Enacted

In FY 2016, CDM identified significant underreporting of assets by numerous departments and agencies (D/A). As a result, shifts in FY 2017 funding strategy and program schedule occurred in order to cover CDM Phase 1 gaps identified as a result of D/A underreporting of assets. FY 2018 reflects a shift in PC&I funds to O&S in order to appropriately track D/A product maintenance costs.

Since CDM Phase 1 provides departments and agencies the fundamental cybersecurity capabilities and is a building block for future phases. Providing partial coverage is not a feasible solution considering CDM Phase 1’s purpose is to identify what hardware, software, and vulnerabilities exist on an agency’s network, then to measure the “actual state” against the “desired state”, providing the visibility required to prioritize and fix the worst/hazardous problems first. Requested funds are necessary to enhance the deployment of CDM Phase 1 capabilities for the under-reported Department and Agency (D/A) assets since sufficient funding will not exist to support follow-on product costs of those same assets. Products have been purchased, however integration activities cannot be transferred until products are installed, configured, and integrated at the department or agency before they can ultimately be transitioned for operations and maintenance activities. This process takes time and is dependent on internal agency testing, change control boards, etc. For these reasons, products could be transitioned during the second or third year of product life.

Investment Schedule

Description	Design Work		Project Work	
	Initiated	Completed	Initiated	Completed
	FY 2016			
NPPD - CDM - CMaaS Implementation TO2A (p)	06/17/15	06/16/16	06/17/16	06/16/18
NPPD - CDM - CMaaS Implementation TO2B (p)	04/27/15	04/26/16	04/27/16	04/26/18
NPPD - CDM - CMaaS Implementation TO2C (p)	09/21/15	09/20/16	09/21/16	09/20/18
NPPD - CDM - CMaaS Implementation TO2D (p)	09/11/15	09/10/16	09/11/16	09/10/18
NPPD - CDM - CMaaS Implementation TO2E (p)	09/11/15	09/10/16	09/11/16	09/10/18

Description	Design Work		Project Work	
	Initiated	Completed	Initiated	Completed
NPPD - CDM - CMaaS Implementation TO2F (p)	06/29/16			06/28/19
NPPD - CDM - Dashboard (p)			03/03/15	10/31/19
NPPD - CDM - TO PrivMgmt (p)	06/29/16			06/28/18
FY 2017				
NPPD - CDM - CMaaS Implementation TO2A (p)			06/17/16	06/16/18
NPPD - CDM - CMaaS Implementation TO2B (p)			04/27/16	04/26/18
NPPD - CDM - CMaaS Implementation TO2C (p)			09/21/16	09/20/18
NPPD - CDM - CMaaS Implementation TO2D (p)			09/11/16	09/10/18
NPPD - CDM - CMaaS Implementation TO2E (p)				06/28/19
NPPD - CDM - CMaaS Implementation TO2F (p)			03/03/15	10/31/19
NPPD - CDM - Dashboard (p)				
NPPD - CDM - TO PrivMgmt (p)				
FY 2018				
NPPD - CDM - CMaaS Implementation TO2A (p)			06/17/16	06/16/18
NPPD - CDM - CMaaS Implementation TO2B (p)			04/27/16	04/26/18
NPPD - CDM - CMaaS Implementation TO2C (p)			09/21/16	09/20/18
NPPD - CDM - CMaaS Implementation TO2D (p)			09/11/16	09/10/18
NPPD - CDM - CMaaS Implementation TO2E (p)				09/10/18
NPPD - CDM - CMaaS Implementation TO2F (p)			03/03/15	06/28/19
NPPD - CDM - Dashboard (p)				10/31/19
NPPD - CDM - TO PrivMgmt (p)	06/29/16			06/28/18

National Cybersecurity Protection System – Investment

Capital Investments Exhibits

Procurement/Acquisition Programs

National Cybersecurity Protection System (NCPS)

Procurement, Construction, and Investments Funding

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
National Cybersecurity Protection System	024-000009508	1	Procurement	IT	Yes	\$91,738	\$91,563	\$56,129

Investment Description

The National Cybersecurity Protection System (NCPS), operationally known as EINSTEIN is an integral part of the cybersecurity community, providing near real-time protection and information to federal civilian Departments and Agencies; cyber centers; and other federal, state and local authorities. NCPS consists of the hardware, software, supporting processes, training, and services being developed and acquired in direct support of the Department of Homeland Security’s mission requirements delineated in the Comprehensive National Cybersecurity Initiative (CNCI) and mandated in National Security Presidential Directives 54 (NSPD-54) / Homeland Security Presidential Directive 23 (HSPD-23). NCPS provides a wide range of cybersecurity capabilities for the .gov domain: intrusion detection, intrusion prevention, advanced cyber analytics, information sharing, and core infrastructure using classified and unclassified information.

Justification

The NCPS Program enhances the protection of Federal civilian department and agency IT infrastructure from cyber threats through the design, development, deployment, and sustainment of EINSTEIN. NCPS is an integrated system delivering intrusion detection, advanced analytics, intrusion prevention, and information sharing capabilities that combat and mitigate cyber threats to the Federal executive branch information and networks.

The NCPS major acquisition program is an integral part of the cyber fabric, providing near real time protection and information for Federal, State, and local authorities. NCPS consists of the hardware, software, supporting processes, training, and services being developed and acquired to support the Department’s mission requirements as delineated in the CNCI and mandated in NSPD-54/HSPD-23.

In FY 2009, EINSTEIN 2 began deployment; EINSTEIN 2 meticulously collects network flow traffic to and from participating Federal executive departments' and agencies networks, and provides an intrusion detection capability that alerts when a pre-defined specific cyber threat is detected. In FY 2014, EINSTEIN 3 Accelerated (E3A) began deployment; E3A acts on suspected malicious traffic by deploying countermeasures to include e-mail and domain name server traffic preventing harm to protected agencies' networks. EINSTEIN 2 and E3A network intrusion detection capability uses a set of custom signatures derived from numerous sources. When a signature alerts on a known or suspected cyber threat, E3A will act on that threat to stop malicious traffic and prevent harm to the intended targets.

This FY18 investment would allow NCPS to continue to build on already deployed capabilities and expand access to DHS threat information and analysis. NCPS would enhance the sensor platform and integrate non-signature based capabilities. Specifically in the Analytics capability set, NCPS would improve the ability to prioritize cyber risks, automatically triage incidents, enrich indicators automatically, and automate response actions to protect D/As and other stakeholders. NCPS would continue to develop and deploy information sharing capabilities that would focus on rapid and machine-to-machine sharing of incidents, indicators, and malware samples. NCPS follows an incremental system development approach, developing and releasing capabilities in "blocks." They have successfully released Blocks 2.0 and 2.1 and are developing Blocks 2.2 and 3.0. Blocks 2.2 goal to provide information sharing capabilities in a secure environment for sharing cybersecurity information, at all classification levels, with a wide range of security operations and information sharing centers across federal, state/local/tribal, private, and international boundaries. Blocks 3.0 goal to provide an active intrusion prevention capability that conducts threat-based decision making on network traffic entering or leaving the Federal Executive Branch civilian networks and disables attempted intrusions before harm is done; Top Secret Mission Operating Environment (MOE) at NCPS Operations and Data Centers; classified and unclassified signatures and countermeasures; and, back-end data storage and data processing capabilities located at DHS Data Centers.

FY 2016 Key Milestone Events (Prior Year)

- All Chief Financial Officer (CFO) Act agencies have deployed at least one of the E3A intrusion prevention countermeasures (DNS Sinkholing and/or Email Filtering). Currently, 217 federal agencies are participating in E3A on at least one countermeasure, approximately 93% of the user population. For comparison, E3A coverage was approximately 38% prior to the passage of the Cybersecurity Act of 2015, which required D/As to implement E3A.
- Deployed enhancements to Automated Indicator Sharing (AIS) in April 2016 to meet CISA 2015 legislation requirements. Using AIS, an average of 45,000 indicators are shared per month with federal and non-federal entities.

FY 2017 Planned Key Milestone Events (Year of Execution)

- Completed the migration of the US-CERT Portal to DHS Homeland Security Information Network (HSIN) in December 2016 and rebranded the portal the NCCIC Portal.

- Increased the breadth of threat data pulled into NCPS and the speed by which that information is correlated with Agency data.

FY 2018 Planned Key Milestone Events (Budget year)

- NCPS Block 2.2/Information Sharing ADE-2C(Acquisition Review Board/Acquisition Decision Event)
- NCPS Block 3.0/E3A ADE-3

Overall Investment Funding

	Prior Years	FY 2016	FY 2017	FY 2018
Operations and Support		\$356,261	\$366,752	\$341,103
Procurement, Construction, and Investments		\$91,738	\$91,564	\$56,129
Research and Development		-	-	-
Project Funding	\$1,878,700	\$91,738	\$91,564	\$56,129
Obligations	\$1,704,971	\$69,904	-	
Expenditures	\$1,607,471	\$55,492	-	

Updated with overall prior year numbers. With the change in CAS PC&I has not been broken out prior to FY16.

Contract Information (Current/Execution Year, Budget Year)

Contract Number	Contractor	Type	Award Date (mo/yr)	Start Date (mo/yr)	End Date (mo/yr)	EVM in Contract	Total Value
HSSA0115C1102	Century Link	Fixed Firm Price	08/15	08/15	02/20	No	\$8,410
HSSA0116J1606	Century Link	Fixed Firm Price	03/16	03/16	03/19	No	\$68,111
HSSA0117C1107	General Dynamics	Cost Plus Fixed Fee	01/17	01/17	07/18	No	\$61,092
HSSA0115C1101	General Dynamics	Cost Plus Fixed Fee	07/15	07/15	01/17	No	\$52,590
HSSA0116X2203	Sandia National Labs	Cost Reimbursable	08/16	08/16	08/20	No	\$91,154
HSSA0115X2203	SEI-CMU	Cost Reimbursable	09/15	09/15	08/20	No	\$68,632
HSSA0113C1102	Vencore [formerly SI Organization]	Cost Plus Fixed Fee	09/13	09/13	09/18	No	\$158,740

Significant Changes to Investment since Prior Year Enacted

N/A

Investment Schedule

Description	Design Work		Project Work	
	Initiated	Completed	Initiated	Completed
FY 2016				
NPPD - NCPS - NCPS Block 2.2 (p)			10/01/15	09/30/19
NPPD - NCPS - NCPS Block 3.0 (p)			10/01/15	12/31/18
NPPD - NCPS - NCPS Maintenance (p)			10/01/15	09/30/22
FY 2017				
NPPD - NCPS - NCPS Block 2.2 (p)			10/01/16	03/30/19
NPPD - NCPS - NCPS Block 3.0 (p)			10/01/16	12/31/18
NPPD - NCPS - NCPS Maintenance (p)			10/01/16	09/30/22
FY 2018				
NPPD - NCPS - NCPS Block 2.2 (p)			10/01/17	09/30/19
NPPD - NCPS - NCPS Block 3.0 (p)			10/01/17	12/31/18
NPPD - NCPS - NCPS Maintenance (p)			10/01/17	09/30/22

*Emergency Communications – PPA***Budget Comparison and Adjustments****Comparison of Budget Authority and Request***Dollars in Thousands*

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Next Generation Networks Priority Services	\$78,550	\$78,401	\$48,905	(\$29,496)
Total	\$78,550	\$78,401	\$48,905	(\$29,496)
Discretionary - Appropriation	\$78,550	\$78,401	\$48,905	(\$29,496)

NPPD requests \$48.9 million for the Emergency Communications Preparedness PPA for planning and acquisition purposes.

This request will fund the Next Generation Networks Priority Services (NGN-PS) program, which provides specialized modeling and analysis to predict and mitigate the effect of communications failures during times of crisis through the development and implementation of NGN - PS Program. Through these analyses, it provides critical risk assessments for the Communications sector during response to man-made or natural disasters, in addition to assisting restoration and recovery efforts.

NGN-PS ensures the continuity of priority communications during an emergency through the continuation of NS/EP priority services currently provided via commercial networks. As major telecommunication carriers replace their current circuit-switched infrastructure with Internet Protocol (IP)-based infrastructure, NGN-PS upgrades will ensure new network infrastructures are capable to accommodate the more than 450,000 authorized users with the ability to communicate during crises. When deployed, NGN-PS technologies will provide all levels of government with priority communication capabilities over robust and diverse nationwide communications networks at a fraction of the cost required to build and maintain a government-owned system.

NGN-PS is a multi-phase, multi-increment, technology insertion that will ultimately deliver priority voice, and data communication services. Phase 1, Increment 1 addresses the transition of legacy, priority voice capabilities in the commercial carriers' long distance core networks. Phase 1, Increment 2 works with major commercial telecommunications carriers as they transition to IP-based infrastructures to ensure continuity of NS/EP priority service. Phase 1, Increment 3 is required for Government Emergency Telecommunications Service (GETS) and Special Routing Arrangement Service (SRAS) portion of the network that supports priority at the local exchange carrier (LEC). Phase 2 and Phase 3 will priority over video and data over IP wireless networks.

Emergency Communications – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$78,550		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$78,550	\$78,401	\$48,905
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$78,550	\$78,401	\$48,905
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$78,550	\$78,401	\$48,905
Obligations (Actual/Projections/Estimates)	\$77,764	\$58,801	\$36,679
Personnel: Positions and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

Emergency Communications – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$78,550
FY 2016 Revised Enacted	-	-	\$78,550
FY 2017 Annualized CR	-	-	\$78,401
FY 2018 Base Budget	-	-	\$5,980
NGN-PS Transfer to O&S to Align with CAS Guidance	-	-	(\$5,980)
Total Transfers	-	-	(\$5,980)
Total Adjustments-to-Base	-	-	(\$5,980)
Next Generation Networks Priority Services Investment	-	-	\$48,905
Total Investment Elements	-	-	\$48,905
FY 2018 Request	-	-	\$48,905
FY 2017 TO FY 2018 Change	-	-	(\$29,496)

Emergency Communications – PPA**Non Pay Budget Exhibits****Non Pay by Object Class***Dollars in Thousands*

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
23.1 Rental Payments to GSA	\$2,693	\$2,693	\$1,680	(\$1,013)
25.1 Advisory and Assistance Services	\$14,961	\$14,961	\$9,332	(\$5,629)
25.2 Other Services from Non-Federal Sources	\$2	\$2	\$1	(\$1)
25.3 Other Goods and Services from Federal Sources	\$59,831	\$59,682	\$37,228	(\$22,454)
25.7 Operation and Maintenance of Equipment	\$1,059	\$1,059	\$662	(\$397)
31.0 Equipment	\$4	\$4	\$2	(\$2)
Total - Non Pay Object Classes	\$78,550	\$78,401	\$48,905	(\$29,496)

Non Pay Cost Drivers

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Next Generation Networks Priority Services (NGN-PS)	\$78,550	\$78,401	\$48,905	(\$29,496)
Total – Non Pay Cost Drivers	\$78,550	\$78,401	\$48,905	(\$29,496)

NARRATIVE EXPLANATION OF CHANGES

Next Generation Networks Priority Services (NGN-PS) - Decrease in accordance with acquisition profile

- Directed by NPPD to move \$5.88 million from PC&I to O&S for WCF/SS.

**Emergency Communications – PPA
Capital Investments Exhibits**

Capital Investments

Dollars in Thousands

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Next Generation Networks Priority Services	024-000009540	1	Procurement	IT	Yes	\$78,550	\$78,401	\$48,905

Next Generation Network Priority Services – Investment

Capital Investments Exhibits

Procurement/Acquisition Programs

Next Generation Network – Priority Services (NGN-PS)

Procurement, Construction, and Investments Funding

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Next Generation Networks Priority Services	024-000009540	1	Procurement	IT	Yes	\$78,550	\$78,401	\$48,905

Investment Description

Next Generation Network Priority Services (NGN-PS) Program responds to Executive Order 13618, which directs the Secretary of DHS to oversee the development, testing, implementation, and sustainment of National Security/Emergency Preparedness (NS/EP) communications, including: communications that support Continuity of Government; Federal, State, local, territorial, and tribal emergency preparedness and response communications. In Commercial Service Provider’s circuit switched networks, the legacy Priority Telecommunication Services provides priority access for National Security/Emergency Preparedness users, however, this capability will be lost as the Service Provider’s replace aging networks with packet-switched networks or Internet Protocol based next generation networks. These Internet Protocol based next generation networks will not support the legacy Priority Telecommunication Services routing protocols leaving an operational gap for priority access for Next Generation Network Priority Services users. Next Generation Network Priority Services addresses the capability gap by providing highly survivable, commercial telecomm assets to provide the Government with priority communications capabilities over robust and diverse nationwide networks at a fraction of the cost required to build a Government-owned system.

Justification

Next Generation Networks Priority Services (NGN-PS) ensures the continuity of priority telecommunications during an emergency through the continuation of NS/EP priority services currently provided via commercial networks. As major commercial telecommunications carriers replace their current circuit-switched infrastructure with Internet Protocol (IP)-based infrastructure, NGN-PS upgrades will ensure new network infrastructures are capable to accommodate the more than 450,000 authorized users with the ability to communicate during crises. When deployed, NGN-PS technologies will provide all levels of government with priority

communications capabilities over robust and diverse nationwide communications networks at a fraction of the cost required to build and maintain a government-owned system.

NGN-PS is a multi-phase, multi-increment, technology insertion that will ultimately deliver priority voice, video, and data communication services. Phase 1, Increment 1 addresses the transition of legacy, priority voice capabilities in the commercial carriers' long distance core networks. Phase 1, Increment 2 works with major commercial telecommunications carriers as they transition to IP-based infrastructures to ensure the continuity of NS/EP priority service. Phase 1, Increment 3 is required for the Government Emergency Telecommunications Service (GETS) and Special Routing Arrangement Service (SRAS) portion of the network that supports priority at the local exchange carrier (LEC). Phase 2 and Phase 3 will priority over video and data over IP wireless networks.

In FY 2018, the NGN-PS program will continue evolving outdated PTS program circuit-based priority features and functions, and phasing in IP-based packet switching priority features.

Public telecommunications networks complete calls through three different elements. The first element is long distance networks that interconnect local and regional carriers, the second is wireless services provided by cellular carriers, and the third is landline services provided by local carriers. Long distance and wireless services have been funded in previous RAP submissions and need to continue to complete the update and provide end-to-end priority.

In FY 2018, NGN-PS will complete operational test and evaluation of these core network capabilities to achieve FOC on the carriers' core VoIP long distance backbone networks (Increment 1).

