Department of Defense Information Technology and Cyberspace Activities Budget Overview

Fiscal Year 2019
President's Budget Request

March 2018

Preparation of this study/report* cost the Department of Defense a total of approximately $3,939,900 for the 2018 Fiscal Year

*Includes unclassified report and its classified annex

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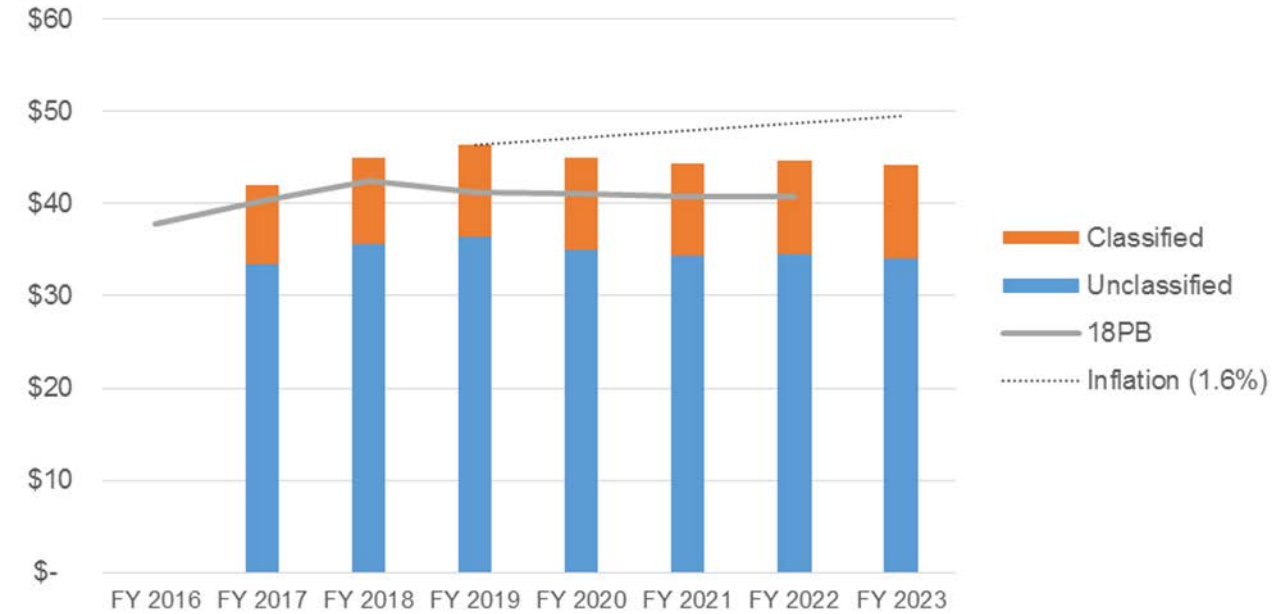
1. DoD FY 2019 IT Budget Request Overview

The Department of Defense (DoD) fiscal year (FY) 2019 total Information Technology/Cyberspace Activities (IT/CA) Budget Request is $46.4B, including $10.0B in classified IT/CA investments and expenses and $36.4B in unclassified IT/CA investments and expenses. The FY 2019 request reflects an overall 9.3% increase from the DoD 2018 requested IT/CA Budget. The DoD IT/CA Budget funding levels in the FY 2019 – FY 2023 Future Year Defense Plan (FYDP) remain relatively consistent, with a projected decrease of approximately $5.24B or 11.9% in IT/CA spending when factoring in the future value of money (FY 2019 to FY 2023). Figure 1 below includes DoD IT/CA Portfolio Resources for FY 2016 to FY 2023.

Figure 1: DoD IT Portfolio Resources for FYs 2016 to FY 2023
(dollars in billions)



DoD's IT/CA assets and initiatives deliver essential infrastructure, systems and communications resources and capabilities from the smallest units to the largest components of the vast global DoD enterprise. Technology capabilities underpin nearly every aspect of modern defense and warfighting strategies and objectives, from the Pentagon to the front line, space and now cyberspace. A seamless, transparent infrastructure that transforms data into actionable information and ensures dependable mission execution in the face of the persistent cyber threat is vital in this new IT-driven operational environment. The strategic landscape for DoD IT/CA is an environment that delivers unified capabilities across DoD and connections with critical mission partners.

The FY 2019 Cyberspace Activities request of $8.6B provides the resources, infrastructure and tools for our cyber warriors to operate, defend, and secure information networks and defenses and for offensive operations. The classified portion of the FY 2019 IT/CA Budget Request addresses Cyberspace Activities and other classified IT initiatives and resources. The classified portion of the FY 2019 President's Budget Request is available electronically on compact disk. Additionally, electronic copies of the same notebook can be found on the Secret Internet Protocol Router Network (SIPRNet) at the following location: https://snap.cape.osd.smil.mil/snapit/Home.aspx.

The public Office of Management and Budget (OMB) IT Dashboard (ITDB)[1] reflects the DoD unclassified IT budget submission and protects classified IT/CA information and information associated to National Security Systems (NSS) from public distribution. As reflected above, the total DoD IT/CA budget for FY 2019 is $46.4 billion. Table 1 provides a breakout of DoD unclassified IT, NSS, and classified IT/CA budget.

Table 1: DoD Unclassified IT/NSS and Classified IT/CA Breakout
(dollars in billions)

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
IT Budget *	$ 16.468	$ 18.585	$ 19.518	$ 18.790	$ 18.435	$ 18.359	$ 18.142
NSS Budget **	$ 16.984	$ 17.090	$ 16.893	$ 16.184	$ 15.978	$ 16.148	$ 15.863
Classified IT/CA Budget **	$ 8.507	$ 9.359	$ 10.013	$ 10.036	$ 9.954	$ 10.140	$ 10.221
Total FY 2019 PB	**$ 41.958**	**$ 45.034**	**$ 46.423**	**$ 45.010**	**$ 44.368**	**$ 44.646**	**$ 44.226**
* Pubically available on the OMB ITDB					*Numbers may not add due to rounding*		
** Not publically available on the OMB ITDB							

2. Cross-Cutting DoD IT Strategies and Goals

The responsibility of the Department of Defense is the security of our country. That requires thinking ahead, planning for a wide range of contingencies and ensuring our military is ready to respond quickly, effectively, and safely. We are faced with addressing today's challenges while at the same time preparing for tomorrow's threats against our national security.