In FY 2015, NGN-PS began work with three of the cellular carriers to develop plans for implementing priority services for national security and emergency preparedness users in their new 4G networks. FY 2018 funding provides for continued carrier design, development, and certification of WPS priority features on their 4G networks to prevent an NS/EP telecommunications shortfall as the carriers start to decommission their 2G networks supporting WPS. FY 2018 funding will continue to implement the end-to-end priority service over the new 4G technologies to ensure priority services are available as carriers' transition to IP only networks. Additionally, these funds will support the addition of a fourth service provider to eliminate coverage gaps in the nationwide footprint.

It is critical that NGN track carriers' conversion to IP on cellular networks to ensure priority services is always available for national security and emergency preparedness users. Cellular carriers began conversion to IP voice in 2014 and will begin to shut down their legacy networks beginning in 2016. Without the required funding, the program will not have priority cellular voice and will not meet the requirements for national security/emergency preparedness.

FY 2016 Key Milestone Events (Prior Year)

- Long Distance priority communications for NS/EP users can now occur over Internet Protocol based carrier networks and legacy circuit switched networks.
- Completed prototype for priority over wireless commercial networks.

FY 2017 Planned Key Milestone Events (Year of Execution)

- Initial Operational Capability on Wireless Priority Service largest commercial carrier.
- Conduct Network-to-Network interoperability test for priority services on long distance carriers.

FY 2018 Planned Key Milestone Events (Budget year)

- Provide end-to-end Wireless Priority Service on largest carrier.
- Provide Full Operational Capability on all long distance carriers.

Overall Investment Funding

	Prior Years	FY 2016	FY 2017	FY 2018
Operations and Support		\$1,824	\$1,821	\$7,636
Procurement, Construction, and Investments		\$78,550	\$78,401	\$48,905
Research and Development		-	-	-
Project Funding	\$206,530	\$78,550	\$78,401	\$48,905
Obligations	\$188,516	\$78,550	\$4,937	
Expenditures	\$174,005	\$20,397	\$1,081	

Contract Information (Current/Execution Year, Budget Year)

Contract Number	Contractor	Type	Award Date (mo/yr)	Start Date (mo/yr)	End Date (mo/yr)	EVM in Contract	Total Value
HC101314C0003	AT&T	Firm Fixed Price	08/14	07/14	03/24	N/A	\$210,870
HC101314C0001	Sprint	Firm Fixed Price	03/14	03/14	03/24	N/A	\$161,130
HC101314C0002	Verizon	Firm Fixed Price	05/14	05/14	03/24	N/A	\$ 210,472
HSHQDC15C00059	Leidos	Combination (two or more)	07/15	07/15	04/17	N/A	\$8,233
HSHQDC15X00007	JITC (DoD)	Cost No Fee	03/15	03/15	08/17	No	\$2,740

Significant Changes to Investment since Prior Year Enacted

N/A

Investment Schedule

Description	Design Work		Project Work	
	Initiated	Completed	Initiated	Completed
FY 2016				
Common	10/01/06	09/30/24		
Phase 1 Increment 1	06/01/08	09/30/20		
Phase 1 Increment 2	10/01/15	09/30/24		
SP1	04/01/14	09/30/24		
SP2	06/01/14	09/30/24		
SP3	09/01/14	09/30/24		
Wireless Capability	10/01/14	09/30/15		
FY 2017				
Common	10/01/06	09/30/24		
Phase 1 Increment 1	06/01/08	09/30/20		
Phase 1 Increment 2	10/01/15	09/30/24		
SP1	04/01/14	09/30/24		
SP2	06/01/14	09/30/24		
SP3	09/01/14	09/30/24		
FY 2018				
Common	10/01/06	09/30/24		
Phase 1 Increment 1	06/01/08	09/30/20		
Phase 1 Increment 2	10/01/15	09/30/24		
SP1	04/01/14	09/30/24		
SP2	06/01/14	09/30/24		
SP3	09/01/14	09/30/24		

*Biometric Identity Management PPA***Budget Comparison and Adjustments****Comparison of Budget Authority and Request***Dollars in Thousands*

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
IDENT/Homeland Advanced Recognition Technology	\$65,800	\$65,675	\$40,100	(\$25,575)
Total	\$65,800	\$65,675	\$40,100	(\$25,575)
Discretionary - Appropriation	\$65,800	\$65,675	\$40,100	(\$25,575)

NPPD is requesting \$40.1 million for the Biometric Identity Management PPA for Homeland Advanced Recognition Technology (HART). The \$40.1 million request is for HART Increment 3.

The Office of Biometric Identity Management (OBIM) mission is to provide enduring, enterprise-level identity services to the Department of Homeland Security (DHS) and its mission partners that advance informed decision making by producing accurate, timely and high assurance biometric identity information and analysis with associated biographic data. OBIM identifies individuals with certainty, in a timely manner and broadens the scope of thousands of known or suspected terrorists. Under NPPD's guidance, OBIM will sustain operations of core biometric identity management services, while planning for additional biometrics-based identity management capabilities and new customers.

OBIM operates and maintains the Automated Biometric Identification System (IDENT) and provides expert identity services by matching, storing, comparing, analyzing, and sharing biometric data. OBIM provides rapid, accurate, and secure identification information to Federal Emergency Management Agency (FEMA), Transportation Security Administration (TSA), U.S. Citizenship and Immigration Services (USCIS), U.S. Coast Guard (USCG), U.S. Customs and Border Protection (CBP), U.S. Immigration and Customs Enforcement (ICE), U.S. Office of Personnel Management, U.S. Secret Service, Department of Defense (DoD), Department of Justice (DOJ), Department of State (DOS), the Intelligence Community (IC), State, local, tribal, and territorial law enforcement, and foreign partners. These services provide accurate and actionable information to customers who determine visa issuance and admissibility into the United States, establish eligibility for immigration benefits, conduct background checks, issue credentials, take law enforcement actions with potential homeland security implications, verify identity of persons associated with matters of national security, conduct intelligence and trend analysis, and grant access to sensitive facilities.

As an enterprise-level biometric identity service provider, OBIM has cross-cutting responsibility to serve and coordinate with DHS components and other Federal agencies. To ensure an enduring working relationship with its customers, OBIM utilizes the Executive Stakeholder Board to coordinate and collaborate with customers.

Biometric Identity Management – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$65,800		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$65,800	\$65,675	\$40,100
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	\$65,800	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$65,800	\$131,475	\$40,100
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$65,800	\$131,475	\$40,100
Obligations (Actual/Projections/Estimates)	-	\$131,343	\$40,059
Personnel: Positions and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

HART does not have any obligation prior to FY 2017 as it is currently in the source selection phase. NPPD OBIM expects HART Increments 1 and 2 to be awarded in FY 2017.

**Biometric Identity Management – PPA
Summary of Budget Changes**

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$65,800
FY 2016 Revised Enacted	-	-	\$65,800
FY 2017 Annualized CR	-	-	\$65,675
FY 2018 Base Budget	-	-	-
Homeland Advanced Recognition Technology Investment	-	-	\$40,100
Total Investment Elements	-	-	\$40,100
FY 2018 Request	-	-	\$40,100
FY 2017 TO FY 2018 Change	-	-	(\$25,575)

**Biometric Identity Management – PPA
Non Pay Budget Exhibits**

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
31.0 Equipment	\$65,800	\$65,675	\$40,100	(\$25,575)
Total - Non Pay Object Classes	\$65,800	\$65,675	\$40,100	(\$25,575)

Non Pay Cost Drivers

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
HART Investment Cost	\$65,800	\$65,675	\$40,100	(\$25,575)
Total – Non Pay Cost Drivers	\$65,800	\$65,675	\$40,100	(\$25,575)

NARRATIVE EXPLANATION OF CHANGES

HART Investment Cost - Decrease in accordance with the acquisition plan.

**Biometric Identity Management – PPA
Capital Investments Exhibits**

Capital Investments
Dollars in Thousands

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Homeland Advanced Recognition Technology (HART)	024-000009560	1	Procurement	IT	Yes	\$65,800	\$65,675	\$40,100

OBIM will operate and maintain the Homeland Advanced Recognition Technology (HART), which will replace the legacy Automated Biometric Identity System (IDENT) system that provides expert identity services by matching, storing, comparing, analyzing, and sharing biometric data. OBIM provides rapid, accurate, and secure identification information to Federal Emergency Management Agency (FEMA), Transportation Security Administration (TSA), U.S. Citizenship and Immigration Services (USCIS), U.S. Coast Guard (USCG), U.S. Customs and Border Protection (CBP), U.S. Immigration and Customs Enforcement (ICE), U.S. Office of Personnel Management, U.S. Secret Service, Department of Defense (DoD), Department of Justice (DOJ), Department of State (DOS), the Intelligence Community (IC), State, local, tribal, and territorial law enforcement, and foreign partners. These services provide accurate and actionable information to customers who determine visa issuance and admissibility into the United States, establish eligibility for immigration benefits, conduct background checks, issue credentials, take law enforcement actions with potential homeland security implications, verify identity of persons associated with matters of national security, conduct intelligence and trend analysis, and grant access to sensitive facilities.

*IDENT/Homeland Advanced Recognition Technology – PPA Level II***Budget Comparison and Adjustments****Comparison of Budget Authority and Request***Dollars in Thousands*

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Homeland Advanced Recognition Technology (HART)	\$65,800	\$65,675	\$40,100	(\$25,575)
Total	\$65,800	\$65,675	\$40,100	(\$25,575)
Discretionary - Appropriation	\$65,800	\$65,675	\$40,100	(\$25,575)

IDENT/Homeland Advanced Recognition Technology – PPA Level II
Budget Authority and Obligations
Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$65,800		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$65,800	\$65,675	\$40,100
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	\$65,800	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$65,800	\$131,475	\$40,100
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$65,800	\$131,475	\$40,100
Obligations (Actual/Projections/Estimates)	-	\$131,343	\$40,059
Personnel: Positions and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

IDENT/Homeland Advanced Recognition Technology – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$65,800
FY 2016 Revised Enacted	-	-	\$65,800
FY 2017 Annualized CR	-	-	\$65,675
FY 2018 Base Budget	-	-	-
Homeland Advanced Recognition Technology Investment	-	-	\$40,100
Total Investment Elements	-	-	\$40,100
FY 2018 Request	-	-	\$40,100
FY 2017 TO FY 2018 Change	-	-	(\$25,575)

NPPD requests \$40.1 million for the IDENT/HART Increment 3 PPA level II.

With this request, HART will address new and emergent capability gaps to meet baseline and new customer mission needs. These gaps include the inability to meet capacity and customer mission requirements, increased accuracy of biometric matching results, increased IT security and privacy protections, greater interoperability, and improved performance and availability.

HART will also address the mission failure risk of the legacy IDENT system, operations and maintenance cost inefficiencies, improve detection and derogatory information matching, and provide multimodal biometric services. HART data and analysis will secure and protect the U.S. against terrorism, enable data integration and analysis, support and strengthen responsive immigration processing system and law enforcement, minimize disruptions to the trade and travel system, and support a smarter, stronger border by enhancing our security infrastructure through support of new technologies.

IDENT/Homeland Advanced Recognition Technology – PPA Level II

Non Pay Budget Exhibits

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
31.0 Equipment	\$65,800	\$65,675	\$40,100	(\$25,575)
Total - Non Pay Object Classes	\$65,800	\$65,675	\$40,100	(\$25,575)

Non Pay Cost Drivers

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
HART Investment Cost	\$65,800	\$65,657	\$40,100	(\$25,575)
Total – Non Pay Cost Drivers	\$65,800	\$65,675	\$40,100	(\$25,575)

NARRATIVE EXPLANATION OF CHANGES

Hart Investment Cost – Decrease in accordance with acquisition plan.

IDENT/Homeland Advanced Recognition Technology – PPA Level II
Capital Investments Exhibits

Capital Investments
Dollars in Thousands

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Homeland Advanced Recognition Technology (HART)	024-000009560	1	Procurement	IT	Yes	\$65,800	\$65,675	\$40,100

Homeland Advanced Recognition Technology (HART) – Investment

Capital Investments Exhibits

Procurement/Acquisition Programs

Homeland Advanced Recognition Technology (HART)

Procurement, Construction, and Investments Funding

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Homeland Advanced Recognition Technology (HART)	024-000009560	1	Procurement	IT	Yes	\$65,800	\$65,675	\$40,100

Investment Description

The HART system replaces the legacy Automated Biometric Identity System (IDENT) system with improved, efficient and more cost effective biometric identity services capabilities. The value to the Department of Homeland Security (DHS) of having a single authoritative biometric system, used across all DHS components and missions, is proven in both the effectiveness of the identifications that result from data sharing, and in the efficiency of having one system instead of many. HART will, at Full Operational Capability (FOC), support 250 million unique identities and 720,000 daily fingerprint transactions. In the future, HART will provide multi-modal capabilities (e.g., iris-scanning and facial recognition modalities in addition to fingerprints), provide operational flexibility, and increased accuracy.

Justification

The \$40.1 million request is to fund HART Increment 3. HART will address new and emergent capability gaps to meet baseline and new customer mission needs. These gaps include the inability to meet capacity and customer mission requirements, increased accuracy of biometric matching results, increased IT security and privacy protections, greater interoperability, and improved performance and availability.

HART will also address the mission failure risk of the legacy IDENT system, operations and maintenance cost inefficiencies, improve detection and derogatory information matching, and provide multimodal biometric services. HART data and analysis will secure and protect the U.S. against terrorism, enable data integration and analysis, support and strengthen responsive immigration processing system and law enforcement, minimize disruptions to the trade and travel system, and support a smarter, stronger border by enhancing our security infrastructure through support of new technologies.

The Office of Biometric Identity Management (OBIM) will develop HART in four increments:

1. Core Foundation: re-architect the core system providing foundational capabilities necessary to operate HART, optimizing the system for performance, and addressing rising sustainment costs.
2. Full-scale Multi-Modal Biometric Matching plus Fusion and Full Performance Test Environment: system will be scalable to store or match other modalities quickly—depending upon mission need—without the need for major development.
3. Web Portal and Person Centric Services: provide customers with a custom-built web system with read-only access for specific pieces of biometric and biographic information.
4. Candidate Verification Tool (CVT) and Analytics and Reporting: replacement for current CVT and improved support for Biometric Support Center examiners- multimodal biometric analyses and decision making.

FY 2016 Key Milestone Events (Prior Year)

- Acquisition Decision Event (ADE) 2A approval on April 25, 2016
- Acquisition Decision Event (ADE) 2B approval on September 28, 2016

FY 2017 Planned Key Milestone Events (Year of Execution)

- Award Increments 1 and 2 contract
- Begin Increment 1 Implementation

FY 2018 Planned Key Milestone Events (Budget year)

- Initial Operating Capability
- Increment 1 ADE-2C

Overall Investment Funding

	Prior Years	FY 2016	FY 2017	FY 2018
Operations and Support		-	-	-
Procurement, Construction, and Investments		\$65,800	\$65,675	\$40,100
Research and Development		-	-	-
Project Funding	-	\$65,800	\$65,675	\$40,100
Obligations	-	-	-	
Expenditures	-	-	-	

Contract Information (Current/Execution Year, Budget Year)

Contract Number	Contractor	Type	Award Date (mo/yr)	Start Date (mo/yr)	End Date (mo/yr)	EVM in Contract	Total Value
TBDA							

Significant Changes to Investment since Prior Year Enacted

FY 2017 -Award HART Increment 1 and 2 contracts. Implement Increment 1.

Subcontractors: Contracts have not been awarded.

Investment Schedule

Description	Design Work		Project Work	
	Initiated	Completed	Initiated	Completed
	FY 2016			
HART Increment 1 and 2	10/15	09/16		
	FY 2017			
TBD				
	FY 2018			
TBD				

HART is currently in the source selection phase and NPPD OBIM expect to award Increment 1 and 2 contracts in FY17. The FY 2018 request of \$40.1 million is for HART Increment 3

Integrated Operations Assets and Infrastructure -PPA

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Modeling Capability Transition Environment	-	-	\$500	\$500
Total	-	-	\$500	\$500
Discretionary - Appropriation	-	-	\$500	\$500

NPPD is requesting \$0.5 million for the Integrated Operations Assets and Infrastructure PPA.

Integrated Operations Assets and Infrastructure ensures domain awareness through the sustainment of command and control, coordination, information sharing, and situational awareness in support of multiple mission programs. This program includes various organizations that carry out functions such as procurement actions in relation to consequence analysis, decision support and modeling, 24x7 critical infrastructure watch operations, emergency preparedness, stakeholder engagement, external affairs, privacy, and strategic planning.

MCTE is an IT environment that analysts can integrate, refine and run analytical models, run simulations, and perform geospatial and calculated analyses in a risk analytics workflow system, allowing analysts to systematically integrate risk analytical models to create an automated workflow system for infrastructure modeling. It will also allow for the deployment of an automated workflow system in an environment that OCIA performers can access and run their own risk analysis within an automated workflow system. This capability will allow OCIA to perform a wide variety of risk analysis while providing a single integrated environment, reduced analytical time frames, and providing more accurate model results.

Integrated Operations Assets and Infrastructure – PPA
Budget Authority and Obligations
Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	-		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	-	-	\$500
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	-	-	\$500
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	-	-	\$500
Obligations (Actual/Projections/Estimates)	-	-	-
Personnel: Positions and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

Integrated Operations Assets and Infrastructure – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	-
FY 2016 Revised Enacted	-	-	-
FY 2017 Annualized CR	-	-	-
FY 2018 Base Budget	-	-	-
Transfer of MCTE from O&S to PC&I Aligning Budget with CAS Policy	-	-	\$500
Total Transfers	-	-	\$500
Total Adjustments-to-Base	-	-	\$500
FY 2018 Current Services	-	-	\$500
FY 2018 Request	-	-	\$500
FY 2017 TO FY 2018 Change	-	-	\$500

NPPD requests \$0.5 million for the Integrated Operations Assets and Infrastructure PPA for the implementation of Modeling Capabilities Transition Environment (MCTE). This is an IT environment that analysts can integrate, refine and run analytical models, run simulations, and perform geospatial and calculated analyses in a risk analytics workflow system, allowing analysts to systematically integrate risk analytical models to create an automated workflow system for infrastructure modeling. It will also allow for the deployment of an automated workflow system in an environment that OCIA performers can access and run their own risk analysis within an automated workflow system. This capability will allow OCIA to perform a wide variety of risk analysis while providing a single integrated environment, reduced analytical time frames, and providing more accurate model results.