The Secretary of Defense framework focuses on building a more lethal DoD, and it encompasses three specific lines of effort (LOE) that the DoD CIO actively supports:

LOE 1: Restoring military readiness as we build a more lethal force
LOE 2: Strengthening alliances as we attract new partners
LOE 3: Bringing business reforms to the Department of Defense

[1] OMB IT Dashboard, https://www.itdashboard.gov/

The DoD Chief Information Officer's (CIO's) vision for the Department's IT of tomorrow is to be integrated, resilient, dynamic, secure and responsive. DoD's goals for Information Technology resources address three imperatives:

- To provide and maintain robust, secure, and interoperable IT assets and digital capabilities across the enterprise,
- To seek and exploit new technologies and methods to further and maintain tactical and information superiority; and,
- To strengthen our ability to collaborate and share information and tools internally and with our partners; and,
- To employ IT, Cyber Space Operations and IA services and capabilities in an efficient and effective manner.

Annually, the DoD CIO issues Capability Planning Guidance (CPG) that is intended to provide specific Department-wide command, control, communications, and computers (C4); information technology, including National Security Systems (NSS) and Defense Business Systems (DBS); Positioning, Navigation, and Timing (PNT); Electromagnetic Spectrum (EMS) management; network operations; information security, cybersecurity; and the DoD information enterprise that supports DoD Command and Control (C2) investment priorities to support the DoD program and budget processes. Table 2 includes key cross-cutting DoD IT goals, initiatives, and objectives outlined in the FY 2019-2023 CPG:

Table 2: FY 2019-2023 DoD IT Environment Goals, Mission Impact, and Objectives

Goal	Mission Impact	Objectives
Execute Joint Information Environment (JIE) Capability Initiatives	A modernized IT enterprise with enhanced network operational effectiveness, information assurance posture and cyber resiliency, and produce efficiencies that allow critical resources to be re-invested to meet future mission needs.	• Develop JRSS implementation plans and resources strategies to migrate DoD Information Network (DoDIN) subscription service installations and communities of interest to JRSS, while identifying specific dates for decommissioning legacy capabilities. • Optimize the use of Internet Protocol (IP) based network infrastructure, enable use of IP version 6 (IPv6), and aggressively terminate costly and obsolete legacy network technologies and associated commercial leased circuits. • Implement Pentagon Network Consolidation. • Migrate DoD Components to enterprise-level communications, collaboration, and productivity services. • Identify enterprise efficiencies where shared services can significantly improve the cost of operations and cybersecurity.
Improve Partnerships with Allies and Industry	Positive synergies in processes, technologies, and intellectual capital are mutually beneficial to DoD and its partners. This will better support Joint/Coalition operations with mission partners, including the UK, Canada, Australia,	• Partner Better with Industry. • Enable Information Sharing and Enhance Collaboration with Key Allies and Partners to Simplify Capabilities and Readiness. • Centralize Program Management and Funding for Coalition IT capabilities under a single organization.

Goal	Mission Impact	Objectives
	and New Zealand (the Five Eyes); NATO, Germany, Japan, and others.	• Modernize existing SECRET//RELEASABLE (S//REL) Information Systems and associated capabilities. • Streamline the Technology Approval Process. • Deploy directory services to discover mission partners. • Enable responsible, enclave access to mission partners over SIPR/NIPR. Deploy directory services to discover mission partners. • Enable responsible, enclave access to mission partners over SIPR/NIPR
Ensure Successful Mission Execution in the Face of Cyber Threat	Provide mission dependability in the face of a capable cyber adversary through the cumulative efforts of those involved in the development, acquisition, sustainment, protection, and defense of DoD information and weapons systems.	• Establish and maintain secure configuration of DoD information technology. • Implement the cybersecurity capabilities described in the DoD cybersecurity reference architecture. • Plan and program for cybersecurity requirements across the lifecycle of DoD information systems and platform IT, including Supervisory Control and Data Acquisition (SCADA), Industrial Control Systems (IDC), Real-time Control Systems (RCS) Internet of Things (IoT) devices, and embedded IT within weapons. • Develop and apply the Cybersecurity Framework to all lifecycle phases. • Normalize and operationalize identity by authenticating at an adequate level of assurance to DoD or mission partner resources. • Fund the DoD cyberspace workforce strategy, which requires a continuum of training and education to support diverse professional and mission development. • Build a cadre of cybersecurity-focused engineers and architects adept at including current day challenges. • Train the entire DoD IT workforce to execute cybersecurity roles and responsibilities appropriate to their IT job role. • Provide cyber range, exercises, and team-based training.

Goal	Mission Impact	Objectives
Provide a DoD Cloud Computing Environment	DoD operations are supported with a more agile and scalable IT environment that is more mission capable and less costly to operate. This increases mobility, virtualization, and integration of virtual services into DoD strategic environments.	• Migrate DoD internet sites to commercial cloud service offerings. • Evaluate a cloud alternative for all it investments and migrate moderate mission impact systems and applications to cloud service offerings. • Migrate all applications and servers supporting users beyond installation network boundaries to a DoD approved enterprise computing environment. • Deploy Shared and DoD Enterprise IT Services via the DoD Cloud Environment • Secure the DoD Cloud Environment • Deploy enterprise identity services to support cloud applications and services (e.g., credentialing, provisioning)
Optimize the Department's Data Center Infrastructure	Optimized DoD computing infrastructure provides greater operational and technical resilience, improves interoperability and effectiveness, increases capability delivery, prioritizes secure capabilities, and reduces costs.	• Close 25% of tiered data centers. • Close 60% of non-tiered data centers. • Meet optimization targets for tiered data centers in accordance with implementation schedules and targets provided in OMB Memorandum M-16-19, “Data Center Optimization Initiative.” • Rationalize DoD Applications and Systems for Migration into Core Data Centers (CDCs) and Component Enterprise Data Centers (CEDCs)
Exploit the Power of Trusted Information Sharing	Enhanced support to decision-making processes — through secure access to DoD information and application of common data standards — improves collaboration both across the DoD enterprise and with external mission partners.	• Deliver an Enterprise Identity and Access Management (IdAM) Capabilities Strategy and Roadmap for Person and Non-person Entities. • Deploy An Authentication Infrastructure To Dynamically Control Authorized User Access (Person and Non-Person Entities) To Information • Improve Information Sharing Across DoD and with External Mission Partners • Integrate Commercial Mobile IT Capabilities

Goal	Mission Impact	Objectives
Provide a Resilient Communications and Network Infrastructure	Modernized DoD communications infrastructure and increased maneuverability within the electromagnetic spectrum providing greater operational and technical resilience, improved plug-and-play and effectiveness, faster capability delivery, prioritized secure capabilities, and reduced costs.	• Improve Strategic and Tactical Communications Networks • Modernize Command, Control and Communications Systems • Consolidate and Optimize Strategic Gateways • Establish End-to-End Satellite Communications (SATCOM) Capabilities • Evolve the DoD to Agile Electromagnetic Spectrum Operations (EMSO) • Ensure National Leadership Command Capabilities (NLCC) Assured Connectivity • Enhance the Delivery and Protection of (PNT)

The overarching DoD IT strategy also includes managing our installed technology base and services in a manner that safeguards our systems, demonstrates responsible stewardship of publicly funded resources and assets, ensures assets continued business value, cost effectiveness, and technological currency and suitability, and that applies effective portfolio management, oversight, and governance.

3. DoD IT Budget by Component for FYs 2017-2023

Table 3 below summarizes the total DoD IT Budget (both classified and unclassified) for each of the Military Departments and DoD Components over the FYDP. This level of resources sustains IT/CA operations, meets current IT/CA modernization needs, maintains or improves our cyber posture, and continues to fund Nuclear Command, Control, and Communications (NC3) programs and activities at the appropriate level.

Table 3: DoD IT Budget by Component for FYs 2017-2023
(dollars in thousands)

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
ARMY							
Unclass	$ 11,387,202	$ 10,813,734	$ 10,702,613	$ 10,366,900	$ 10,137,210	$ 10,233,285	$ 10,112,674
Class	$ 2,069,743	$ 2,172,497	$ 2,381,752	$ 2,572,498	$ 2,492,237	$ 2,598,806	$ 2,692,558
Sub-total	**$ 13,456,945**	**$ 12,986,231**	**$ 13,084,365**	**$ 12,939,398**	**$ 12,629,447**	**$ 12,832,091**	**$ 12,805,232**
NAVY							
Unclass	$ 7,065,966	$ 8,186,899	$ 8,249,669	$ 8,101,491	$ 7,976,190	$ 8,080,247	$ 8,172,604
Class	$ 1,200,470	$ 1,455,813	$ 1,580,857	$ 1,659,758	$ 1,639,384	$ 1,658,695	$ 1,682,384
Sub-total	**$ 8,266,436**	**$ 9,642,712**	**$ 9,830,526**	**$ 9,761,249**	**$ 9,615,574**	**$ 9,738,942**	**$ 9,854,988**
AIR FORCE							
Unclass	$ 5,224,964	$ 5,548,035	$ 5,827,075	$ 5,314,664	$ 5,143,015	$ 5,154,973	$ 4,897,439
Class	$ 2,171,671	$ 2,409,774	$ 2,639,859	$ 2,457,871	$ 2,361,237	$ 2,431,676	$ 2,368,162
Sub-total	**$ 7,396,635**	**$ 7,957,809**	**$ 8,466,934**	**$ 7,772,535**	**$ 7,504,252**	**$ 7,586,649**	**$ 7,265,601**
DEF-WIDE							
Unclass	$ 9,773,085	$ 11,126,479	$ 11,630,730	$ 11,191,483	$ 11,157,175	$ 11,037,940	$ 10,822,234
Class	$ 3,064,927	$ 3,321,059	$ 3,410,828	$ 3,345,829	$ 3,461,398	$ 3,450,516	$ 3,477,541
Sub-total	**$ 12,838,012**	**$ 14,447,538**	**$ 15,041,558**	**$ 14,537,312**	**$ 14,618,573**	**$ 14,488,456**	**$ 14,299,775**
DOD TOTAL							
Unclass	$ 33,451,217	$ 35,675,147	$ 36,410,087	$ 34,974,538	$ 34,413,590	$ 34,506,445	$ 34,004,951
Class	$ 8,506,811	$ 9,359,143	$ 10,013,296	$ 10,035,956	$ 9,954,256	$ 10,139,693	$ 10,220,645
TOTAL	**$ 41,958,028**	**$ 45,034,290**	**$ 46,423,383**	**$ 45,010,494**	**$ 44,367,846**	**$ 44,646,138**	**$ 44,225,596**

4. FY 2019 Key Drivers for Increases and Decreases

Table 4 below summarizes changes between the FY 2018 President's Budget portfolio and the FY 2019 President's Budget Request in the total number of investments, total unclassified resources, and the percentage change in resources from PB 2018 to PB 2019 by Component.

Table 4: FY 2018 to 2019 Portfolio Comparison
(dollars in millions)

DoD Components	FY 2018 President's Budget		FY 2019 President's Budget		% Change in Resourses from 2018 PB to 2019 PB
	Number of Investments	FY 2018 Portfolio Resources	Number of Investments	FY 2019 Portfolio Resources	
Army	961	$ 8,408	976	$ 10,703	27%
Navy	781	$ 7,792	754	$ 8,250	6%
Air Force	667	$ 4,895	621	$ 5,827	19%
Defense-Wide	807	$ 12,083	800	$ 11,631	-4%
DoD Total	**3,216**	**$ 33,178**	**3,151**	**$ 36,411**	**10%**
Note: Unclassified Submission Only				*Numbers may not add due to rounding*	

Increases or decreases from one FY to the next can be indicative of changes in investment acquisition stages or activities and other lifecycle-sensitive resource changes such as technology refresh cycles. Other common drivers of resources increases include changes in labor or FTE costs, commodity price fluctuations, and general inflation. Overall portfolio increases reflect the net effect of investment increases and decreases, including the addition of new investments, retirement of existing investments and systems, and system or service consolidations. Table 5 below includes PB 2019 changes in resources from PB 2018 by Components and Appropriations Type:

Table 5: FY 2018 to 2019 Portfolio Comparison by Appropriation Type

DoD Components	Change from FY 2018 President's Budget			
	Operations	Procurement	RDT&E	Other
Army	12%	35%	51%	43%
Navy	9%	4%	15%	8%
Air Force	-3%	0%	48%	4%
Defense-Wide	8%	-6%	20%	6%
DoD Total	**7%**	**15%**	**38%**	**9%**
Note: Unclassified Submission Only				

5. DoD IT Cost Savings Initiatives

Investment and management strategies for modernizing or consolidating information systems, acquiring newer technologies, and applying innovative uses of technologies offer opportunities for efficiencies and cost savings both within the IT resource pool and outside of IT in a variety of mission, administrative, and other functional areas. The following table summarizes the composite realized or expected savings and IT efficiencies within the following areas as of March 2018:

- Data Center Consolidation;
- Enterprise licensing;
- Circuit optimization;
- Medical devices;
- Application rationalization;
- Military Health System IT Reform;
- The National Capital Region (NCR) IT Consolidation;
- The Defense Media Activity (DMA);
- IT Commodity Management Reform; and
- Wireless Device Management Reform.

Table 6: IT Efficiencies and Cost Savings Summary
(dollars in millions)

IT Savings	FY 2017 and Prior	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Cumulative
Data Center Savings	$ 331.90	$ 64.10	$ 102.30	$ 109.50	$ 143.20	$ -	$ -	$ 751.00
Other IT Savings	$ 23.80	$ 144.20	$ 239.60	$ 511.70	$ 783.80	$ 572.50	$ 534.20	$ 2,809.80
Total Savings	**$ 355.70**	**$ 208.30**	**$ 341.90**	**$ 621.20**	**$ 927.00**	**$ 572.50**	**$ 534.20**	**$ 3,560.80**
Note: Unclassified Submission Only								

6. FY 2017, 2018, and 2019 IT Budget by Capital versus Operating Expenses

The Office of Management and Budget (OMB)-defines categorizations of funds according to the system lifecycle constructs of Development/Modernization/Enhancement (DME) and Operations and Maintenance (O&M). Within DoD, the DME categorization indicates acquisition or development efforts for specific IT capital assets. Despite persistent characterizations of all O&M activities as funding “legacy” (antiquated) system spending, this category of expenses within DoD actually includes all non-capital and modernization expenses for all activities, purchased services, staffing, and systems costs for all ongoing IT functions (such as help desk services or communications) and operational costs for in-service systems, regardless of when such assets were developed or deployed, or the relative currency of technology

employed. Resources assigned to the O&M category are used to operate and maintain specific systems and technologies with discernable lifecycles, including Technical Refresh of equipment and software versions/releases, as well as resources for ongoing functions, services and expenses not specific to a particular system or the acquisition of a particular capital asset.

Table 7 below compares the portion of the DoD IT Portfolio resources aligned to the Capital (DME)) and Expenses (O&M) categories defined by the OMB Circular A-11 (https://www.whitehouse.gov/omb/circulars/#budget).

Table 7: DoD IT Portfolio Resource Distribution by Capital (DME) and Operating Expenses (Operations and Maintenance)
(*dollars in millions)*

Fiscal Year	Dev/Mod/Enhance		Expenses (O&S)	
	Resources	Portfolio %	Resources	Portfolio %
FY 2017 PB	$ 6,996	23%	$ 23,301	77%
FY 2018 PB	$ 7,600	23%	$ 25,578	77%
FY 2019 PB	$ 9,779	27%	$ 26,631	73%
Note: Unclassified Submission Only				

Within the DoD IT portfolio, O&M resources are used for the following expenses:

- IT Staffing/FTE;
- IT Systems operation and sustainment;
- Legacy IT systems and assets operation and sustainment;
- Technology refresh, upgrades and updates;
- Software licensing, maintenance updates and releases;
- Purchase of commodity and commercial services not deemed provisioned;
- IT Management and CIO staff functions; and
- IT Technical support functions.

7. DoD Data Center Consolidation/Optimization Savings Summary

In accordance with DoD Data Center consolidation objectives, DoD closed 915 data centers between FY 2010 and FY 2017, with an estimated cumulative cost savings of $331.90 million[1]. See Table 7 below for FY savings through FY 2019 based on DoD Total Cost of Ownership Model and FY15 DoD resource management decisions.

[1] Q4FY17 data center inventory submission to OMB used to calculate data center closure value

Table 8: DoD Data Center Optimization Savings from FYs 2011-2019
(dollars in millions)

Data Center Optimization	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018*	FY 2019*
Annual Savings	$ 0.50	$ 17.00	$ 5.90	$ 117.80	$ 49.40	$ 80.40	$ 60.90	$ 64.10	$ 102.30
Cumulative Savings	$ 0.50	$ 17.50	$ 23.40	$ 141.20	$ 190.50	$ 271.00	$ 331.90	$ 396.00	$ 498.30
* Projected									

8. DoD Investment in Cloud Technologies and Solutions

On September 13, 2017 the Deputy Secretary of Defense, in a memorandum regarding the acceleration of enterprise cloud adoption, stated, "…accelerating the DoD's adoption of cloud computing technologies is critical to maintaining our militaries technological advantage." That memorandum directed the Department establish a Cloud Executive Steering Group (CESG) to devise and oversee the execution of a strategy to accelerate the adoption of cloud architectures and cloud services, focusing on commercial solutions. This initiative will occur in two phases; during phase one, the DoD will use a tailored acquisition process to acquire a modern enterprise cloud services solution that can support unclassified, secret, and top secret information; during phase two, the CESG will rapidly transition select DoD Components or agencies to the acquired cloud solution, and, to the maximum extent possible, operationalize its mission using security, software, and machine learning capabilities that cloud technology provides. DoD continues to increase its use of cloud computing technologies and solutions, including use of private, in-house, and hybrid cloud solutions, and is making progress in adoption of approved cloud service offerings (CSOs) across information impact levels as illustrated in Table 9 below. This table shows cloud adoption efforts by Information Impact Level (Level 2 = Low Impact, often public facing web sites, Level 4/5 = Moderate Impact, unclassified systems and unclassified National Security Systems, Level 6 = Secret Classified Systems) as well as the number of commercial and government cloud services that have been assessed to meet DoD cybersecurity requirements for the various impact level.