Integrated Operations Assets and Infrastructure – PPA

Non Pay Budget Exhibits

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
31.0 Equipment	-	-	\$500	\$500
Total - Non Pay Object Classes	-	-	\$500	\$500

Non Pay Cost Drivers

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
MCTE Investment Cost	\$0	\$0	\$500	\$500
Total – Non Pay Cost Drivers	\$0	\$0	\$500	\$500

NARRATIVE EXPLANATION OF CHANGES

MCTE Investment Cost – Increase in accordance with the acquisition plan.

Integrated Operations Assets and Infrastructure – PPA
Capital Investments Exhibits

Capital Investments
Dollars in Thousands

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Modeling Capability Transition Environment	Not assigned at this	Non-Major	Procurement	IT	No	-	-	\$500

Modeling Capability Transition Environment (MCTE) – Investment

Capital Investments Exhibits

Procurement/Acquisition Programs

Modeling Capability Transition Environment (MCTE)

Procurement, Construction, and Investments Funding

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Modeling Capability Transition Environment	Not assigned at this	Non-Major	Procurement	IT	No	-	-	\$500

Investment Description

Modeling Capability Transition Environment (MCTE) is an IT environment that analysts can integrate, refine and run analytical models, run simulations, and perform geospatial and calculated analyses in a risk analytics workflow system, allowing analysts to systematically integrate risk analytical models to create an automated workflow system for infrastructure modeling. It will also allow for the deployment of an automated workflow system in an environment that OCIA performers can access and run their own risk analysis within an automated workflow system. This capability will allow OCIA to perform a wide variety of risk analysis while providing a single integrated environment, reduced analytical time frames, and providing more accurate model results.

Justification

OCIA requires an accessible IT environment that analyst can integrate, refine and run analytical models, run simulations, and perform geospatial and calculated analyses in a risk analytics workflow system.

OCIA requires greater access for risk analysts to leverage analytical models, thereby reducing the reliance on higher cost, National Infrastructure Simulation Center (NISAC) national laboratory subject matter experts to run models.

OCIA will be able to reduce analytical timeframes, producing more timely information for decision makers and other OCIA stakeholders.

This capability will allow OCIA to perform a wide variety of risk analysis such as: estimate the pollution affected by power outages during a hurricane; estimate the recovery time from power outages per region; estimate the economic impact of region during a flood; estimate the disruption to the national transportation system during a national event.

FY 2016 Key Milestone Events (Prior Year)

- N/A
- N/A

FY 2017 Planned Key Milestone Events (Year of Execution)

- Acquisition Decision Event 2A Decision Event
- Develop an alternative analysis for technical approaches to meet the requirements

FY 2018 Planned Key Milestone Events (Budget year)

- Acquisition Decision Event 2C Decision Event
- Initial Operating Capability (IOC)
- Program Release 2

Overall Investment Funding

	Prior Years	FY 2016	FY 2017	FY 2018
Operations and Support		-	-\$500	-
Procurement, Construction, and Investments		-	-	\$500
Research and Development		-	-	-
Project Funding	-	-	-	\$500
Obligations	-	-	-	
Expenditures	-	-	-	

Contract Information (Current/Execution Year, Budget Year)

Contract Number	Contractor	Type	Award Date (mo/yr)	Start Date (mo/yr)	End Date (mo/yr)	EVM in Contract	Total Value
TBD							

Significant Changes to Investment since Prior Year Enacted

Contracts have not been awarded.

Investment Schedule

Description	Design Work		Project Work	
	Initiated	Completed	Initiated	Completed
FY 2016				
JRB Approval of Program			05/01/16	07/01/16
FY 2017				
ADE 1 Stage Gate Approval			07/01/16	03/01/17
ADE 2A/2B Stage Gate Approval			04/01/17	09/01/17
FY 2018				
Procurement of Fed RAMP IT Architecture and Labor			10/01/17	02/01/18
Procurement and Licenses			10/01/17	02/01/18
Initial Operating Capability			02/01/18	04/01/18

Severable Items

Element/Item	Prior Years	FY 2016	FY 2017	FY 2018
Licenses				\$200
FedRAMP IT Infrastructure				\$200
Labor				\$200

Infrastructure Protection – PPA

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Infrastructure Protection (IP) Gateway	-	-	\$4,219	\$4,219
Total	-	-	\$4,219	\$4,219
Discretionary - Appropriation	-	-	\$4,219	\$4,219

NPPD is requesting \$4.2 million for the Infrastructure Protection PPA.

Infrastructure Protection program leads and coordinates national programs and policies on critical infrastructure security and resilience and develops strong partnerships across government and the private sector. The program conducts and facilitates vulnerability and consequence assessments to help critical infrastructure owners and operators and state, local, tribal, and territorial partners understand and address risks to critical infrastructure. Additionally, it provides information on emerging threats and hazards and offers tools and training to partners to help them manage risks to critical infrastructure.

The Infrastructure Protection Gateway (IP Gateway) supports the Office of Infrastructure Protection in meeting its mission of assessing key assets (e.g., bridge, power grid, dam, and subways) and critical infrastructure vulnerabilities and taking action to mitigate vulnerabilities, enhance security, and ensure continuity and necessary redundancy. The IP Gateway system provides a secure, encrypted, controlled-access web interface to a suite of specialized tools to DHS Components, Federal agencies, State, Local, Tribal, and Territorial governments, and owner/operators of our nation’s critical infrastructure. A consistent assessment methodology supports asset-to-asset comparisons, robust analytics, and cross-government sharing of critical infrastructure information. Textual and geospatial presentations aid user understanding of the underlying data.

Infrastructure Protection – PPA
Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	-		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	-	-	\$4,219
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	-	-	\$4,219
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	-	-	\$4,219
Obligations (Actual/Projections/Estimates)	-	-	\$3,614
Personnel: Positions and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

Infrastructure Protection – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	-
FY 2016 Revised Enacted	-	-	-
FY 2017 Annualized CR	-	-	-
FY 2018 Base Budget	-	-	-
Infrastructure Protection PC&I Investment	-	-	\$4,219
Total Investment Elements	-	-	\$4,219
FY 2018 Request	-	-	\$4,219
FY 2017 TO FY 2018 Change	-	-	\$4,219

Funding for the IP Gateway will enable IP to expand capabilities in alignment with industry technical advancements and address customer feedback to improve the collection, management, visualization and assessment of complex infrastructure information such as dependencies and interdependencies, combined physical and cyber security and resilience risk, cascading operational impacts, and, most impactful, predictive data analytics to inform planning activities and preventive measures. This funding will enable the development and implementation of data analytics applications to leverage disparate information currently contained within the IP Gateway and publicly available through media sources and other public feeds to enhance situational awareness and the comprehensive understanding of risk to critical infrastructure. Through enhanced data analytic capabilities, IP will be able to improve timely and relevant situational awareness and visualization, enable tipping and cuing needed to operationalize available information, support enhanced risk analysis and display of risk/vulnerability reduction (dashboards), enable integrated reporting to support steady state and incident response, and focus programmatic efforts through informed decision-making.

Additionally, as IP prepares to migrate the IP Gateway to a cloud-based hosting provider in FY 2019, significant modernization and back-end redesign is required to efficiently transition the IP Gateway applications and capabilities. This modernization will address behind-the-scenes issues with data structures, information protection, user access management, and data access rights; these modernization enhancements will better prepare IP to design and implement a cloud-based system and ensure the new architecture is optimized and flexible from the onset.

Infrastructure Protection – PPA

Non Pay Budget Exhibits

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
25.3 Other Goods and Services from Federal Sources	-	-	\$4,219	\$4,219
Total - Non Pay Object Classes	-	-	\$4,219	\$4,219

Non Pay Cost Drivers

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
IP Gateway Investment Cost	-	-	\$4,219	\$4,219
Total – Non Pay Cost Drivers	-	-	\$4,219	\$4,219

NARRATIVE EXPLANATION OF CHANGES

IP Gateway Investment Cost – Increase in accordance with acquisition plan.

**Infrastructure Protection – PPA
Capital Investments Exhibits**

Capital Investments
Dollars in Thousands

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Infrastructure Protection (IP) Gateway	024-000009567	3	Procurement	IT	No	-	-	\$4,219

Infrastructure Protection (IP) Gateway – Investment

Capital Investments Exhibits

**Procurement/Acquisition Programs
(Infrastructure Protection (IP) Gateway)**

Procurement, Construction, and Investments Funding

Investment	Unique Item Identifier	Acquisition Level	Procurement / Construction	IT/Non-IT	MAOL	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget
Infrastructure Protection (IP) Gateway	024-000009567	3	Procurement	IT	No	-	-	\$4,219

Investment Description

The Infrastructure Protection Gateway (IP Gateway) supports the Office of Infrastructure Protection in meeting its mission of assessing key assets (e.g., bridge, power grid, dam, and subways) and critical infrastructure vulnerabilities and taking action to mitigate vulnerabilities, enhance security, and ensure continuity and necessary redundancy. The IP Gateway system provides a secure, encrypted, controlled-access web interface to a suite of specialized tools to DHS Components, Federal agencies, State, Local, Tribal, and Territorial governments, and owner/operators of our nation’s critical infrastructure. A consistent assessment methodology supports asset-to-asset comparisons, robust analytics, and cross-government sharing of critical infrastructure information. Textual and geospatial presentations aid user understanding of the underlying data.

Justification

Funding for the IP Gateway will enable IP to expand capabilities in alignment with industry technical advancements and address customer feedback to improve the collection, management, visualization and assessment of complex infrastructure information such as dependencies and interdependencies, combined physical and cyber security and resilience risk, cascading operational impacts, and, most impactful, predictive data analytics to inform planning activities and preventive measures. This funding will enable the development and implementation of data analytics applications to leverage disparate information currently contained within the IP Gateway and publicly available through media sources and other public feeds to enhance situational awareness and the comprehensive understanding of risk to critical infrastructure. Through enhanced data analytic capabilities, IP will be able to improve timely and relevant situational awareness and visualization, enable tipping and cuing needed to operationalize available information, support enhanced risk analysis and display of risk/vulnerability reduction (dashboards), enable integrated reporting to support steady state and incident response, and focus programmatic efforts through informed decision-making.

Additionally, as IP prepares to potentially migrate the IP Gateway to a cloud-based hosting provider in FY19, significant modernization and back-end redesign is required to efficiently transition the IP Gateway applications and capabilities. This modernization will address behind-the-scenes issues with data structures, information protection, user access management, and data access rights; these modernization enhancements will better prepare IP to design and implement a cloud-based system and ensure the new architecture is optimized and flexible from the onset.

Routinized investment in IP Gateway modernization and enhancements will allow continued development of a key enabling system supporting all aspects of the NPPD/Infrastructure Protection (IP) mission. Enhancements such as the improved data visualization, analytics, and assessment of dependency information will allow IP, CS&C, OCIA, and our Sector Specific Agency and State, Local, Territorial and Tribal mission partners to better understand local, regional and national risk through critical dependencies. Complementary, the enhancements will support the architectural optimization to facilitate the successful transition of the IP Gateway to a cloud-based hosting provider in FY19 and ensure the new architecture is optimized and flexible from the onset.

FY 2016 Key Milestone Events (Prior Year)

- None; new effort in FY18

FY 2017 Planned Key Milestone Events (Year of Execution)

- None; new effort in FY18

FY 2018 Planned Key Milestone Events (Budget year)

This request provides funding for various, customer-driven enhancements as reviewed, prioritized, and approved by the IP IT Governance Board and NPPD Joint Requirements Board (as applicable). Incremental updates and enhancements will be released on a quarterly basis based on identified requirements and funding availability.

The milestones are as follows:

- Initiation of Planning and Solutions Engineering
- Release Planning Review
- Initial Operating Capability
- Iterative Releases of Improved Capabilities
- Final Operating Capability

Overall Investment Funding

	Prior Years	FY 2016	FY 2017	FY 2018
Operations and Support		\$15,867	\$14,535	\$10,681
Procurement, Construction, and Investments		-	-	\$4,219
Research and Development		-	-	-
Project Funding	\$40,422	\$15,687	\$9,988	\$4,219
Obligations	\$40,347	\$15,857	\$9,788	
Expenditures	\$40,347	\$15,857	\$9,788	

Contract Information (Current/Execution Year, Budget Year)

Contract Number	Contractor	Type	Award Date (mo/yr)	Start Date (mo/yr)	End Date (mo/yr)	EVM in Contract	Total Value
TBD (New Contracts)	TBD	TBD	TBD	TBD	TBD	No	TBD

Significant Changes to Investment since Prior Year Enacted

N/A

Investment Schedule

Description	Design Work		Project Work	
	Initiated	Completed	Initiated	Completed
FY 2016				
N/A				
FY 2017				
N/A				
FY 2018				
Planning and Solutions Engineering of Functional Requirements	10/18	01/18		
Release Planning Review (RPR) of First Release	01/18	07/18		
Initial Operating Capability (IOC)			10/18	07/18
Iterative Releases / RPR			07/18	07/19
Final Operating Capability			10/19	07/19
Description 18-6				

Severable Items

Element/Item	Prior Years	FY 2016	FY 2017	FY 2018
N/A				

Department of Homeland Security
National Protection and Programs Directorate
Research and Development



Fiscal Year 2018
Congressional Justification

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Research and Development

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Cybersecurity	-	-	\$2,030	-	-	\$2,026	-	-	\$4,695	-	-	\$2,669
Infrastructure Protection	-	-	\$4,089	-	-	\$4,081	-	-	\$2,431	-	-	(\$1,650)
Integrated Operations R&D	-	-	-	-	-	-	-	-	\$4,000	-	-	\$4,000
Total	-	-	\$6,119	-	-	\$6,107	-	-	\$11,126	-	-	\$5,019
Subtotal Discretionary - Appropriation	-	-	\$6,119	-	-	\$6,107	-	-	\$11,126	-	-	\$5,019

Overview

The NPPD Research & Development (R&D) appropriation includes funds necessary for supporting the search for new or refined knowledge and ideas and for the application or use of such knowledge and ideas for the development of new or improved products and processes with the expectation of maintaining or increasing national economic productive capacity or yielding other future benefits. Activities are organized according to the following program/project/activity (PPA) structure:

- Cybersecurity:** The Cybersecurity R&D program oversees the development and application of research and standards to ensure reliable, interoperable and effective NPPD technologies and processes. The program works to ensure NPPD cyber activities remain abreast of leading-edge cybersecurity defense capabilities in order to maintain and advanced computer security preparedness and response to cyberattacks and incidents. Specific emphasis is placed on cybersecurity and NPPD's role in addressing cybersecurity challenges by collaborating with Federal departments and agencies to address cybersecurity risks, opportunities, and solutions on cyber issues with public and private sector partners.
- Infrastructure Protection:** The Infrastructure Protection program leads and coordinates national programs and policies on critical infrastructure security and resilience and develops strong partnerships across government and the private sector. The program conducts and facilitates vulnerability and consequence assessments to help critical infrastructure owners and operators and state, local, tribal, and territorial partners understand and address risks to critical infrastructure. Additionally, it provides information on emerging threats and hazards and offers tools and training to partners to help them manage risks to critical infrastructure.

- **Integrated Operations R&D:** The Integrated Operations R&D program funds research and development activities conducted by the Office of Cyber and Infrastructure Analysis (OCIA) to develop capabilities to model, simulate, and conduct other advanced analytics of disruptions to cyber and infrastructure networks

Research and Development Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$6,119		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$6,119	\$6,107	\$11,126
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$6,119	\$6,107	\$11,126
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$6,119	\$6,107	\$11,126
Obligations (Actual/Projections/Estimates)	\$6,105	\$6,107	\$11,126
Personnel: Positons and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

Research and Development Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$6,119
FY 2016 Revised Enacted	-	-	\$6,119
FY 2017 Annualized CR	-	-	\$6,107
FY 2018 Base Budget	-	-	\$6,107
Transferred in to Align to CAS Policy	-	-	\$4,000
Total Transfers	-	-	\$4,000
Total Adjustments-to-Base	-	-	\$4,000
FY 2018 Current Services	-	-	\$10,107
Proactive Cyber Protection	-	-	\$2,669
Total, Program Increases	-	-	\$2,669
Counterterrorism and IP	-	-	(\$1,650)
Total, Program Decreases	-	-	(\$1,650)
FY 2018 Request	-	-	\$11,126
FY 2017 TO FY 2018 Change	-	-	\$5,019

NISAC funding of \$4 million transferred from NISAC O&S PPA to Integrated Operations R&D to align to CAS policy. Funds will be used for capability development at the national labs.

Research and Development Justification of Program Changes

Dollars in Thousands

Program Changes	FY 2018 President's Budget		
	Positions	FTE	Amount
Program Change 1 - Counterterrorism and IP	-	-	(\$1,650)
Infrastructure Protection	-	-	(\$1,650)
Program Change 2 - Proactive Cyber Protection	-	-	\$2,669
Cybersecurity	-	-	\$2,669
Total Program Changes	-	-	\$1,019

Program Change

Program Change 1 – Counterterrorism and Infrastructure Protection (IP)

NPPD requests a decrease of \$1.7 million for Counterterrorism and IP.

Description

Counterterrorism and IP

Increases:

- **Technology Development and Deployment Program \$0.6 million** – This request will identify projects designed to solve resilient design challenges, develop tools to support infrastructure investment decisions, and create products that can aid in detecting malicious activity. Each fiscal year, program funding will be used to host four stakeholder meetings, launch the annual competition, and offer an incentive to generate proposals.

Decreases:

- **Critical Infrastructure Protection Technology (\$2.0 million)** – Submitted in the FY18 Request, is the removal of the Omnibus increase from Congress in FY16.
- **Position, Navigation, and Timing PMO (\$0.3 million)** - The Positioning, Navigation, and Timing (PNT) Project Management Office (PMO) has been established to serve as a central DHS office to coordinate and execute DHS missions in relation to PNT. This decrease reduces funding for the interagency policy coordination for PNT issues within NPPD as the Office of Policy takes a larger role in PNT issues.

Justification**Counterterrorism and IP**

Increases:

- **Technology Development & Deployment Program \$0.6 million** - The request will provide much needed resources and knowledge to enhance the protection and resilience of critical infrastructure. NPPD will be able to utilize a unique contracting vehicle to pursue new innovative technologies for rapid deployment through a competition that will identify projects devised to solve resilient design challenges, develop tools to support infrastructure investment decisions, and create products that can aid in detecting malicious activity.