Table 9: DoD IT Cloud Computing Migrations and Approved Service Offerings FYs 2015-2018

DoD Cloud Computing	Q2 FY15	Q2 FY16	Q2 FY17	Q2 FY18
Systems Migrating to Cloud				
Information Impact Level 2				42
Information Impact Levels 4/5	20	47	90	250
Information Impact Levels 6				8
Approved Cloud Service Offerings (CSOs)				
Information Impact Level 2	36	50	66	91
Information Impact Levels 4/5	2	3	7	20
Information Impact Levels 6				1

9. DoD IT Budget Request by Mission Area

The DoD IT Budget organizes investments by Mission Areas, and Segments within those Mission Areas, to provide visibility into how much we are investing in various capabilities across the portfolio. Mission Areas and Segments are shown in Figure 2 below:

Figure 2: DoD FY 2019 Mission Areas and Segments

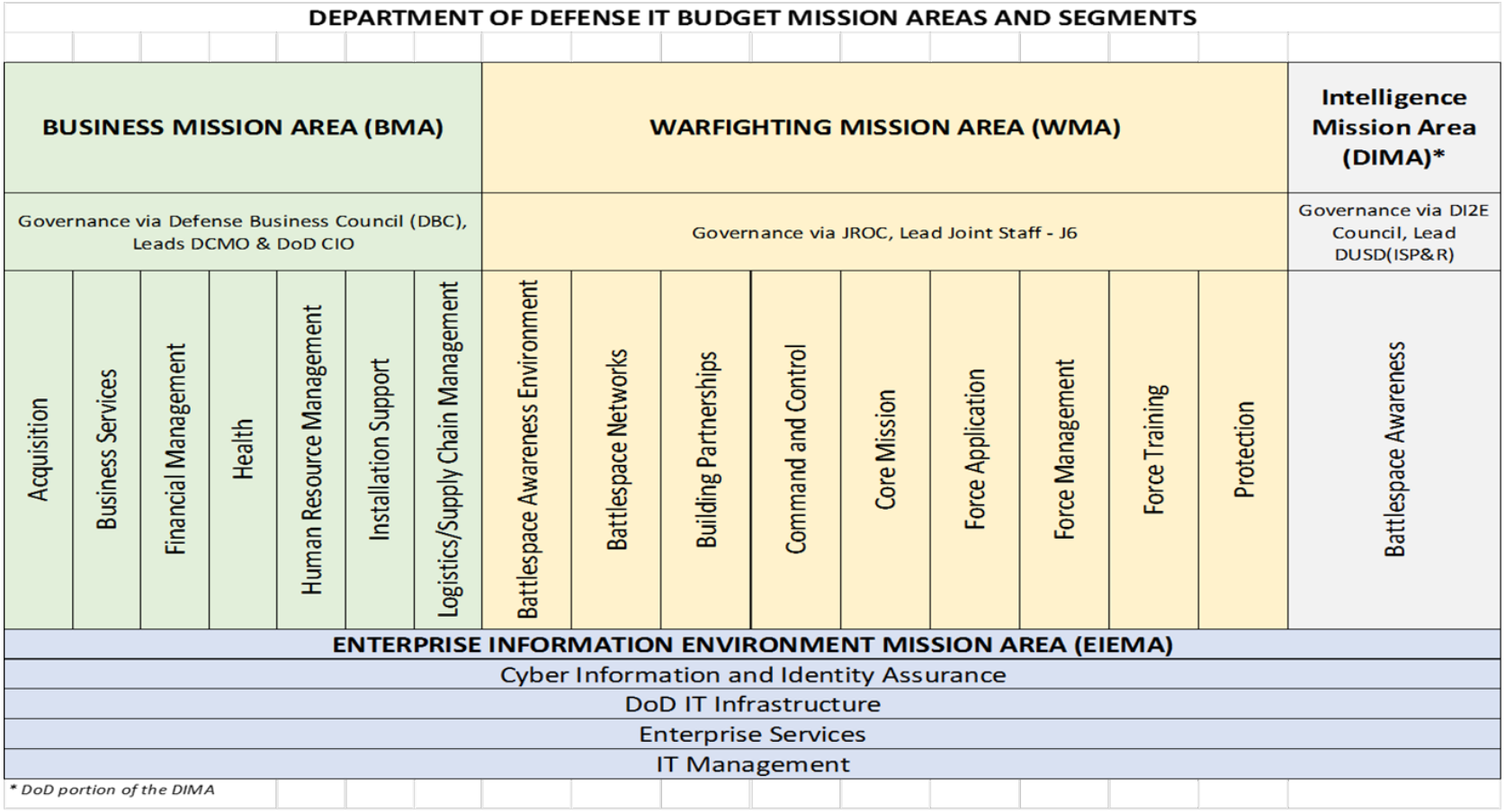


Table 10 below shows the distribution of unclassified IT investments and resources among the DoD Mission Areas and Segments for the FY 2019 IT President's Budget Request:

Table 10: DoD FY 2019 IT Budget Resources by Mission Area and Segment
(dollars in millions)

Mission Area	Segment	FY 2019 PB		
		Resources	% of Total IT Portfolio Resources	% of Total IT Portfolio Resources
Business	Acquisition	$ 663.9	1.8%	25.8%
	Other Business Services	$ 158.1	0.4%	
	Financial Management	$ 1,092.3	3.0%	
	Health	$ 1,853.6	5.1%	
	Human Resource Management	$ 2,287.2	6.3%	
	Installation Support	$ 370.3	1.0%	
	Logistics/Supply Chain Management	$ 2,986.1	8.2%	
Enterprise Information Environment	DoD IT Infrastructure	$ 17,374.2	47.7%	51.4%
	IT Management	$ 1,330.3	3.7%	
Warfighting	Battlespace Awareness-Environment	$ 335.0	0.9%	22.4%
	Battlespace Networks	$ 3,194.2	8.8%	
	Building Partnerships	$ 138.1	0.4%	
	Command & Control	$ 3,248.6	8.9%	
	Core Mission	$ 161.3	0.4%	
	Force Application	$ 497.6	1.4%	
	Force Management	$ 94.4	0.3%	
	Force Training	$ 371.9	1.0%	
	Protection	$ 128.1	0.4%	
Intelligence	Battlespace Awareness-ISR	$ 125.0	0.3%	0.3%
	Total Portfolio	**$ 36,410.1**	**100.0%**	**100.0%**
Note: Unclassified Submission Only			*Numbers may not add due to rounding*	

10. Cyberspace Activities

The DoD continues to invest in the development and maintenance of cyberspace activities to support full spectrum operations in pursuit of national objectives. The DoD is prepared to defend the nation against cyber threats and provide the President with options in the event of crisis or contingency.

The growing number and complexity of malicious cyber activities targeting U.S. national security interests has increased congressional attention in the DoD's cyber activities and in the abilities of the Department to protect national interest and the prioritization of cyber-related planned efforts.

The Fiscal Year (FY) 2019 President's Budget request for Cyberspace Activities of $8.6 billion (FYDP, $43.3 billion) represents an increase in cyberspace funding of $0.6 billion compared to the FY 2018 budget request, and supports the Department's defensive and offensive cyberspace operations capabilities and cyber strategy. Table 11 displays the distribution of the Cyberspace Activities request by portfolio; Cyberspace Activities, Cybersecurity, Cyber Mission Forces, HQ US CYBERCOM, and Cyber Science & Technology.

Table 11: DoD Cyberspace Activities Budget Request
(dollars in millions)

Portfolio	FY 2017*	FY 2018**	FY 2019***	Δ FY18-19	FY 2020	FY 2021	FY 2022	FY 2023	Total FY19-23
Cyberspace Activities	$ 3,093	$ 3,094	$ 3,372	$ 278	$ 3,225	$ 3,190	$ 3,307	$ 3,422	$16,516
Cybersecurity	$ 2,102	$ 2,522	$ 2,756	$ 234	$ 2,878	$ 2,750	$ 2,721	$ 2,696	$13,802
CYBER Mission Force (CMF)	$ 1,335	$ 1,701	$ 1,851	$ 150	$ 1,936	$ 1,922	$ 2,070	$ 2,113	$ 9,893
USCYBERCOM (Headquarters only)	$ 309	$ 282	$ 257	$ (25)	$ 221	$ 229	$ 239	$ 248	$ 1,195
Cyber Science & Technology	$ 493	$ 455	$ 403	$ (52)	$ 376	$ 384	$ 386	$ 379	$ 1,929
TOTAL Cyber	**$ 7,333**	**$ 8,054**	**$ 8,639**	**$ 585**	**$ 8,635**	**$ 8,475**	**$ 8,723**	**$ 8,858**	**$43,333**
Army	$ 1,647	$ 1,763	$ 1,968	$ 205	$ 2,117	$ 1,999	$ 2,187	$ 2,306	$10,578
Navy	$ 1,069	$ 1,271	$ 1,388	$ 117	$ 1,449	$ 1,430	$ 1,454	$ 1,507	$ 7,229
Air Force	$ 2,172	$ 2,378	$ 2,577	$ 199	$ 2,397	$ 2,287	$ 2,349	$ 2,284	$11,895
Defense-Wide	$ 2,445	$ 2,643	$ 2,706	$ 63	$ 2,672	$ 2,759	$ 2,733	$ 2,762	$13,633
TOTAL Cyber	**$ 7,333**	**$ 8,054**	**$ 8,639**	**$ 585**	**$ 8,635**	**$ 8,475**	**$ 8,723**	**$ 8,858**	**$43,333**

Source: Select & Native Programming Data Input System - Information Technology (FEB 2018) *Numbers may not add due to rounding*

Includes operations, investment, military personnel, and military construction appropriations

** FY 2017 actuals includes $222 million Overseas Contingency Operations (OCO) funds*

*** FY 2018 reflects the President's Budget base request, includes $243 million OCO funds*

**** FY 2019 reflects the President's Budget request, includes $195 million OCO funds*

11. Electronic-Government (E-Government)

DoD continues to support and benefit from Federal E-Government (E-Gov) Initiatives, including Lines of Business (LOB) and shared services. Table 12 below includes DoD agency contributions towards E-Gov initiatives in FYs 2017 through 2019. The National Freedom of Information Act (FOIA) Portal is a requirement under the FOIA Improvement Act and not reflected within the DoD E-Government Initiatives.

Agency contributions reflect commitments of funding and/or in-kind services provided by partner agencies to initiative managing partner agencies in support of developing, implementing, and/or migrating to E-Gov common solutions. Contribution amounts are determined annually through collaborative, inter-agency E-Gov initiative governance structures subject to approval by OMB.

Table 12: DoD E-Government Contributions for FY 2017, FY 2018, and FY 2019
(dollars in thousands)