Decreases:

- **Critical Infrastructure Protection Technology (\$2.0 million)** – The FY 2016 enacted amount included an additional \$2.0 million above the FY 2016 President’s Budget for the Technology Development and Deployment Program (TDDP) to define agency needs, identify requirements for community-level critical infrastructure protection and resiliency, and rapidly develop, test, and transition to use technologies that addresses the needs and requirements. The FY 2018 Request removes the \$2.0M of funding provided by Congress for TDDP.
- **Position, Navigation, and Timing PMO (\$0.3 million)** - The DHS Office of Policy is taking a stronger supporting role in PNT policy issues. Subsequently, this decrease reduces funding for interagency policy coordination for PNT issues within NPPD.

Performance**Counterterrorism and IP**

Increases:

- **Technology Development & Deployment Program \$0.6 million** - The additional resources will give NPPD the flexibility to connect with private sector counterparts to conduct and coordinate cutting edge critical infrastructure community-based research and technology without employing the formal, lengthy standard Federal procurement processes. The planned competition will promote technology transfer and commercialization of products for the critical infrastructure community. Prototypes identified through this process can then be brought to market and disseminated broadly to support the critical infrastructure community. At present, NPPD has minimal capacity to build the legal framework and expand the outreach network necessary to connect customers to Technology Development and Deployment (TDDP) projects.

Decreases:

- **Critical Infrastructure Protection Technology (\$2.0 million)** - A reduction of funds will impact the level and quantity of technologies for critical infrastructure protection and resiliency that can be rapidly developed, tested, and transitioned for use.
- **Position, Navigation, and Timing PMO (\$0.3 million)** - NPPD is submitting a parallel increase request for PNT within the Sector Risk Management PPA now that the 2017 National Defense Authorization Act (NDAA) has been signed and based on a greater understanding of the threat environment and PNT needs. The request includes funding for PNT actions to meet the 2017 NDAA requirements and for partnering with industry to better secure GPS and prepare for a potential PNT outage through vulnerability awareness, monitoring, standards and identifying alternative sources of PNT. The reduction in R&D funding is due to the transfer of PNT funding for the Office of Policy.

Program Change 2 Proactive Cyber Protection

NPPD requests \$2.7 million for Proactive Cyber Protection.

Description

Increases:

- **Proactive Cyber Protection** (\$2.7 million) - Proactive Cyber Protection predicts and prevents an incident from taking place, using prediction of the evolving threat space and new technologies (such as real-time cybersecurity technologies, 5th Generation Programming Language (5GL), etc.) that will be used in the future. The approaches and technologies of Proactive Cyber Protect act in anticipation to protect against an attack against computers and networks.

Justification

Performance

Increases:

- **Proactive Cyber Protection (\$2.7 million)** - The requested resources will support engagements with other Departments and agencies (i.e., NIST, National Security Agency (NSA), etc.), as well as private industry to facilitate the assessment and development of draft specifications of requirements in the areas of:
 - Orchestration of security approach for .gov networks
 - Common data models and best practices for securing .gov
 - Common message/communications fabric with standard security baselines, message transport protocols and interfaces,

supporting federated exchange of cyberspace defense information.

Without these additional funds, NPPD would have a significant gap in detecting and protecting the immense .gov networks comprised of Federal departments and agencies, impacting NPPD's ability to document and standardize near and long-term changes in the cyber environment. Technology is evolving constantly, with the threat landscape evolving even more rapidly. Information sharing on cyber-attacks is an insufficient method for fighting cybersecurity, the attacks are happening in microseconds, making the move from reactionary cybersecurity methodologies to real-time proactive technologies an imperative action, putting us ahead of malicious cyber-attacks. In order to proactively protect against future attacks on .gov networks, NPPD must understand and develop the next generation of cybersecurity defensive/protection capabilities. Without this planning, NPPD will not be effective in mitigating future attack vectors/patterns on new technologies being used by the private, defense, or public workforce (i.e. IoT, Mobile, Cloud computing).

There are two basic cybersecurity approaches used to deal with security vulnerabilities: proactive and reactive. Proactive approaches include all measures (predicts and prevents) that are taken with the goal of preventing host-based or network-based attacks from successfully compromising systems. Reactive approaches are those procedures that organizations use once they discover that some of their systems have been compromised by an intruder or attack program. Both the public and private sectors need proactive cybersecurity technologies versus today reactionary options combat cyber-attacks, by deploying technologies that can authenticate, view, audit, and analyze known digital policy events in real time during data in motion. The cyber protection/detection capabilities that NPPD is providing today is based on mature technologies that have been around for many years. As new technologies are adopted by the .gov (i.e. IoT, Mobile devices, Cloud computing, etc.), these effectiveness of existing Cybersecurity capabilities diminishes. In order to provide Cyber protection to the new environment, NPPD has to identify the gaps in its portfolio of cybersecurity tools/services and plan, update and add new capabilities to continue to provide Cyber defense and protection to the .gov and the nation.

Research and Development Non Pay Budget Exhibits

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Cybersecurity	\$2,030	\$2,026	\$4,695	\$2,669
Infrastructure Protection	\$4,089	\$4,081	\$2,431	(\$1,650)
Integrated Operations R&D	-	-	\$4,000	\$4,000
Total	\$6,119	\$6,107	\$11,126	\$5,019
Discretionary - Appropriation	\$6,119	\$6,107	\$11,126	\$5,019

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$56	-	-	-
25.1 Advisory and Assistance Services	\$1,516	\$1,638	\$3,807	\$2,169
25.2 Other Services from Non-Federal Sources	\$276	\$388	\$888	\$500
25.3 Other Goods and Services from Federal Sources	-	-	\$4,000	\$4,000
25.5 Research and Development Contracts	\$4,089	\$4,081	\$2,431	(\$1,650)
25.7 Operation and Maintenance of Equipment	\$182	-	-	-
Total - Non Pay Object Classes	\$6,119	\$6,107	\$11,126	\$5,019

Cybersecurity – PPA

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Cybersecurity	-	-	\$2,030	-	-	\$2,026	-	-	\$4,695	-	-	\$2,669
Total	-	-	\$2,030	-	-	\$2,026	-	-	\$4,695	-	-	\$2,669
Subtotal Discretionary - Appropriation	-	-	\$2,030	-	-	\$2,026	-	-	\$4,695	-	-	\$2,669

Cybersecurity – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$2,030		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$2,030	\$2,026	\$4,695
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$2,030	\$2,026	\$4,695
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$2,030	\$2,026	\$4,695
Obligations (Actual/Projections/Estimates)	\$2,016	\$2,026	\$4,695
Personnel: Positons and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

Cybersecurity – PPA
Summary of Budget Changes
Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$2,030
FY 2016 Revised Enacted	-	-	\$2,030
FY 2017 Annualized CR	-	-	\$2,026
FY 2018 Base Budget	-	-	\$2,026
FY 2018 Current Services	-	-	\$2,026
Proactive Cyber Protection	-	-	\$2,669
Total, Program Increases	-	-	\$2,669
FY 2018 Request	-	-	\$4,695
FY 2017 TO FY 2018 Change	-	-	\$2,669

PPA Description

The Cybersecurity Research and Development (R&D) PPA includes funds necessary to oversee the development and use of standards to ensure reliable, interoperable and effective technologies and processes and works closely with the NPPD's Office of Cybersecurity and Communications (CS&C), cybersecurity partners, and standard-setting organizations. Specific emphasis is placed on cybersecurity and NPPD's role in addressing cybersecurity challenges by collaborating with Federal departments and agencies to address cybersecurity risks, opportunities, and solutions on cyber issues with public and private sector partners.

Cybersecurity - PPA Non Pay Budget Exhibits

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Cybersecurity	\$2,030	\$2,026	\$4,695	\$2,669
Total	\$2,030	\$2,026	\$4,695	\$2,669
Discretionary - Appropriation	\$2,030	\$2,026	\$4,695	\$2,669

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$56	-	-	-
25.1 Advisory and Assistance Services	\$1,516	\$1,638	\$3,807	\$2,169
25.2 Other Services from Non-Federal Sources	\$276	\$388	\$888	\$500
25.7 Operation and Maintenance of Equipment	\$182	-	-	-
Total - Non Pay Object Classes	\$2,030	\$2,026	\$4,695	\$2,669

Cybersecurity - PPA Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Proactive Cyber Protection	\$2,030	\$2,026	\$4,695	\$2,669
Total – Non Pay Cost Drivers	\$2,030	\$2,026	\$4,695	\$2,669

NARRATIVE EXPLANATION OF CHANGES

The requested resources will support engagements with other Departments and agencies (i.e., National Institute of Standards and Technology (NIST), National Security Agency (NSA), etc.), as well as private industry to facilitate the assessment and development of draft specifications of requirements in the areas of:

- Orchestration of security approach for .gov networks
- Common data models and best practices for securing .gov
- Common message/communications fabric with standard security baselines, message transport protocols and interfaces, supporting federated exchange of cyberspace defense information.

NPPD, in coordination with CS&C’s CTO, will gather and consolidate all requirements from CS&C and .gov stakeholders regarding challenges/barriers to adopting cybersecurity best practices/technologies; coordinate with various research and development organizations, including DHS’s Science and Technology (S&T), on addressing the requirements; then provide stakeholders with options to address their needs. The intent is to use formalized processes to ensure full engagement and official sign-off of key stakeholders. The activities include:

- Development and reassessment of .gov cyber architecture documentation to assist with strategic planning and performance requirements to be met and reduce the implementation risks.
- Product technical papers, analyses, use cases, and presentations.
- Conduct gap analyses in the current security capabilities offered by NPPD and within .gov internal resources.
- Develop the CS&C business and IT services delivery strategy plan, to ensure all business services are fully supported by IT services delivered.
- Conduct open working groups with government stakeholders to solicit feedback and buy-in; and support many technical homeland security standards working groups within DHS to gather, analyze and maintain current information about standards and conformity assessment activities.

FY 2018 Non- Pay Cost Driver- Main Cost Driver 1 (i.e. Training, Travel, Contracts) FY 2018 request provides contractor services enabling discovery of capability gaps and trends; risk prioritization of discovered gaps; development of threat landscape analysis documents; and building CS&C’s future capabilities architecture.

Cybersecurity – PPA
Research and Development
Technology Readiness Level Exhibit

Project Description:**Chief Technology Officer**

- **Problem:** Protecting and securing cyberspace within NPPD’s mission area requires cutting edge techniques, processes, systems, and strategies. This presents an incredible challenge in a constantly changing environment and ever-present threat of attack.
- **Solution:** A cohesive effort across the Federal Government and its stakeholders is necessary in order to address cybersecurity risks, opportunities, and solutions on cyber issues by discovering and implementing new or refined knowledge and ideas for the development of new or improved products and processes. Areas of interest and collaboration include development of standards and information sharing specifications, adoption of new technologies and industry-standard processes, and cyber architecture specifications and future planning.
- **Impact:** Efforts will support NPPD’s near and long term changes in technology and the Government’s network landscape, identifying new standards and technologies, and developing a set of capabilities, guidance or specifications that would improve the nation’s cybersecurity posture, including the .gov and critical infrastructure.

FY 2016 Key Milestone Events (Prior Year)

- Developed and released interoperability and technical specifications, baseline architecture for cybersecurity tools orchestration and active defense in partnership with the National Security Agency (NSA).
- Collected R&D requirements from CS&C stakeholders and identify federally funded research projects that can satisfy CS&C R&D requirements

FY 2017 Planned Key Milestone Events (Year of Execution)

- Develop and release interoperability and technical specifications, baseline architecture for cybersecurity tools orchestration and active defense in partnership with the (NSA).
- Collect R&D requirements from CS&C stakeholders and identify federally funded research projects that can satisfy CS&C R&D requirements.

FY 2018 Planned Key Milestone Events (Budget year)

- Continue refinement of the Baseline Reference Architecture and transition to industry strategy for cybersecurity tools orchestration based on industry input, in partnership with NSA.
- Develop a draft technical specification for playbooks and workflows for cybersecurity orchestration services, in partnership with NSA.
- Refine and update CS&C R&D requirements and work with DHS and industry research organizations to identify relevant technologies and projects that can meet CS&C R&D requirements

Overall Project Funding

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Project Funding	-	-	\$2,030	\$2,026	\$4,695
Obligations	-	-	\$2,016	\$1,638	

Project Schedule

Research & Development Description	Planned Start Date	Planned Completion
FY 2017		
Baseline Reference Architecture for cybersecurity orchestration and active defense	Oct 2016	Feb 2017
Draft technical specification on orchestration services	Oct 2016	Apr 2017
Collect R&D requirements from CS&C stakeholders	Apr 2017	Jun 2017
Identify research projects that can satisfy CS&C R&D requirements	Jul 2017	Sep 2017
FY 2018		
Refinement of the Baseline Reference Architecture for cybersecurity orchestration and active defense	Oct 2017	Sep 2018
Transition strategy for the specification of the orchestration services.	Feb 2018	Sep 2018
Draft technical specification for playbooks and workflows for the orchestration services	Oct 2017	Jun 2018
Refine and update R&D requirements	Feb 2018	Feb 2018
Work with research & development organizations to identify relevant technologies and projects that can meet CS&C R&D requirements	Jun 2018	Sep 2018

Applied

Technology Readiness Level

Level 6

Transition Plans

Transition plan will follow NPPD and CS&C policies.

*Infrastructure Protection - PPA***Budget Comparison and Adjustments****Comparison of Budget Authority and Request***Dollars in Thousands*

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Infrastructure Protection	-	-	\$4,089	-	-	\$4,081	-	-	\$2,431	-	-	(\$1,650)
Total	-	-	\$4,089	-	-	\$4,081	-	-	\$2,431	-	-	(\$1,650)
Subtotal Discretionary - Appropriation	-	-	\$4,089	-	-	\$4,081	-	-	\$2,431	-	-	(\$1,650)

Infrastructure Protection – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$4,089		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$4,089	\$4,081	\$2,431
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$4,089	\$4,081	\$2,431
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$4,089	\$4,081	\$2,431
Obligations (Actual/Projections/Estimates)	\$4,089	\$4,081	\$2,431
Personnel: Positons and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

Infrastructure Protection – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$4,089
FY 2016 Revised Enacted	-	-	\$4,089
FY 2017 Annualized CR	-	-	\$4,081
FY 2018 Base Budget	-	-	\$4,081
FY 2018 Current Services	-	-	\$4,081
Counterterrorism and IP	-	-	(\$1,650)
Total, Program Decreases	-	-	(\$1,650)
FY 2018 Request	-	-	\$2,431
FY 2017 TO FY 2018 Change	-	-	(\$1,650)

PPA Description

The Infrastructure Protection Research & Development PPA supports research, development, and application of innovative technology for community-based critical infrastructure protection and develops a pragmatic approach for protecting critical infrastructure against terrorist attacks and other emergency situations. This program also addresses community-based critical infrastructure protection priorities and develops homeland security technologies that may be transitioned to commercialization.

**Infrastructure Protection – PPA
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Infrastructure Protection	\$4,089	\$4,081	\$2,431	(\$1,650)
Total	\$4,089	\$4,081	\$2,431	(\$1,650)
Discretionary - Appropriation	\$4,089	\$4,081	\$2,431	(\$1,650)

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
25.5 Research and Development Contracts	\$4,089	\$4,081	\$2,431	(\$1,650)
Total - Non Pay Object Classes	\$4,089	\$4,081	\$2,431	(\$1,650)

Infrastructure Protection – PPA Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Research and Technology Development for Critical Infrastructure Protection	\$2,000	\$2,000	\$640	(\$1,360)
Positioning Navigation & Timing	\$865	\$860	\$570	(\$290)
Infrastructure Design & Recovery	\$424	\$423	\$423	-
Ammonium Nitrate Capabilities	\$800	\$798	\$798	-
Total – Non Pay Cost Drivers	\$4,089	\$4,081	\$2,431	(\$1,650)

NARRATIVE EXPLANATION OF CHANGES

- **Research and Technology Development for Critical Infrastructure Protection:** Removal of FY 2016 TDDP increase provided by Congress.
- **Positioning Navigation & Timing:** Reduction to PNT for the Office of Policy.
- **Infrastructure Design & Recovery:**
- **Ammonium Nitrate Capabilities:**

Infrastructure Protection – PPA Research and Development

Technology Readiness Level Exhibit

Project Description:

The Critical Infrastructure Resilience Toolkit (CIPT)/Technology Development and Deployment Program (TDDP) is a unique and innovative program that conducts cutting edge research and uses that research to advance proof of concepts focused on innovative infrastructure security and resilience. These proof of concepts can then be brought to market and disseminated broadly to support the critical infrastructure community. This decrement is a removal of the one-time funds approved in the FY16 Omnibus.

The Infrastructure Development and Recovery (IDR) Program promotes cross-sector, multi-threat/multi-hazard resilience solutions that expand the Federal government’s capabilities to further the long-term security and resilience of the Nation’s critical infrastructure. The IDR Program encourages an integrated, holistic approach to decision-making that incorporates resilient strategies, policies, and best practices and informs the planning, design, construction, and day-to-day operations of critical infrastructure. The IDR Program is currently developing the Critical Infrastructure Resilience Toolkit (CIRT), a suite of tools and resources intended for a broad set of infrastructure partners and focused on infrastructure security and resilience. The purpose of the CIRT is to inform infrastructure investment, development, and operational decisions.

The Positioning, Navigation, and Timing (PNT) Project Management Office (PMO) has been established to serve as a central DHS office to coordinate and execute DHS missions in relation to PNT. In FY18 the focus of the PMO will be on fulfilling the requirements established in the National Defense Authorization Act of 2016, which mandated that backup requirements be completed for all 16 critical infrastructure sectors, followed by a comprehensive analysis of alternatives for fulfilling the requirements. In addition, the PMO is working with the critical infrastructure community to ensure they understand the risk associated with dependence on PNT capabilities provided by GPS. This effort will continue to develop products, programs, and mitigation strategies for critical infrastructure owners and operators. Focus areas for research and development will include the confirmation of precision requirements for critical infrastructure PNT users, identification of emerging threats and wide ranging efforts to reduce risk through technology, procedures and policy. These efforts are conducted in coordination with private industry, interagency partners and DHS’s Science and Technology Office.

Ammonium Nitrate Capabilities funding provides defensible scientific data that supports establishing a minimum Standard Threshold Quantity (STQ) concentration for the Improvised Explosive Device Precursor (IEDP) chemicals listed on the Chemical Facility Anti-Terrorism Standards (CFATS) Appendix A.