Line of Business (LoB) Title	Investment Unique ID	Brief Description	FY 2017	FY 2018	FY 2019
Budget Formulation and Execution LoB	007-000100911	Provides agencies with technological solutions, tools, and services for enhancing budgeting, analysis, document production, and data collection.	$ 110	$ 110	$ 110
E-Rulemaking	007-000100920	DoD's as a Partner Agency with the EPA, provides funding for the fee for service to supporting maintenance and operation of the government-wide electronic docket management system known as the Federal Docket Management System (FDMS), a publicly accessible system. The eRulemaking Program is a collaborative, inter-agency effort, whose purpose is to establish a common, automated and integrated repository for managing Federal rulemakings and non-rulemaking action that follow a structured notice and common process.	$ 89	$ 94	$ 95
Federal Health Architecture LoB	007-000100912	Coordinates government-wide solutions for interoperable and secure health information exchange and address agency business priorities, while protecting citizen privacy.	$ 2,306	$ 1,618	$ -
Federal PKI	007-000101044	The federal PKI efforts/federal PKI bridge is designed to allow agencies to operate their own public key infrastructures and interoperate with the public key infrastructures of other agencies.	$ 645	$ 645	$ 645
Financial Management LoB	007-000100913	Creates government-wide financial management solutions that are efficient and improve business performance while ensuring integrity in accountability, financial controls, and mission effectiveness.	$ 191	$ 211	$ 215
Grants.Gov	007-000100914	The Grants.gov Storefront provides electronic functionality for applicants and grantees, and reduces the paper-based processes that currently challenge the Federal grants environment. The initiative is designed to reduce existing inefficiencies, meet E-Gov goals, and provide benefits to both citizens and the government. Funds are provided for the DOD use of Grants.gov's Find and Apply functionality.	$ 705	$ 737	$ 755
Human Resources LoB	007-000100915	Allows the DoD to optimize the cost of managing HR systems and processes across a worldwide customer base and to reduce costs of performing these functions individually.	$ 261	$ 261	$ 261
Integrated Award Environment	007-000100916	Uses innovative processes and technologies to improve systems and operations for those who award, administer, or receive federal financial assistance (i.e. grants, loans), contracts, and intergovernmental transactions.	$ 28,862	$ 29,015	$ 29,028
Performance Management LoB	007-000100917	Develops government-wide performance management capabilities to help meet the transparency requirements of the Government Performance and Results Modernization Act of 2010 (GPRAMA), and support government-wide performance management efforts.	$ 79	$ 80	$ 80

Line of Business (LoB) Title	Investment Unique ID	Brief Description	FY 2017	FY 2018	FY 2019
Security, Suitability, and Credentialing LoB	007-000100918	Executive branch-wide, modern, cost-effective, standardized, and interoperable personnel security, suitability, and credentialing solutions providing common, core functionally to support the strategic management of the LoB.	$ 2,000	$ 2,000	$ 2,000
USAJOBS	007-000100919	USAJOBS.gov website provides a place while citizens can easily search for employment opportunities throughout the Federal Government.	$ 96	$ 775	$ 792
		Total	**$ 35,344**	**$ 35,546**	**$ 33,981**
Notes:				*Numbers may not add due to rounding*	
1. The Geospatial LoB is not represented in the Department of Defense budget, it is funded with National Intelligence Program (NIP) resources.					
2. USAJOBS funding in FY 2017 is located in multiple investments throughout the IT Budget but was centralized into a single investment (007-000100919) beginning in PB 2018.					

12. FY 2017 NDAA Section 1653 Statement

The DoD CIO, in coordination with the United States Cyber Command, has jointly developed a formal plan (memorandum) for modernizing the Department's Information Security Continuous Monitoring (ISCM) framework and incorporates requirements to implement Comply-to-Connect for the protection and defense of the network as well as to address Congressional requirements for software inventory publication. Fiscal Year 2017 Departmental actions include the development of an Information Security Continuous Monitoring Strategy; Comply-to-Connect Strategy; Enterprise Patch Management Service Strategy and Concept of Operations, Insider Threat User Activity Monitoring Strategy, and the availability of a formal acquisition vehicle for Components acquire the core capabilities and services of the Comply-to-Connect policy-based technical solution for automated instrumentation of cyber capabilities and configuration enforcement.

In FY2018, the Department will complete its test and examination of modernized security capabilities for endpoint hardening and protection; and, detection of malicious activities conducted by authorized and privileged DoD network users. Insider Threat remains one of the top cybersecurity concerns for the Department. Information collected by user activity monitoring capabilities combined with cyber asset detection provide a comprehensive view of network activity. The holistic view is necessary for the cyber defender to adequately identify, detect, respond, and recover from all cyber events as part of the Department's cyber internal defensive measures.

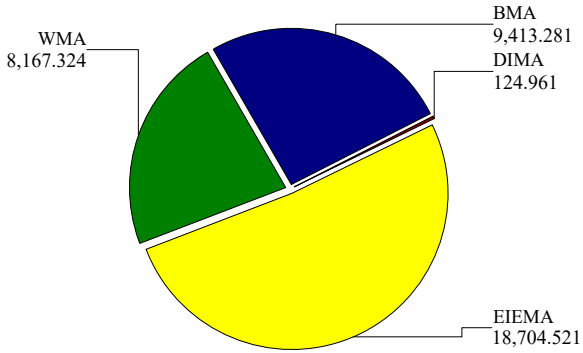
The FY 2019 Budget request includes funding and program plans to close gaps in identity management and data loss prevention which are germane core requirements to defend against threats on the network. These capabilities will publish reportable information to the ISCM framework to achieve comprehensive visibility into both cyber and information resource protection.

13. FITARA Statements

The Chief Information Officer of the Department of Defense (a) reviewed and provided recommendations to the Secretary of Defense on the information technology budget request of the Department, and (b) certifies that information technology investments are adequately implementing incremental development, as defined in capital planning guidance issued by the Office of Management and Budget.

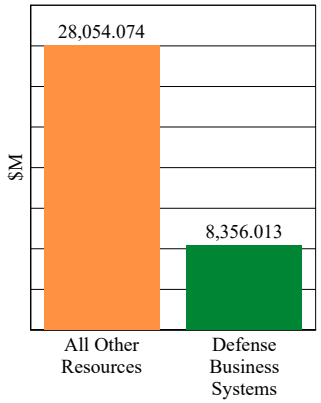
The CFO and CIO jointly affirm that the CIO had a significant role in reviewing planned IT support for major programs and significant increases and decreases in IT resources.