FY 2016 Key Milestone Events (Prior Year)

- Complete initial needs assessment and scoping for Critical Infrastructure Resilience Toolkit (CIRT).
- Complete a set of Case Studies highlighting current models for, and challenges associated with, making regional and local-level infrastructure investment and development decisions.
- FY16 White Paper Call which addressed and identified gaps in the critical infrastructure community. It enhanced resilience and security in the community.
- ISC-CS Proof of Concept which is an innovative research that led to development of the proof of concept that prove or confirm research that was conducted. It also ensures federal agency compliance to security standards and policies.

FY 2017 Planned Key Milestone Events (Year of Execution)

- FY17 White Paper Call
- PNT Research Requirements
- ISC-CS Transition to Use
- Complete development of Version 1 of the Infrastructure Resilience Planning Framework, corresponding Quick Guides, and associated resources.
- Complete development of Version 1 of the Cybersecurity Quick Guide for Infrastructure Development.
- Conduct pilots of CIRT, Version 1.
- Complete a revised needs assessment and develop scope for private sector-focused planning and investment decision support tools.
- Develop an initial scope for the automation and hosting of CIRT, Version 1.

FY 2018 Planned Key Milestone Events (Budget year)

- FY18 White Paper Call
- Complete automation and hosting of CIRT, version 1.
- Complete development of version 1 of the private sector-focused infrastructure planning and investment tools and resources.

Overall Project Funding

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
CI Partnerships	-	\$424	\$424	\$423	\$423
NIPP Management	-	\$640	\$2,865	\$2,860	\$1,210
Infrastructure Security Compliance	-	\$800	\$800	\$798	\$798
Project Funding	-	\$1864	\$4,089	\$4,081	\$2,431
Obligations	-	\$1,864	\$4,089	\$4,081	

Project Schedule

Research & Development Description	Planned Start Date	Planned Completion
FY 2017		
Literature Review for Limits of Explosivity and Formulation Section	Jul 2017	Jun 2018
Small-scale Characterization Testing of Improvised Explosive Formulations with and without Component Dilutions	Jul 2017	Jun 2018
Intermediate-scale Thermal Stability Testing of Improvised Explosive Formulations without Precursor or Dilutions	Jul 2017	Jun 2018
Intermediate-scale Performance Testing of Improvised Explosive Formulations for Established Benchmarks	Jul 2017	Jun 2018
Large-scale Explosivity Testing of Improvised Explosive Formulations for Establishing Benchmarks	Jul 2017	Jun 2018
Large-scale Explosivity Testing of Improvised Explosive Formulations for Establishing Precursor Chemical Viability Concentrations	Jul 2017	Jun 2018
FY 2018		
Literature Review for Limits of Explosivity and Formulation Section	Jul 2018	Jun 2019
Small-scale Characterization Testing of Improvised Explosive Formulations with and without Component Dilutions	Jul 2018	Jun 2019
Intermediate-scale Thermal Stability Testing of Improvised Explosive Formulations without Precursor Dilutions	Jul 2018	Jun 2019
Intermediate-scale Performance Testing of Improvised Explosive Formulations for Establishing Benchmarks	Jul 2018	Jun 2019
Large-scale Explosivity Testing of Improvised Explosive Formulations for Establishing Benchmarks	Jul 2018	Jun 2019
Large-scale Explosivity Testing of Improvised Explosive Formulations for Establishing Precursor Chemical Viability Concentrations	Jul 2018	Jun 2019

Type of Research**Technology Readiness Level****Transition Plans**

Integrated Operations R&D - PPA

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Integrated Operations R&D	-	-	-	-	-	-	-	-	\$4,000	-	-	\$4,000
Total	-	-	-	-	-	-	-	-	\$4,000	-	-	\$4,000
Subtotal Discretionary - Appropriation	-	-	-	-	-	-	-	-	\$4,000	-	-	\$4,000

Integrated Operations R&D – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	-	-	-
Transfers & Reprogrammings	-	-	-
Delta in Enacted Fee Estimate to Fee Actuals	-	-	-
Enacted Rescissions to Prior Year	-	-	-
Revised Enacted/Request	-	-	\$4,000
Carryover and/or Recoveries (Actual/Estimates/Projections)	-	-	-
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	-	-	\$4,000
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	-	-	\$4,000
Obligations (Actual/Projections/Estimates)	-	-	\$4,000
Personnel: Positons and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

Integrated Operations R&D – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	-
FY 2016 Revised Enacted	-	-	-
FY 2017 Annualized CR	-	-	-
FY 2018 Base Budget	-	-	-
Transferred in to Align to CAS Policy	-	-	\$4,000
Total Transfers	-	-	\$4,000
Total Adjustments-to-Base	-	-	\$4,000
FY 2018 Current Services	-	-	\$4,000
FY 2018 Request	-	-	\$4,000
FY 2017 TO FY 2018 Change	-	-	\$4,000

PPA Description

The Integrated Operations R&D program funds research and development activities conducted by OCIA to develop capabilities to model, simulate, and conduct other advanced analytics of disruptions to cyber and infrastructure networks. These advanced analytics, conducted through the National Infrastructure Simulation and Analysis Center (NISAC), informs homeland security decision making in support of both operational efforts and strategic planning.

**Integrated Operations R&D – PPA
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Integrated Operations R&D	-	-	\$4,000	\$4,000
Total	-	-	\$4,000	\$4,000
Discretionary - Appropriation	-	-	\$4,000	\$4,000

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
25.3 Other Goods and Services from Federal Sources	-	-	\$4,000	\$4,000
Total - Non Pay Object Classes	-	-	\$4,000	\$4,000

Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
NISAC	0	0	\$4,000	\$4,000
Total – Non Pay Cost Drivers	0	0	\$4,000	\$4,000

NARRATIVE EXPLANATION OF CHANGES

National Infrastructure Simulation Analysis Center - NPPD transferred \$4.0 million to create this PPA from the NISAC sub-PPA in the O&S appropriation. This funding was transferred to properly align NISAC funding to align with the Department's Common Appropriations Structure (CAS) policy; these resources fund research and development activities but were not transferred in the FY 2017 budget proposal.

FY 2018 Non- Pay Cost Driver- Main Cost Driver 1: The NISAC capability is funded largely through contracts with scientific and engineering organizations, historically the National Laboratories. Due to the technical nature of their work, costs for these performers are higher than general contract performers.

Integrated Operations R&D – PPA Research and Development

Technology Readiness Level Exhibit

Project Description:

National Infrastructure Simulation and Analysis Center

- **Problem:** Complex modeling, simulation, and advanced analytic capabilities are required to estimate the potential impacts of disruptions to cyber and physical infrastructure. Developing these capabilities often requires developing novel scientific approaches to modeling cyber and infrastructure networks and the threats and hazards that can impact them.
- **Solution:** OCIA leverages the advanced modeling and simulation capabilities of the Sandia and Los Alamos National Laboratories through the NISAC Program to model regional- and National-level direct and cascading impacts of disruptions to infrastructure.
- **Impact:** NISAC enables homeland security decision makers to leverage modeling and simulation capabilities to support both operational efforts and strategic planning. NISAC analysis informs decisions to strengthen infrastructure security and resilience, as well as response and recovery efforts during natural, man-made, or cyber incidents. If the NISAC model did not exist, there will be a gap in the support of advanced analytics, modelling and simulation capabilities that estimates the potential impacts of disruption to cyber and physical infrastructure.

FY 2016 Key Milestone Events (Prior Year)

- Develop a three-dimensional flood modeling capability to model the impacts of dam failures.
- Develop a methodology to model disruptions to voice communications and internet networks.

FY 2017 Planned Key Milestone Events (Year of Execution)

- Develop an advanced approach to model power outages due to wind damage.
- Develop an approach to model infrastructure dependencies in urban areas.

FY 2018 Planned Key Milestone Events (Budget year)

- Submission of deliverables identifying methods to improve existing capabilities to model the impacts of homeland security events on infrastructure.
- System prototype demonstration of an analytic workflow in a laboratory environment to model the consequence of an

electromagnetic pulse event to electric power infrastructure.

- Experimental proof of concept of an analytic workflow in a laboratory environment to model the consequences of a cyber event on computer networks in a repeatedly and analytically-sound way.

Delayed Milestones

- NA

Overall Project Funding

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Project Funding	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
Obligations	\$4,000	\$4,000	\$4,000	\$4,000	

*Funding in FY 2016 and FY 2017 was in the O&S account and appears in this table for comparison purposes only.

Project Schedule

Research & Development Description	Planned Start Date	Planned Completion
FY 2016		
NADevelop a three-dimensional flood modeling capability to model the impacts of dam failures. Develop a methodology to model disruptions to voice communications and internet networks.		
FY 2017		
NA Develop an advanced approach to model power outages due to wind damage. Develop an approach to model infrastructure dependencies in urban areas.		
FY 2018		
Deliverables identifying methods to improve existing capabilities to model the impacts of homeland security events on infrastructure.	Oct 2017	Sept 2019
System prototype demonstration of an analytic workflow in a laboratory environment to assess the consequence of an electromagnetic pulse event to electric power infrastructure	Oct 2017	Sept 2019
Experimental proof of concept of an analytic workflow in a laboratory environment to assess the consequences of a cyber event on Federal computer networks.	Oct 2017	Sept 2019

Type of Research

Developmental

Technology Readiness Level

Level 5

Transition Plans

NA

Department of Homeland Security
National Protection and Programs Directorate
Federal Protective Services



Fiscal Year 2018
Congressional Justification

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Federal Protective Services

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
FPS Operations	1,481	1,386	\$336,458	1,602	1,507	\$368,892	1,602	1,507	\$360,079	-	-	(\$8,813)
Countermeasures	-	-	\$1,106,991	-	-	\$1,082,186	-	-	\$1,115,976	-	-	\$33,790
Total	1,481	1,386	\$1,443,449	1,602	1,507	\$1,451,078	1,602	1,507	\$1,476,055	-	-	\$24,977
Subtotal Discretionary - Offsetting Fee	1,481	1,386	\$1,443,449	1,602	1,507	\$1,451,078	1,602	1,507	\$1,476,055	-	-	\$24,977

Overview

The Department of Homeland Security, through the National Protection and Programs Directorate (NPPD), Federal Protective Service (FPS) provides security services to approximately 9,000 General Services Administration owned, leased, or operated facilities in 11 regions across the country, including the soon to be Departmental Headquarters at the St. Elizabeth's Campus. FPS protects Federal facilities and those who occupy them by providing integrated law enforcement and protective security services, and leveraging access to the intelligence and information resources of our network of Federal, State, local, tribal, territorial, and private sector partners. Every day, FPS protects the homeland by managing risk and ensuring continuity for one sector of our national critical infrastructure: our Nation's Federal facilities.

FPS, a full-cost recovery operation, provides infrastructure security and resilience against terrorist attacks, natural disasters, and other large-scale incidents that may impact Federal facilities. Secure and resilient infrastructure is essential for national security, economic vitality, and public health and safety. Critical infrastructure security and resilience efforts must address all hazards—from terrorism and other criminal activities to natural disasters and cyber threats.

FPS security services include the use of approximately 13,000 contracted Protective Security Officers (PSOs), as well as Technical Countermeasure (TCM) programs, and equipment. These services provide a comprehensive risk-based approach to facility protection allowing NPPD to prioritize its operations to prevent, detect, assess, respond to, and disrupt criminal and other incidents endangering the Federal community.

The FY 2018 request includes 1,602 FTP/1,507 FTE and offsetting collection authority of \$1.476 billion for FPS. This is an increase of \$24.977 million in offsetting collection authority from the FY 2017 President's Budget. Additionally, in FY 2018, FPS plans to use prior year carry-over and available recoveries to fund operating requirements.

Federal Protective Services Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$1,443,449		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$1,443,449	\$1,451,078	\$1,476,055
Carryover and/or Recoveries (Actual/Estimates/Projections)	\$248,380	\$206,922	\$85,422
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$1,691,829	\$1,658,000	\$1,561,477
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$1,691,829	\$1,658,000	\$1,561,477
Obligations (Actual/Projections/Estimates)	\$1,383,322	\$1,399,756	\$1,559,915
Personnel: Positons and FTE			
Enacted/Request Positions	1,481	1,602	1,602
Enacted/Request FTE	1,386	1,507	1,507
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	1,481	1,602	1,602
FTE (Actual/Estimates/Projections)	1,386	1,507	1,507

Statutory Authority:

Section 1706 of the Homeland Security Act of 2002, codified at 40 USC 1315(a) vests in the Secretary of DHS the authority and responsibility to “protect the buildings, grounds, and property that are owned, occupied, or secured by the Federal Government;” (6 USC 203(3) & 6 USC 232(a)). The authority for FPS to recover the cost of law enforcement and security services can be found at 40 USC 586(c) (implemented at 41 CFR 102-85.135). Congress recognizes and confirms FPS' reimbursable authority in the annual appropriations.

Authorized Uses:

Offsetting collections are to be used for the protection of Federally owned and leased buildings and for the operations of the FPS

Federal Protective Services Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	1,481	1,386	\$1,443,449
FY 2016 Revised Enacted	1,481	1,386	\$1,443,449
FY 2017 Annualized CR	1,602	1,507	\$1,451,078
FY 2018 Base Budget	1,602	1,507	\$1,451,078
2018 Pay Raise	-	-	\$3,068
Adjustment to Offsetting Collection Authority	-	-	\$24,977
Annualization of 2017 Pay Raise	-	-	\$762
Annualization of FPS Rapid Protection Force (121 FTP/FTE)	-	-	\$1,388
Total, Pricing Increases	-	-	\$30,195
Total ATBs	-	-	(\$5,218)
Total, Pricing Decreases	-	-	(\$5,218)
Total Adjustments-to-Base	-	-	\$24,977
FY 2018 Current Services	1,602	1,507	\$1,476,055
FY 2018 Request	1,602	1,507	\$1,476,055
FY 2017 TO FY 2018 Change	-	-	\$24,977

The FPS FY 2018 Budget Request includes 1,602 FTP/1,507 FTE. Below are the following net pricing adjustments:

- Offsetting Collections Authority of \$33.790 million:
 - Adjustment for \$5.072 million in Building-Specific offsetting collection authority; and
 - Adjustment for \$28.718 million in Reimbursable Agency-Specific offsetting collection authority.

Federal Protective Services Justification of Pricing Changes

Dollars in Thousands

Pricing Changes	FY 2018 President's Budget		
	Positions	FTE	Amount
Pricing Change 1 - 2018 Pay Raise	-	-	\$3,068
FPS Operations	-	-	\$3,068
Operating Expenses	-	-	\$3,068
Pricing Change 2 - Adjustment to Offsetting Collection Authority	-	-	\$24,977
FPS Operations	-	-	(\$8,813)
Operating Expenses	-	-	(\$8,813)
Countermeasures	-	-	\$33,790
Protective Security Officers	-	-	\$9,915
Technical Countermeasures	-	-	\$23,875
Pricing Change 3 - Annualization of 2017 Pay Raise	-	-	\$762
FPS Operations	-	-	\$762
Operating Expenses	-	-	\$762
Pricing Change 4 - Annualization of FPS Rapid Protection Force (121 FTP/FTE)	-	-	\$1,388
FPS Operations	-	-	\$1,388
Operating Expenses	-	-	\$1,388
Pricing Change 5 - Total ATBs	-	-	(\$5,218)
FPS Operations	-	-	(\$5,218)
Operating Expenses	-	-	(\$5,218)
Total Pricing Changes	-	-	\$24,977

2018 Pay Raise: Increase of \$3.068 million for the 2018 pay increase..

Annualization of 2017 Pay Raise: Increase of \$0.762 million for the annualization of the 2017 pay increase.

Annualization of FPS Rapid Protection Force: Annualizes the FY 2017 program change implementing the FPS Rapid Protection Force and includes a \$1.388 million increase and 121 FTE.

Basic Security Adj. to Offsetting Collections Authority: Decrease of \$11.503 million reflecting a reduction of 14.748 million in square footage at \$0.78 per square foot impacting offsetting collection authority in FPS Operations.

Building-Specific Security Adj. to Off. Coll. Authority: Increase of \$5.072 million in offsetting collection authority through both Protective Security Officers of \$1.472 million and Technical Countermeasures of \$3.600 million impacting offsetting collections in Countermeasures.

Building-Specific Security Oversight Fee Adj. to Off. Coll. Authority: Increase of \$0.400 million through FPS Operations impacting offsetting collection authority total for Building-Specific Security to \$5.472 million.

Reimb. Agcy-Specific Security Adj. to Off. Coll. Authority: Increase of \$28.718 million in offsetting collection authority through Countermeasures for both Protective Security Officers of \$8.443 million and Technical Countermeasures of \$20.275 million.

Reimb. Agcy-Specific Security Oversight Fee Adj. to Off. Coll. Authority: Increase of \$2.290 million through FPS Operations impacting offsetting collection authority total for Reimb. Agcy-Specific Security to \$31.008 million.

**Federal Protective Services
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
FPS Operations	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67
Total	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67
Discretionary - Offsetting Fee	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67

* The FTE Rate calculation does not include Object Class 11.8-Special Personal Services Payments or 13.0-Benefits for Former Personnel.

Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$120,968	\$123,387	\$128,761	\$5,374
11.3 Other than Full-Time Permanent	\$2,953	\$3,012	\$3,143	\$131
11.5 Other Personnel Compensation	\$22,180	\$22,624	\$23,609	\$985
12.1 Civilian Personnel Benefits	\$46,271	\$47,196	\$49,251	\$2,055
13.0 Benefits for Former Personnel	\$22	\$23	\$24	\$1
Total - Personnel Compensation and Benefits	\$192,394	\$196,242	\$204,788	\$8,546
Positions and FTE				
Positions - Civilian	1,481	1,602	1,602	-
FTE - Civilian	1,386	1,507	1,507	-

Federal Protective Services Permanent Positions by Grade-Appropriation

Grades and Salary Range	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
Total, SES	8	8	8	-
GS-15	40	40	40	-
GS-14	145	150	150	-
GS-13	348	373	373	-
GS-12	530	621	621	-
GS-11	90	90	90	-
GS-10	2	2	2	-
GS-9	140	140	140	-
GS-8	16	16	16	-
GS-7	121	121	121	-
GS-6	1	1	1	-
GS-5	40	40	40	-
Total Permanent Positions	1,481	1,602	1,602	-
Unfilled Positions EOY	95	95	95	-
Total Perm. Employment (Filled Positions) EOY	1,386	1,507	1,507	-
Position Locations				
Headquarters	273	273	273	-
U.S. Field	1,208	1,329	1,329	-
Averages				
Average Personnel Costs, ES Positions	168,614	168,619	171,126	2,507
Average Personnel Costs, GS Positions	89,784	89,796	91,131	1,335
Average Grade, GS Positions	12	12	12	-

**Federal Protective Services
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
FPS Operations	\$144,064	\$172,650	\$155,291	(\$17,359)
Countermeasures	\$1,106,991	\$1,082,186	\$1,115,976	\$33,790
Total	\$1,251,055	\$1,254,836	\$1,271,267	\$16,431
Discretionary - Offsetting Fee	\$1,251,055	\$1,254,836	\$1,271,267	\$16,431

Federal Protective Services Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$7,896	\$9,462	\$8,377	(\$1,085)
22.0 Transportation of Things	\$9,567	\$11,464	\$11,195	(\$269)
23.1 Rental Payments to GSA	\$20,588	\$24,670	\$24,100	(\$570)
23.2 Rental Payments to Others	\$5	\$6	\$6	-
23.3 Communications, Utilities, and Misc. Charges	\$9,004	\$9,540	\$15,758	\$6,218
24.0 Printing and Reproduction	\$116	\$138	\$135	(\$3)
25.1 Advisory and Assistance Services	\$20,374	\$24,032	\$23,422	(\$610)
25.2 Other Services from Non-Federal Sources	\$1,129,475	\$1,112,381	\$1,123,560	\$11,179
25.3 Other Goods and Services from Federal Sources	\$4,707	\$5,180	\$5,216	\$36
25.4 Operation and Maintenance of Facilities	\$548	\$657	\$641	(\$16)
25.6 Medical Care	\$4	\$5	\$5	-
25.7 Operation and Maintenance of Equipment	\$28,129	\$33,586	\$30,436	(\$3,150)
25.8 Subsistence & Support of Persons	\$2,883	\$2,823	\$6,005	\$3,182
26.0 Supplies and Materials	\$2,743	\$3,287	\$3,210	(\$77)
31.0 Equipment	\$3,985	\$4,386	\$6,298	\$1,912
32.0 Land and Structures	\$11,017	\$13,203	\$12,888	(\$315)
42.0 Insurance Claims and Indemnities	\$13	\$15	\$15	-
94.0 Financial Transfers	\$1	\$1	-	(\$1)
Total - Non Pay Object Classes	\$1,251,055	\$1,254,836	\$1,271,267	\$16,431

FPS Operations – PPA

Budget Comparison and Adjustments

Comparison of Budget Authority and Request

Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Operating Expenses	1,481	1,386	\$336,458	1,602	1,507	\$368,892	1,602	1,507	\$360,079	-	-	(\$8,813)
Total	1,481	1,386	\$336,458	1,602	1,507	\$368,892	1,602	1,507	\$360,079	-	-	(\$8,813)
Subtotal Discretionary - Offsetting Fee	1,481	1,386	\$336,458	1,602	1,507	\$368,892	1,602	1,507	\$360,079	-	-	(\$8,813)

FPS Operations

As depicted on pages 17-19, the Activity Based Costing model shows that in FY 2018, FPS operating expense requirements are expected to reach approximately \$502.855 million. FPS is projected to generate \$360.079 million in revenue. In FY 2018, FPS plans to rely on accumulated carryover funding as well as anticipated recoveries to bridge this revenue shortfall.

The major operating expense categories required to maintain current services for FPS Operations are briefly described below.

Protective Services

Protective Services provided by FPS include law enforcement operations, investigations, criminal intelligence and information sharing, K-9 operations, MegaCenter operations, critical incidents, and special security operations. Recent threats and attacks, both internationally and domestically, require FPS to invest an increasing number of its law enforcement resources to rapidly respond to various locations across the country.

Facility Security Assessments

FPS law enforcement operations encompass all aspects and resources required to deliver law enforcement protective services. FPS law enforcement personnel perform Facility Security Assessments (FSAs) in accordance with Interagency Security Committee (ISC) standards, and provide oversight and inspection of the approximately 13,000 PSOs at roughly 6,000 posts in over 3,000 buildings across the United States and its territories.

The cornerstone of FPS' protective security mission is the assessment of government facilities and associated infrastructure, which FPS refers to as its FSA program. The FSA inspection conducted is a standardized comprehensive risk assessment that examines credible threats to Federal buildings and the vulnerabilities and consequences associated with those threats.

Credible threats include criminal activities or potential acts of terrorism. Each facility is assessed against a baseline level of protection and countermeasures are recommended to mitigate the gaps identified to the baseline or other credible threats and vulnerabilities unique to a facility.

FSAs are the process and final product documenting an evaluation of the security related risks to a facility. Requirements for the frequency of Federal building security assessments are driven by the ISC standards with high risk facility (Facility Security Level (FSL) 3, 4, & 5) assessments occurring on a three year cycle. FPS has a target of completing approximately 2,000 FSAs (all FSLs) annually for Federal facilities.

Law Enforcement Operations

FPS law enforcement personnel also respond to more than 40,000 incidents per year at Federal facilities and perform visible deterrence through mobile patrol and response activities. FPS law enforcement personnel are assigned to analyze criminal intelligence, investigate threats made against Federal officials, and investigate incidents occurring in Federal facilities. Training, firearms, ammunition, and uniforms all support the ability of FPS law enforcement personnel to deploy each day to protect Federal facilities.

FPS is also responsible for deploying its law enforcement officers to Federal facilities adjacent to or in the vicinity of national security events (e.g., the national conventions and inauguration held every four years.) After supporting the Republican National Convention in Cleveland in July 2016, the FPS corps also provided protection to Federal employees, visitors, and the general public in support of the Democratic National Convention's high profile event. These deployments were consistent with risk assessments and intelligence coordinated with other Federal, State, and local law enforcement organizations to provide protective services during national emergencies, as demonstrated during the Dallas police shooting on July 7, 2016. Additionally, FPS works closely with the Administrative Office of the U.S. Courts and the U.S. Marshals Service to provide for the protection of Federal courthouses during high-profile trials (such as terrorists, cartel drug lords, and other trials where protests or other security incidents may occur).

FPS provided support to the U.S. District Court of South Carolina, partnering with the U.S. Marshals Service to secure the ongoing Dylann Roof trial. FPS maintained an enhanced uniformed presence in and around the courthouse and conducted daily K9 sweeps in the courthouse which included working with the Charleston Fire Department Hazardous Materials Team to test

for potential biological threats. The FPS Mobile Command Vehicle team coordinated communications with all law enforcement partners while stationed at the Customs Courthouse in Charleston. This operation ensured the safety and security of trial witnesses, lawyers, family members, the defendant and the general public during the court proceedings which lasted for five weeks.

Fleet Management

FPS tracks and maintains a fleet of around 1,200 vehicles to ensure that FPS officers are in a position to respond and protect the people and buildings under its protection. The vast majority of the FPS fleet is leased through General Services Administration (GSA), with the exception of specialty vehicles (i.e., mobile command vehicles, x-ray vehicles, motorcycles) which are purchased because they are not available to lease through GSA. Vehicle leasing has been an effective alternative to vehicle purchasing for FPS and ensures that vehicles are routinely replaced at the expiration of the lease period as well as normalizes the cost over a three-year or five-year period. Additionally, FPS has an ongoing collaboration with DHS/NPPD to continuously review the entire FPS fleet composition, including for the vehicle types, numbers of vehicles, application of the Vehicle Allocation Methodology to law enforcement specific vehicles, and operational needs. The following have been implemented:

- A methodology to aid in fleet right-sizing contributing to the shift from a composition of mostly Sport Utility Vehicle's (SUV's) to a balanced fleet that consists of Sedans and SUV's on the FY16-17 Vehicle Orders.
- A comprehensive analysis of regional requirements for replacement vehicles resulting in individual justifications for all vehicles.
- An internal control program with the FPS Self Inspection Program with regular independent assessments to maintain a healthy vehicle fleet to meet all operational mission requirements.

Investigations, Criminal Intelligence, & Information Sharing

The FPS Protective Investigation Program (PIP) is part of a larger system FPS uses to protect government facilities and occupants through threat mitigation, criminal investigation, and a training program that strengthens agents' knowledge and skills in available threat mitigation strategies and provides them with critical resources to utilize for successful case management and violence prevention. The key functions of the PIP are to identify those subjects that might pose a threat, investigate and assess those individuals, and implement a mitigation strategy designed to prevent an attack.

FPS agents are responsible for investigating a wide range of criminal and non-criminal activity, including felony crimes, assaults, burglary, thefts, threat of harm to Federal employees, inappropriate communications, bomb threats, and suspicious activities. Threats to harm Federal employees and inappropriate communications cases make up a substantial portion of the agent's basic criminal investigation.

Operation Shield is an FPS initiative that systematically deploys a full array of law enforcement and security personnel to test and validate the effectiveness of FPS countermeasures at facilities. This includes assessing the effectiveness of Protective Security Officers (PSO) in detecting the presence of unauthorized persons or potentially disruptive or dangerous activities in or around Federal facilities, and their ability to prevent the introduction of prohibited items or harmful substances into the facilities. Operation MegaShield involves the participation of multiple law enforcement partners (Federal, state and local) at multiple FPS-protected facilities.

Operation Shield and MegaShield deployments: (1) provide a highly visible law enforcement presence; (2) disrupt terrorist and criminal activity; (3) expand patrol operations through increased coverage;; and (5) collect and assimilate data to continually assess and improve FPS' ability to achieve its core mission – to secure facilities and safeguard occupants.

MegaCenter and Radio Communications

FPS personnel are required to respond to a variety of incidents 24 hours a day, some of which entail responding to criminal activity in progress, and others to protect life and property. To provide around-the-clock capabilities to take calls for assistance, dispatch personnel, and ensure the appropriate response to incidents, FPS has four MegaCenters strategically located throughout the country. They provide a vital communications link between FPS law enforcement personnel, PSOs manning posts at or patrolling in Federal facilities, and other Federal, State, and local law enforcement entities; the MegaCenters also facilitate the swift and efficient flow of information across the Nation and territories.

Throughout the year, the MegaCenters monitor multiple types of alarm systems, closed-circuit television, and wireless dispatch communications within Federal facilities throughout the Nation. The related alarm monitoring function for GSA and other Federally owned and leased facilities provides a dedicated and specialized service to ensure prompt dispatch of law enforcement and emergency first responders to situations at those facilities. For instance, the MegaCenters handled over four million incoming and outgoing telephone calls and over two million incoming alarm signals requiring action. These activities led to over 250,000 calls/dispatches for service in FY 2016.

Training

FPS coordinates and conducts initial training for Inspectors through a 36-week comprehensive training program which certifies them as Federal law enforcement officers and provides certificates in national weapons detection training, use of electronic control devices, alarm and video surveillance systems technology, and facility security assessments. FPS also requires each law enforcement officer to attend in-service training annually and complete a more rigorous two-week training course every five years. Moreover, FPS requires that PSOs undergo at least 120 hours of training each year.

Mission Support

FPS mission and business support activities include headquarters leadership; management and operations; field operations oversight; resource management to include budget, finance, revenue, and performance management; logistics contracting and procurement; human capital coordination; program management; and acquisition program and information technology system planning and oversight. Financial controls are critical to the achievement of the FPS mission. This focus is reflected in the planning and analytical rigor that underlies the emphasis placed on budgets, revenue and performance management, particularly with respect to ensuring (1) financial transparency, (2) operational continuity, (3) responsiveness to customer demand and NPPD direction, including surges, critical incidents, special events, and (4) the continuous realization of spending efficiencies.

Rent

FPS maintains a law enforcement and security presence in all 50 states and the U.S. Territories of Guam and Puerto Rico. FPS occupies approximately 905,000 square feet of operational and support space obtained through GSA.

Information Technology Support

The increase in automation of facility systems has generated a demand for increased technological capabilities within traditional security and law enforcement duties. Facilities and supporting systems continue to evolve subsequently blurring the lines between physical and IT security. With that, in 2016, FPS initiated the Advanced Technology Security Program (ATSP) to address the cyber risk to Federal facilities and thereby secure building and security technology against potential threat to unauthorized access to information or control devices to cause harm. Automation of facility systems has generated a demand for increased technological capabilities within traditional security and law enforcement duties. Facilities and supporting systems continue to evolve subsequently blurring the lines between physical and IT security.

FPS Inspectors are responsible for Tier 1 and 2 activities. The Industrial Control Systems-Cyber Emergency Response Team (ICS-CERT) is responsible for Tier 3. The following table illustrates the Tier levels and primary responsibilities.

Tier Level	Description	Output	Primary Responsibility
Tier 1	Data Collection and Triage	<ul style="list-style-type: none"> Utilizes existing assessment method, but evaluates system connectivity Structured inputs added to existing evaluation in the FPS Gateway/Modified Infrastructure Survey Tool. 	FPS Inspectors
Tier 2	Initial Cybersecurity Assessment	<ul style="list-style-type: none"> Evaluation of cyber specific threats toward systems, agencies, and facility coupled with vulnerability research and Interagency Security Committee specific countermeasures as applied to each system 	Advanced Technology Security Specialist (Inspectors w/Net+)
Tier 3	Advanced Cybersecurity Assessment	<ul style="list-style-type: none"> ICS-CERT Cybersecurity Evaluation Tool/Design Architecture Review/Network Architecture Validation 	ICS-CERT (with FPS coordination)

Activity Based Costing

The Activity-Based Costing (ABC) model is a management tool that informs operational decisions and enables the analysis of trade-offs that support a risk-based approach to achieving mission success. FPS continues to refine its ABC model to identify the costs to protect Federal facilities and their occupants. The ABC model informed the FY 2016 and FY 2017 budget requests as well as this budget submission. Using FY 2016 expenses and FY 2016 distribution of labor survey results, FPS has projected an FY 2018 view of resource consumption using the ABC model.

The deployment of the 1,602 FTP/1,507 FTE by activity groupings is set forth in the table below. The activity groupings in the table are only used to present greater transparency into FPS' operational and mission support activities.

Federal Protective Service (FPS) FY 2016 ABC Model Activity Groups	Total Head count*	Total FTE	Total Cost (\$M)***
Primary	1,152	715	\$ 125.7
Law Enforcement Response	872	106	\$ 17.7
Protective Investigations	274	18	\$ 4.1
Facility Security Assessments (FSA)	842	215	\$ 36.8
Protective Security Officer Services	889	154	\$ 25.4
Criminal Investigations	515	41	\$ 9.7
Technical Countermeasure Services	501	30	\$ 5.5
Law Enforcement Policing and Patrol	762	83	\$ 13.8
Critical Incident and Special Security Operations	639	33	\$ 7.2
Facility Tenant Support	652	24	\$ 3.8
National Infrastructure Protection Plan (NIPP) Government Facilities Sector (GFS) Support	172	3	\$ 0.8
Delegation Management	116	8	\$ 0.9
Secondary	955	177	\$ 76.9
MegaCenter Operations	340	25	\$ 38.0
K-9 Operations	145	66	\$ 14.2
Criminal Intelligence and Information Sharing	376	23	\$ 5.6
PSO Suitability	102	12	\$ 9.2
Covert Security Testing	213	6	\$ 1.3
Operation Shield	616	17	\$ 3.0
Federal, State, and Local Coordination	582	24	\$ 4.9
Contingency Operations	163	4	\$ 0.7
Enabling	1,165	215	\$ 48.2
Field Entry Level Training	223	47	\$ 10.0
Field Standards and Certifications Training	740	36	\$ 9.2
Field Advanced and Refresher Training	794	34	\$ 8.7
Training Development and Delivery	279	33	\$ 6.9
Administrative Training	329	15	\$ 4.1
Stakeholder Engagement and Liaison	702	50	\$ 9.3
Support	733	262	\$ 111.3
Acquisition and Procurement	413	71	\$ 18.1
Budget, Finance, Revenue, and Performance Management	287	53	\$ 21.5
General Counsel	37	1	\$ 2.9
Human Capital Management	172	31	\$ 12.2
Information Technology	94	16	\$ 30.4
Logistics, Facilities, Fleet, and Property Accountability and Management	274	40	\$ 10.2
National Field Operations Oversight (Headquarters Operations)	125	27	\$ 6.1
Personnel Security Management	81	12	\$ 3.8
Policy and Contingency Planning	115	7	\$ 5.0
Public Affairs	44	4	\$ 1.1
Supplementary Services	184	17	\$ 8.3
Supplementary Services	184	17	\$ 8.3
Grand Total	1,481**	1,386	\$ 370.4

Federal Protective Service (FPS) FY 2017 ABC Model Activity Groups	Total Head count*	Total FTE	Total Cost (\$M)***
Primary	1,205	815	\$ 154.9
Law Enforcement Response	951	128	\$ 22.3
Protective Investigations	307	16	\$ 3.9
Facility Security Assessments (FSA)	902	245	\$ 46.9
Protective Security Officer Services	940	160	\$ 29.4
Criminal Investigations	544	39	\$ 8.9
Technical Countermeasure Services	528	34	\$ 7.6
Law Enforcement Policing and Patrol	828	111	\$ 18.7
Critical Incident and Special Security Operations	774	52	\$ 11.2
Facility Tenant Support	665	25	\$ 4.5
National Infrastructure Protection Plan (NIPP) Government Facilities Sector (GFS) Support	140	2	\$ 0.8
Delegation Management	101	3	\$ 0.7
Secondary	1,034	182	\$ 74.8
MegaCenter Operations	291	18	\$ 30.0
K-9 Operations	144	64	\$ 12.9
Criminal Intelligence and Information Sharing	444	24	\$ 6.7
PSO Suitability	159	19	\$ 14.2
Covert Security Testing	241	6	\$ 1.4
Operation Shield	645	19	\$ 3.3
Federal, State, and Local Coordination	674	27	\$ 5.3
Contingency Operations	228	5	\$ 1.0
Enabling	1,163	223	\$ 48.0
Field Entry Level Training	195	39	\$ 8.6
Field Standards and Certifications Training	831	40	\$ 9.5
Field Advanced and Refresher Training	873	43	\$ 8.8
Training Development and Delivery	278	31	\$ 6.3
Administrative Training	384	15	\$ 4.4
Stakeholder Engagement and Liaison	857	55	\$ 10.4
Support	794	280	\$ 116.1
Acquisition and Procurement	415	70	\$ 16.4
Budget, Finance, Revenue, and Performance Management	297	57	\$ 22.4
General Counsel	41	1	\$ 2.5
Human Capital Management	197	37	\$ 13.3
Information Technology	87	17	\$ 27.5
Logistics, Facilities, Fleet, and Property Accountability and Management	317	43	\$ 15.8
National Field Operations Oversight (Headquarters Operations)	77	29	\$ 6.9
Personnel Security Management	79	13	\$ 6.8
Policy	128	10	\$ 2.8
Public Affairs	52	3	\$ 1.7
Supplementary Services ****	247	7	\$ 1.2
Supplementary Services	247	7	\$ 1.2
Grand Total	1,602**	1,507	\$ 395.0

Federal Protective Service (FPS) FY 2018 ABC Model Activity Groups	Total Head count*	Total FTE	Total Cost (\$M)***
Primary	1,212	794	\$ 204.6
Law Enforcement Response	933	133	\$ 24.6
Protective Investigations	287	19	\$ 4.3
Facility Security Assessments (FSA)	891	244	\$ 51.6
Protective Security Officer Services	902	144	\$ 32.4
Criminal Investigations	481	41	\$ 9.8
Technical Countermeasure Services	468	35	\$ 42.3
Law Enforcement Policing and Patrol	750	95	\$ 20.6
Critical Incident and Special Security Operations	663	49	\$ 12.3
Facility Tenant Support	615	25	\$ 5.0
National Infrastructure Protection Plan (NIPP) Government Facilities Sector (GFS) Support	104	3	\$ 0.9
Delegation Management	134	6	\$ 0.8
Secondary	1,031	172	\$ 106.1
MegaCenter Operations	305	19	\$ 57.1
K-9 Operations	117	59	\$ 14.2
Criminal Intelligence and Information Sharing	362	20	\$ 7.3
PSO Suitability	101	18	\$ 15.6
Covert Security Testing	192	8	\$ 1.5
Operation Shield	726	21	\$ 3.6
Federal, State, and Local Coordination	649	23	\$ 5.8
Contingency Operations	152	4	\$ 1.0
Enabling	1,227	232	\$ 52.9
Field Entry Level Training	299	61	\$ 9.4
Field Standards and Certifications Training	684	32	\$ 10.5
Field Advanced and Refresher Training	875	39	\$ 9.7
Training Development and Delivery	291	42	\$ 7.0
Administrative Training	352	11	\$ 4.9
Stakeholder Engagement and Liaison	798	47	\$ 11.4
Support	803	302	\$ 138.0
Acquisition and Procurement	428	73	\$ 18.1
Budget, Finance, Revenue, and Performance Management	336	59	\$ 24.7
General Counsel	52	2	\$ 2.8
Human Capital Management	243	38	\$ 14.7
Information Technology	116	15	\$ 40.2
Logistics, Facilities, Fleet, and Property Accountability and Management	332	51	\$ 17.5
National Field Operations Oversight (Headquarters Operations)	119	36	\$ 7.6
Personnel Security Management	79	12	\$ 7.5
Policy	144	11	\$ 3.0
Public Affairs	48	5	\$ 1.9
Supplementary Services ****	290	7	\$ 1.3
Supplementary Services	290	7	\$ 1.3
Grand Total	1,602**	1,507	\$ 502.9

Notes:

* Individual positions within FPS are often required to support multiple activities; as such, each individual may be counted in multiple activities.

The numbers do not distinguish the percentage of time an individual spends on each activity.

** This is not the sum of the head count outlined in the activity groupings; rather it is the number of positions requested in FY 2018.

*** FPS will use prior year carryover and recoveries to support its FY 2018 operating requirements.

**** Supplementary Services reflects that FPS will no longer conduct GSA and Daycare adjudications in FY 2018.

MAJOR ACQUISITION PROGRAMS:

FPS Tactical Communications Program – IT Program

The FPS Tactical Communications Program (TACCOM) major Acquisition program provides a centralized dispatch capability that links officer-to-officer communications between FPS Headquarters (HQ), its 11 Regions, and the security personnel at the St. Elizabeth’s Campus. The TACCOM Land Mobile Radio (LMR) communication system is a vital link to performing FPS’ mission of securing and protecting Federal facilities and those inside them. TACCOM includes system maintenance provided by contracted operational field support technicians for FPS HQ, Regions, at St. Elizabeth’s and dispatch radio consoles in four MegaCenters located across the United States, ensuring the best possible reliability of the individual components contained therein.

In FY 2018, \$44.974 million is projected for the FPS TACCOM program, which will be included with the budget authority for offsetting collections. FPS Federal staff in support of TACCOM are included in the FTP/FTE numbers under FPS Operations PPA.

Program increase for FY 2018 funds system maintenance and tactical form-fit-function technology refresh to include the replacement of all antennas elements and associated cabling, uninterrupted power supplies, including the total estimated edition, and replacement of approximately 100 radio dispatch consoles within FPS. No additional FTE is associated with the program increase.

FPS TACCOM Program (dollars in thousands)		
FY 2016	FY 2017	FY 2018
\$16,195	\$39,594	\$44,974

FPS Operations – PPA
Budget Authority and Obligations
Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$336,458		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$336,458	\$368,892	\$360,079
Carryover and/or Recoveries (Actual/Estimates/Projections)	\$235,962	\$196,576	\$81,238
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$572,420	\$565,468	\$441,317
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$572,420	\$565,468	\$441,317
Obligations (Actual/Projections/Estimates)	\$365,543	\$372,851	\$436,904
Personnel: Positons and FTE			
Enacted/Request Positions	1,481	1,602	1,602
Enacted/Request FTE	1,386	1,507	1,507
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	1,481	1,602	1,602
FTE (Actual/Estimates/Projections)	1,386	1,507	1,507

FPS Operations provides funding and supports personnel expenses for all FPS Federal staff and mission critical and mission support capabilities. In FY 2018, FPS Operations will focus on sustainment and continuation of mission delivery.

FPS Operations – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	1,481	1,386	\$336,458
FY 2016 Revised Enacted	1,481	1,386	\$336,458
FY 2017 Annualized CR	1,602	1,507	\$368,892
FY 2018 Base Budget	1,602	1,507	\$368,892
2018 Pay Raise	-	-	\$3,068
Annualization of 2017 Pay Raise	-	-	\$762
Annualization of FPS Rapid Protection Force (121 FTP/FTE)	-	-	\$1,388
Total, Pricing Increases	-	-	\$5,218
Adjustment to Offsetting Collection Authority	-	-	(\$8,813)
Total ATBs	-	-	(\$5,218)
Total, Pricing Decreases	-	-	(\$14,031)
Total Adjustments-to-Base	-	-	(\$8,813)
FY 2018 Current Services	1,602	1,507	\$360,079
FY 2018 Request	1,602	1,507	\$360,079
FY 2017 TO FY 2018 Change	-	-	(\$8,813)

PPA Description

FPS Operations provides funding for: Salaries and Benefits for the Federal staff compensation and benefits; Protective Services for Law Enforcement Operations, Investigations, Criminal Intelligence, & Information Sharing, K-9 Operations, MegaCenter Operations, Critical Incidents and Special Security Operations, Fleet, and Facilities; Training for Law Enforcement entry-level training, Law Enforcement advanced and refresher training, Law Enforcement standards and certification training, and Administrative training; and Mission Support for Policy and Planning, Acquisition Management, Adjudications, HSPD-12, Budget, Finance; and Revenue, Human Capital, Information Technology, Logistics and other business support services.

Adjustments to Base Justification

- \$3.830 million increase for 2018 pay inflation. Of this amount, \$0.762 million is for the annualization of the pay raise in 2017 (one quarter of the fiscal year) and \$3.068 million is for the pay raise in 2018 (three quarters of the fiscal year).

- \$1.388 million and 121 FTE increase for the annualization of FY 2017 program increase implementing the FPS Rapid Protection Force.
- \$0.400 million increase for Building-Specific Security Oversight Fee Adjustment to Offsetting Collection Authority.
- \$2.290 million increase for reimbursement of Agency-Specific Security Oversight Fee Adjustment to Offsetting Collection Authority.
- \$11.503 million decrease to Basic Security Adjustment to Offsetting Collections Authority.

FPS Operations – PPA Personnel Compensation and Benefits

Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Operating Expenses	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67
Total	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67
Discretionary - Offsetting Fee	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67

* The FTE Rate calculation does not include Object Class 11.8-Special Personal Services Payments or 13.0-Benefits for Former Personnel.

FPS Operations provides funding for Salaries and Benefits for all FPS Federal staff compensation and benefits. For FY 2018, FPS Operations will support 1,602 FTP / 1,507 FTE.

Pay by Object Class

Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$120,968	\$123,387	\$128,761	\$5,374
11.3 Other than Full-Time Permanent	\$2,953	\$3,012	\$3,143	\$131
11.5 Other Personnel Compensation	\$22,180	\$22,624	\$23,609	\$985
12.1 Civilian Personnel Benefits	\$46,271	\$47,196	\$49,251	\$2,055
13.0 Benefits for Former Personnel	\$22	\$23	\$24	\$1
Total - Personnel Compensation and Benefits	\$192,394	\$196,242	\$204,788	\$8,546
Positions and FTE				
Positions - Civilian	1,481	1,602	1,602	-
FTE - Civilian	1,386	1,507	1,507	-

FPS Operations funds for civilian pay by Object Class Code for FY 2016 through FY 2018.

**FPS Operations – PPA
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Operating Expenses	\$144,064	\$172,650	\$155,291	(\$17,359)
Total	\$144,064	\$172,650	\$155,291	(\$17,359)
Discretionary - Offsetting Fee	\$144,064	\$172,650	\$155,291	(\$17,359)

FPS Operations for non-pay from FY 2016 through FY 2018 aligned with offsetting collections.

FPS Operations – PPA Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$7,894	\$9,460	\$8,375	(\$1,085)
22.0 Transportation of Things	\$9,563	\$11,460	\$11,186	(\$274)
23.1 Rental Payments to GSA	\$20,571	\$24,653	\$24,064	(\$589)
23.2 Rental Payments to Others	\$5	\$6	\$6	-
23.3 Communications, Utilities, and Misc. Charges	\$3,338	\$4,001	\$3,905	(\$96)
24.0 Printing and Reproduction	\$116	\$138	\$135	(\$3)
25.1 Advisory and Assistance Services	\$18,629	\$22,326	\$19,759	(\$2,567)
25.2 Other Services from Non-Federal Sources	\$37,195	\$44,576	\$36,166	(\$8,410)
25.3 Other Goods and Services from Federal Sources	\$2,622	\$3,142	\$3,067	(\$75)
25.4 Operation and Maintenance of Facilities	\$548	\$657	\$641	(\$16)
25.6 Medical Care	\$4	\$5	\$5	-
25.7 Operation and Maintenance of Equipment	\$27,560	\$33,029	\$29,244	(\$3,785)
25.8 Subsistence & Support of Persons	\$27	\$32	\$31	(\$1)
26.0 Supplies and Materials	\$2,739	\$3,283	\$3,205	(\$78)
31.0 Equipment	\$2,222	\$2,663	\$2,599	(\$64)
32.0 Land and Structures	\$11,017	\$13,203	\$12,888	(\$315)
42.0 Insurance Claims and Indemnities	\$13	\$15	\$15	-
94.0 Financial Transfers	\$1	\$1	-	(\$1)
Total - Non Pay Object Classes	\$144,064	\$172,650	\$155,291	(\$17,359)

FPS Operations for non-pay by Object Class Code for FY 2016 through FY 2018.

Operating Expenses – PPA Level II
Budget Comparison and Adjustments
Comparison of Budget Authority and Request
Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Operating Expenses	1,481	1,386	\$336,458	1,602	1,507	\$368,892	1,602	1,507	\$360,079	-	-	(\$8,813)
Total	1,481	1,386	\$336,458	1,602	1,507	\$368,892	1,602	1,507	\$360,079	-	-	(\$8,813)
Subtotal Discretionary - Offsetting Fee	1,481	1,386	\$336,458	1,602	1,507	\$368,892	1,602	1,507	\$360,079	-	-	(\$8,813)

*Reflects reprogramming/transfers, as applicable and actual FTE. This footnote applies to all FY 2016 Revised Enacted tables throughout the CJ Submission. For comparison purposes only, FY 2016 and FY 2017 funding levels reflect the CAS Structure.

FPS Operations/FPS Operating Expenses for FY 2016 through FY 2018 aligned with offsetting collections.

Operating Expenses – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	1,481	1,386	\$336,458
FY 2016 Revised Enacted	1,481	1,386	\$336,458
FY 2017 Annualized CR	1,602	1,507	\$368,892
FY 2018 Base Budget	1,602	1,507	\$368,892
2018 Pay Raise	-	-	\$3,068
Annualization of 2017 Pay Raise	-	-	\$762
Annualization of FPS Rapid Protection Force (121 FTP/FTE)	-	-	\$1,388
Total, Pricing Increases	-	-	\$5,218
Adjustment to Offsetting Collection Authority	-	-	(\$8,813)
Total ATBs	-	-	(\$5,218)
Total, Pricing Decreases	-	-	(\$14,031)
Total Adjustments-to-Base	-	-	(\$8,813)
FY 2018 Current Services	1,602	1,507	\$360,079
FY 2018 Request	1,602	1,507	\$360,079
FY 2017 TO FY 2018 Change	-	-	(\$8,813)

PPA Level II Description

FPS Operating Expenses provides funding for:

- Salaries and Benefits for the Federal staff compensation and benefits;
- Protective Services for Law Enforcement Operations, Investigations, Criminal Intelligence, & Information Sharing, K-9 Operations, MegaCenter Operations, Critical Incidents and Special Security Operations, Fleet, and Facilities;
- Training for Law Enforcement entry-level training, Law Enforcement advanced and refresher training, Law Enforcement standards and certification training, and Administrative training; and

- Mission Support for Policy and Planning, Acquisition Management, Adjudications, HSPD-12, Budget, Finance; and Revenue, Human Capital, Information Technology, Logistics and other business support services.

Adjustments to Base Justification

- \$3.830 million increase for 2018 pay inflation. Of this amount, \$0.762 million is for the annualization of the pay raise in 2017 (one quarter of the fiscal year) and \$3.068 million is for the pay raise in 2018 (three quarters of the fiscal year).
- \$1.388 million and 121 FTE increase for the annualization of FY 2017 program increase implementing the FPS Rapid Protection Force.
- \$0.400 increase for Building-Specific Security Oversight Fee Adjustment to Offsetting Collection Authority.
- \$2.290 million increase for reimbursement of Agency-Specific Security Oversight Fee Adjustment to Offsetting Collection Authority.
- \$11.503 million decrease to Basic Security Adjustment to Offsetting Collections Authority.

**Operating Expenses – PPA Level II
Personnel Compensation and Benefits**

Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted				FY 2017 Annualized CR				FY 2018 President's Budget				FY 2017 to FY 2018 Total Changes			
	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate	Pos.	FTE	Amount	Rate
Operating Expenses	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67
Total	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67
Discretionary - Offsetting Fee	1,481	1,386	\$192,394	\$138.8	1,602	1,507	\$196,242	\$130.21	1,602	1,507	\$204,788	\$135.88	-	-	\$8,546	\$5.67

* The FTE Rate calculation does not include Object Class 11.8-Special Personal Services Payments or 13.0-Benefits for Former Personnel.

NARRATIVE EXPLANATION OF CHANGES

- \$3.830 million increase for 2018 pay inflation. Of this amount, \$0.762 million is for the annualization of the pay raise in 2017 (one quarter of the fiscal year) and \$3.068 million is for the pay raise in 2018 (three quarters of the fiscal year).
- \$1.388 million and 121 FTE increase for the annualization of FY 2017 program increase implementing the FPS Rapid Protection Force.

FTE Change FY 2017-2018: No change between FY 2017 and FY 2018.

PCB Change FY 2017-2018: PCB increased by \$8.546 million between FY 2017 and FY 2018.

Average Cost Change FY 2017-2018: Average cost increased by \$5,670 per FTE between FY 2017 and FY 2018.

Operating Expenses – PPA Level II
Pay by Object Class
Dollars in Thousands

Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
11.1 Full-time Permanent	\$120,968	\$123,387	\$128,761	\$5,374
11.3 Other than Full-Time Permanent	\$2,953	\$3,012	\$3,143	\$131
11.5 Other Personnel Compensation	\$22,180	\$22,624	\$23,609	\$985
12.1 Civilian Personnel Benefits	\$46,271	\$47,196	\$49,251	\$2,055
13.0 Benefits for Former Personnel	\$22	\$23	\$24	\$1
Total - Personnel Compensation and Benefits	\$192,394	\$196,242	\$204,788	\$8,546
Positions and FTE				
Positions - Civilian	1,481	1,602	1,602	-
FTE - Civilian	1,386	1,507	1,507	-

FPS Operations/FPS Operating Expenses funds for civilian pay by Object Class Code for FY 2016 through FY 2018.

Pay Cost Drivers
Dollars in Thousands

Leading Cost-Drivers	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate	FTE	Amount	Rate
Law Enforcement	1,017	\$150,158	\$147.65	1,134	\$153,259	\$135.15	1,134	\$159,933	\$141.03	0	\$6,674	\$5.83
Non-Law Enforcement	365	\$42,236	\$114.46	373	\$42,983	\$115.24	373	\$44,855	\$120.25	0	\$1,872	\$5.01
Total – Pay Cost Drivers	1,386	\$192,394	\$138.81	1,507	\$196,242	\$130.21	1,507	\$204,788	\$135.88	0	\$8,546	\$5.67

Law Enforcement: FPS Federal compensation is based on the set pay inflation and offsetting collection covers the increases. FPS Law Enforcement officers fill many roles including Inspectors, Criminal Investigators, K-9 Officers, District and Area Commanders.

Non-Law Enforcement: Non-Law Enforcement personnel provide support that sustains the mission and fill many roles including Mission Support Branch Chiefs, Budget Analysts, Contract Specialists and Personnel Security Specialists.

**Operating Expenses – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Operating Expenses	\$144,064	\$172,650	\$155,291	(\$17,359)
Total	\$144,064	\$172,650	\$155,291	(\$17,359)
Discretionary - Offsetting Fee	\$144,064	\$172,650	\$155,291	(\$17,359)

FPS Operations/FPS Operating Expenses for non-pay from FY 2016 through FY 2018 aligned with offsetting collections.

Operating Expenses – PPA Level II
Non Pay by Object Class
Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$7,894	\$9,460	\$8,375	(\$1,085)
22.0 Transportation of Things	\$9,563	\$11,460	\$11,186	(\$274)
23.1 Rental Payments to GSA	\$20,571	\$24,653	\$24,064	(\$589)
23.2 Rental Payments to Others	\$5	\$6	\$6	-
23.3 Communications, Utilities, and Misc. Charges	\$3,338	\$4,001	\$3,905	(\$96)
24.0 Printing and Reproduction	\$116	\$138	\$135	(\$3)
25.1 Advisory and Assistance Services	\$18,629	\$22,326	\$19,759	(\$2,567)
25.2 Other Services from Non-Federal Sources	\$37,195	\$44,576	\$36,166	(\$8,410)
25.3 Other Goods and Services from Federal Sources	\$2,622	\$3,142	\$3,067	(\$75)
25.4 Operation and Maintenance of Facilities	\$548	\$657	\$641	(\$16)
25.6 Medical Care	\$4	\$5	\$5	-
25.7 Operation and Maintenance of Equipment	\$27,560	\$33,029	\$29,244	(\$3,785)
25.8 Subsistence & Support of Persons	\$27	\$32	\$31	(\$1)
26.0 Supplies and Materials	\$2,739	\$3,283	\$3,205	(\$78)
31.0 Equipment	\$2,222	\$2,663	\$2,599	(\$64)
32.0 Land and Structures	\$11,017	\$13,203	\$12,888	(\$315)
42.0 Insurance Claims and Indemnities	\$13	\$15	\$15	-
94.0 Financial Transfers	\$1	\$1	-	(\$1)
Total - Non Pay Object Classes	\$144,064	\$172,650	\$155,291	(\$17,359)

FPS Operations/FPS Operating Expenses funds for non-pay by Object Class Code for FY 2016 through FY 2018.

Operating Expenses – PPA Level II Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Nationwide IT Infrastructure Operations and Maintenance	\$40,764	\$40,764	\$41,375	\$611
Rent – GSA	\$20,571	\$24,653	\$24,064	(\$589)
MegaCenter Dispatch Operations	\$34,969	\$28,860	\$28,860	\$0
Other	\$47,760	\$78,373	\$60,992	\$(17,381)
Total – Non Pay Cost Drivers	\$144,064	\$172,650	\$155,291	\$(17,359)

NARRATIVE EXPLANATION OF CHANGES

Nationwide IT Infrastructure Operation and Maintenance (O&M): FPS applied a 1.5% inflation rate for FY 2017 and FY 2018 as it anticipates continued growth in these areas as it refreshes with new equipment and funds IT projects to support the mission.

Rent—GSA: FPS occupies approximately 905,000 square feet of operational and support space obtained through GSA. Rent costs are derived from annual estimates provided by GSA and the DHS Working Capital Fund.

MegaCenter/Dispatch Support Operations: FPS maintains contractor support for its four nationwide MegaCenters and will offset for anticipated costs increases related to inflationary adjustments and for maintaining communication systems.

*Countermeasures - PPA***Budget Comparison and Adjustments****Comparison of Budget Authority and Request***Dollars in Thousands*

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Protective Security Officers	-	-	\$1,085,699	-	-	\$1,061,371	-	-	\$1,071,286	-	-	\$9,915
Technical Countermeasures	-	-	\$21,292	-	-	\$20,815	-	-	\$44,690	-	-	\$23,875
Total	-	-	\$1,106,991	-	-	\$1,082,186	-	-	\$1,115,976	-	-	\$33,790
Subtotal Discretionary - Offsetting Fee	-	-	\$1,106,991	-	-	\$1,082,186	-	-	\$1,115,976	-	-	\$33,790

FPS Countermeasures for FY 2016 through FY 2018 aligned with offsetting collections.

Countermeasures – PPA Budget Authority and Obligations

Dollars in Thousands

Budget Authority	FY 2016	FY 2017	FY 2018
Enacted	\$1,106,991		
Transfers & Reprogrammings	-		
Delta in Enacted Fee Estimate to Fee Actuals	-		
Enacted Rescissions to Prior Year	-		
Revised Enacted/Request	\$1,106,991	\$1,082,186	\$1,115,976
Carryover and/or Recoveries (Actual/Estimates/Projections)	\$12,418	\$10,346	\$4,184
Rescissions to Current Year/Budget Year	-	-	-
Net Sequestered Resources	-	-	-
Supplementals	-	-	-
Total Budget Authority	\$1,119,409	\$1,092,532	\$1,120,160
Collections – Reimbursable Resources	-	-	-
Total Budget Resources	\$1,119,409	\$1,092,532	\$1,120,160
Obligations (Actual/Projections/Estimates)	\$1,017,779	\$1,026,905	\$1,108,958
Personnel: Positons and FTE			
Enacted/Request Positions	-	-	-
Enacted/Request FTE	-	-	-
Onboard and Actual FTE; Includes Collections - Reimbursable Resources			
Onboard (Actual/Estimates/Projections)	-	-	-
FTE (Actual/Estimates/Projections)	-	-	-

FPS Countermeasures include contracts funded by customer agencies for Protective Security Officers (PSOs) and Technical Countermeasures (TCMs).

Countermeasures – PPA Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$1,106,991
FY 2016 Revised Enacted	-	-	\$1,106,991
FY 2017 Annualized CR	-	-	\$1,082,186
FY 2018 Base Budget	-	-	\$1,082,186
Adjustment to Offsetting Collection Authority	-	-	\$33,790
Total, Pricing Increases	-	-	\$33,790
Total Adjustments-to-Base	-	-	\$33,790
FY 2018 Current Services	-	-	\$1,115,976
FY 2018 Request	-	-	\$1,115,976
FY 2017 TO FY 2018 Change	-	-	\$33,790

PPA Description

Countermeasures consist of two types of security services that are provided through building-specific and reimbursable agency-specific security.

Building-specific security services are provided in accordance with security requirements generated through an FSA or customer request. Building costs are distributed to tenants based on square footage from GSA Occupancy Agreements and are recovered on a monthly basis. Charges include an oversight fee to fund FPS oversight and overhead costs.

Reimbursable agency-specific security, also called tenant-specific security, is negotiated via Security Work Authorizations (SWAs) or reimbursable agreements between FPS and another Federal agency. The two types of security services are Protective Security Officers (PSOs) and Technical Countermeasures (TCMs), which are similar to building-specific, but are configured for an individual customer rather than a multi-tenant facility. Reimbursements consist of the estimated direct cost of the security services requested, plus the oversight fee.

Adjustments to Base Justification

- \$28.718 million increase for reimbursement of Agency-Specific Adjustment to Offsetting Collection Authority.
- \$5.072 increase for Building-Specific Adjustment to Offsetting Collection Authority.

Countermeasures – PPA Non Pay Budget Exhibits

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Protective Security Officers	\$1,085,699	\$1,061,371	\$1,071,286	\$9,915
Technical Countermeasures	\$21,292	\$20,815	\$44,690	\$23,875
Total	\$1,106,991	\$1,082,186	\$1,115,976	\$33,790
Discretionary - Offsetting Fee	\$1,106,991	\$1,082,186	\$1,115,976	\$33,790

FPS Countermeasures for non-pay from FY 2016 through FY 2018 aligned with offsetting collections.

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$2	\$2	\$2	-
22.0 Transportation of Things	\$4	\$4	\$9	\$5
23.1 Rental Payments to GSA	\$17	\$17	\$36	\$19
23.3 Communications, Utilities, and Misc. Charges	\$5,666	\$5,539	\$11,853	\$6,314
25.1 Advisory and Assistance Services	\$1,745	\$1,706	\$3,663	\$1,957
25.2 Other Services from Non-Federal Sources	\$1,092,280	\$1,067,805	\$1,087,394	\$19,589
25.3 Other Goods and Services from Federal Sources	\$2,085	\$2,038	\$2,149	\$111
25.7 Operation and Maintenance of Equipment	\$569	\$557	\$1,192	\$635
25.8 Subsistence & Support of Persons	\$2,856	\$2,791	\$5,974	\$3,183
26.0 Supplies and Materials	\$4	\$4	\$5	\$1
31.0 Equipment	\$1,763	\$1,723	\$3,699	\$1,976
Total - Non Pay Object Classes	\$1,106,991	\$1,082,186	\$1,115,976	\$33,790

FPS Countermeasures funds for non-pay by Object Class Code for FY 2016 through FY 2018.

Protective Security Officers – PPA Level II
Budget Comparison and Adjustments
Comparison of Budget Authority and Request
Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Protective Security Officers	-	-	\$1,085,699	-	-	\$1,061,371	-	-	\$1,071,286	-	-	\$9,915
Total	-	-	\$1,085,699	-	-	\$1,061,371	-	-	\$1,071,286	-	-	\$9,915
Subtotal Discretionary - Offsetting Fee	-	-	\$1,085,699	-	-	\$1,061,371	-	-	\$1,071,286	-	-	\$9,915

The Protective Security Officers Level II PPA includes pass-through countermeasure contracts funded by customer agencies for PSOs.

Protective Security Officers – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$1,085,699
FY 2016 Revised Enacted	-	-	\$1,085,699
FY 2017 Annualized CR	-	-	\$1,061,371
FY 2018 Base Budget	-	-	\$1,061,371
Adjustment to Offsetting Collection Authority	-	-	\$9,915
Total, Pricing Increases	-	-	\$9,915
Total Adjustments-to-Base	-	-	\$9,915
FY 2018 Current Services	-	-	\$1,071,286
FY 2018 Request	-	-	\$1,071,286
FY 2017 TO FY 2018 Change	-	-	\$9,915

PPA Level II Description

Protective Security Officers Level II PPA funds contract PSO services that are a key component of FPS' protective security mission. Individual risk assessments combined with specific customer requirements drive the placement of PSOs. PSOs provide:

- Access Control: ensuring access to secured areas in accordance to access control procedures;
- Control Center Operations: integrating multiple countermeasures through monitoring of security equipment and facilitating communication with other posts or law enforcement as necessary;
- Patrol and Response: patrolling and monitoring the facility for safety, security, and enforcement purposes;
- Screening: identifying and interdicting unlawful, dangerous, or prohibited items to ensure that they do not enter a secured area; and
- Visitor Processing: identifying and documenting visiting individuals.

FPS sets parameters to ensure that countermeasures are effectively functioning as designed and that the contracted service is in compliance with contract requirements. Achievement of this framework is measured by the successful completion of PSO post inspections that are conducted during the course of a year. The number of post inspections conducted per year is set annually per directives guiding protective security force performance monitoring. FPS post inspections review compliance in the operation of the

post including the identification of the individual on duty, post desk book, cleanliness and orderly operation of the post, PSO knowledge of the post orders, and PSO performance of duties in accordance with the post orders (to include professionalism, proper certifications, and licenses). When technical countermeasures are deployed at a post, the effectiveness of that countermeasure is also assessed.

As with FSAs, post inspections are an integral part of FPS' security mission and therefore, require sufficient resources and personnel to achieve its mission while also ensuring that customer requirements and expectations are being met to reduce and mitigate facility risk. With that, PSO services are anticipated to be a means of risk/threat reduction into the foreseeable future.

Adjustments to Base Justification

- \$8.443 million increase for reimbursement of Agency-Specific Security Adjustment to Offsetting Collection Authority.
- \$1.472 million increase for Building-Specific Security Adjustment to Offsetting Collection Authority.

**Protective Security Officers – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary
Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Protective Security Officers	\$1,085,699	\$1,061,371	\$1,071,286	\$9,915
Total	\$1,085,699	\$1,061,371	\$1,071,286	\$9,915
Discretionary - Offsetting Fee	\$1,085,699	\$1,061,371	\$1,071,286	\$9,915

Protective Security Officers Level II PPA for non-pay from FY 2016 through FY 2018 aligned with offsetting collections.

Non Pay by Object Class
Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
21.0 Travel and Transportation of Persons	\$2	\$2	\$2	-
23.3 Communications, Utilities, and Misc. Charges	\$36	\$35	\$35	-
25.2 Other Services from Non-Federal Sources	\$1,083,636	\$1,059,355	\$1,069,252	\$9,897
25.3 Other Goods and Services from Federal Sources	\$2,002	\$1,957	\$1,975	\$18
25.7 Operation and Maintenance of Equipment	\$3	\$3	\$3	-
25.8 Subsistence & Support of Persons	\$17	\$16	\$16	-
26.0 Supplies and Materials	\$3	\$3	\$3	-
Total - Non Pay Object Classes	\$1,085,699	\$1,061,371	\$1,071,286	\$9,915

Protective Security Officers Level II PPA funds for non-pay by Object Class Code for FY 2016 through FY 2018.

Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Protective Security Officer Contracts	\$1,085,699	\$1,061,371	\$1,071,286	\$9,915
Total – Non Pay Cost Drivers	\$1,085,699	\$1,061,371	\$1,071,286	\$9,915

NARRATIVE EXPLANATION OF CHANGES

Physical Security Officer Contracts: Contract PSO services are a key component of the execution of NPPD’s protective security mission. Individual risk assessments combined with the specific customer requirements of each facility drive the placement of PSO-staffed security posts at different facilities. These posts are charged with minimizing specific vulnerabilities to identified credible threats. From FY 2017 into FY 2018, FPS applied a 0.93% inflationary adjustment related to personnel and equipment contracts.

Technical Countermeasures – PPA Level II
Budget Comparison and Adjustments
Comparison of Budget Authority and Request
Dollars in Thousands

Organization	FY 2016 Revised Enacted			FY 2017 Annualized CR			FY 2018 President's Budget			FY 2017 to FY 2018 Total Changes		
	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount	Pos.	FTE	Amount
Technical Countermeasures	-	-	\$21,292	-	-	\$20,815	-	-	\$44,690	-	-	\$23,875
Total	-	-	\$21,292	-	-	\$20,815	-	-	\$44,690	-	-	\$23,875
Subtotal Discretionary - Offsetting Fee	-	-	\$21,292	-	-	\$20,815	-	-	\$44,690	-	-	\$23,875

Technical Countermeasures includes countermeasure contracts funded by customer agencies for Technical Countermeasures (TCMs).

Technical Countermeasures – PPA Level II Summary of Budget Changes

Dollars in Thousands

Budget Formulation Activity	Positions	FTE	Amount
FY 2016 Enacted	-	-	\$21,292
FY 2016 Revised Enacted	-	-	\$21,292
FY 2017 Annualized CR	-	-	\$20,815
FY 2018 Base Budget	-	-	\$20,815
Adjustment to Offsetting Collection Authority	-	-	\$23,875
Total, Pricing Increases	-	-	\$23,875
Total Adjustments-to-Base	-	-	\$23,875
FY 2018 Current Services	-	-	\$44,690
FY 2018 Request	-	-	\$44,690
FY 2017 TO FY 2018 Change	-	-	\$23,875

PPA Level II Description

FPS Countermeasures/Technical Countermeasures (TCM) Level II PPA allows FPS to provide an integrated and cost-effective level of protection. TCM includes x-ray machines, magnetometers, alarm systems, closed circuit video (CCV) equipment, and access control systems. The FPS TCM program includes design, implementation, and oversight as well as collaborative efforts with Federal partners, such as DHS' Science & Technology Directorate and Transportation Security Administration.

FPS is responsible for installing and maintaining appropriate technical countermeasures to mitigate threats to Federal facilities by enhancing the protective security posture across the facility portfolio. Once deployed, the costs of TCM capabilities are reimbursed by customer agencies.

The process of replacing antiquated technology and equipment (much of the equipment is over 10 years old) that has reached and/or exceeded its intended useful life creating significant risks by degrading the ability to deter, deny, and detect credible threats to Federal facilities, personnel, information and equipment. The older analog and digital technology will not be supported by manufacturers, integrators or installers. Therefore, it is incumbent upon FPS to recognize and update to current technology and equipment, so to address the evolving threat environment by enhancing its ability to secure and make Federal facilities safe. FPS will continue to support modernization efforts by considering facility security levels and operability of existing systems. Ultimately, the outcome will be to enhance the security of FPS protected facilities.

Adjustments to Base Justification

- \$20.275 million increase for reimbursement of Agency-Specific Security Adjustment to Offsetting Collection Authority.
- \$3.600 million increase for Building-Specific Security Adjustment to Offsetting Collection Authority.

**Technical Countermeasures – PPA Level II
Non Pay Budget Exhibits**

Non Pay Summary

Dollars in Thousands

Organization	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Technical Countermeasures	\$21,292	\$20,815	\$44,690	\$23,875
Total	\$21,292	\$20,815	\$44,690	\$23,875
Discretionary - Offsetting Fee	\$21,292	\$20,815	\$44,690	\$23,875

Technical Countermeasures for non-pay from FY 2016 through FY 2018 aligned with offsetting collections.

Non Pay by Object Class

Dollars in Thousands

Non-Pay Object Classes	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Change
22.0 Transportation of Things	\$4	\$4	\$9	\$5
23.1 Rental Payments to GSA	\$17	\$17	\$36	\$19
23.3 Communications, Utilities, and Misc. Charges	\$5,630	\$5,504	\$11,818	\$6,314
25.1 Advisory and Assistance Services	\$1,745	\$1,706	\$3,663	\$1,957
25.2 Other Services from Non-Federal Sources	\$8,644	\$8,450	\$18,142	\$9,692
25.3 Other Goods and Services from Federal Sources	\$83	\$81	\$174	\$93
25.7 Operation and Maintenance of Equipment	\$566	\$554	\$1,189	\$635
25.8 Subsistence & Support of Persons	\$2,839	\$2,775	\$5,958	\$3,183
26.0 Supplies and Materials	\$1	\$1	\$2	\$1
31.0 Equipment	\$1,763	\$1,723	\$3,699	\$1,976
Total - Non Pay Object Classes	\$21,292	\$20,815	\$44,690	\$23,875

Technical Countermeasures funds for non-pay by Object Class Code for FY 2016 through FY 2018.

Non Pay Cost Drivers

Dollars in Thousands

Leading Non Pay Cost-Drivers	FY 2016 Revised Enacted	FY 2017 Annualized CR	FY 2018 President's Budget	FY 2017 to FY 2018 Total Changes
Technical Countermeasure Contracts	\$21,292	\$20,815	\$44,690	\$23,875
Total Non Pay Cost Drivers	\$21,292	\$20,815	\$44,690	\$23,875

NARRATIVE EXPLANATION OF CHANGES

Technical Countermeasure Contracts: From FY 2017 to FY 2018, FPS anticipates an approximately 114.7% increase for technical countermeasure resources required for FPS customers and tenant agencies. This funding will allow FPS to procure and maintain technical security equipment, install or upgrade required infrastructure to support equipment networking, and equipment end of life replacement.