Mission Area



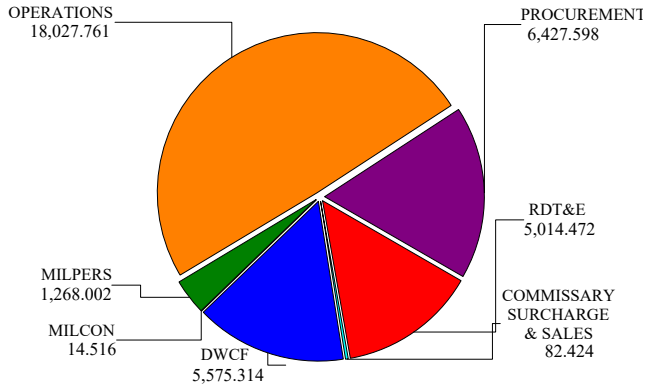
FY2019 ($M)

Business System Breakout



FY2019 ($M)

Appropriation



FY2019 ($M)

FY18 to FY19 Comparison ($M)

	FY2018	Inflation	Program Change	FY2019
PB FY2019:	35,675.147	606.469	734.940	36,410.087

FY18/FY19PB Comparison ($M)

	FY2018	FY2019	Delta
PB FY2018:	33,177.792	32,369.707	-808.085
PB FY2019:	35,675.147	36,410.087	
Delta:	2,497.355	4,040.380	

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DoD INFORMATION TECHNOLOGY BUDGET REQUEST BY DEPARTMENT (DOLLARS IN MILLIONS)			
DEPARTMENT	**FY2017**	**FY2018**	**FY2019**
DEPARTMENT OF ARMY	$11,387.202	$10,813.734	$10,702.613
DEPARTMENT OF NAVY	$7,065.966	$8,186.899	$8,249.669
DEPARTMENT OF AIR FORCE	$5,224.964	$5,548.035	$5,827.075
DEFENSE WIDE ACTIVITIES	$9,773.085	$11,126.479	$11,630.730
DOD TOTALS	**$33,451.217**	**$35,675.147**	**$36,410.087**

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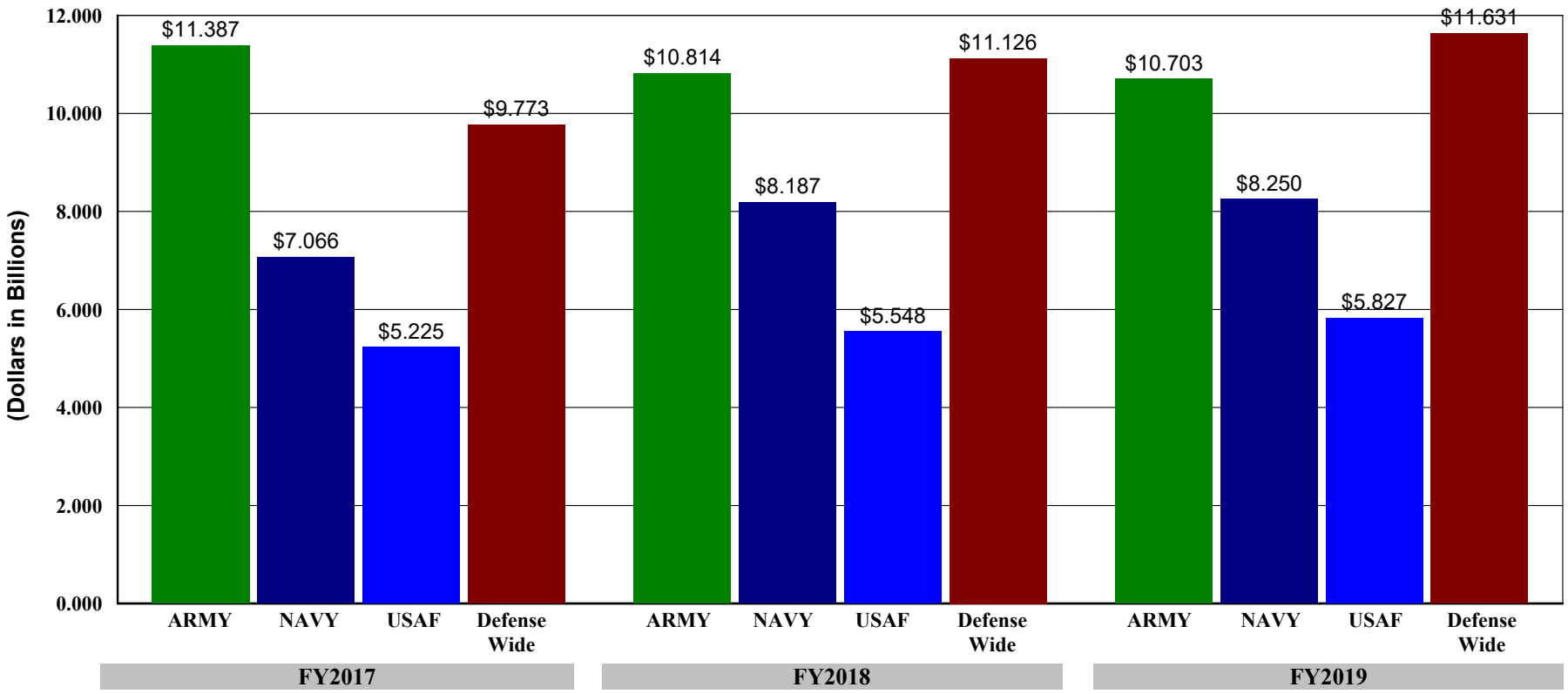
DoD INFORMATION TECHNOLOGY BUDGET REQUEST
COMPONENT SUMMARY
(DOLLARS IN BILLIONS)



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DoD INFORMATION TECHNOLOGY BUDGET REQUEST BY COMPONENT (DOLLARS IN MILLIONS)			
	FY2017	**FY2018**	**FY2019**
GRAND TOTAL	**$33,451.217**	**$35,675.147**	**$36,410.087**
DEPARTMENTS	**$23,678.132**	**$24,548.668**	**$24,779.357**
ARMY	$11,387.202	$10,813.734	$10,702.613
NAVY	$7,065.966	$8,186.899	$8,249.669
AIR FORCE	$5,224.964	$5,548.035	$5,827.075
DEFENSE AGENCIES	**$8,838.447**	**$10,418.302**	**$10,877.580**
DARPA	$35.048	$35.944	$36.364
DCAA	$38.805	$37.243	$31.494
DCMA	$113.267	$167.305	$162.075
DeCA	$164.043	$181.523	$159.223
DFAS	$346.260	$363.226	$374.162
DHA	$2,403.977	$2,808.097	$2,985.724
DISA	$2,889.509	$3,855.326	$4,134.907
DLA	$1,327.386	$1,368.889	$1,383.400
DPAA	$19.556	$19.204	$19.365
DSCA	$12.580	$19.829	$12.546
DSS	$45.469	$42.909	$53.729
DTRA	$121.725	$141.672	$140.094
JCS	$125.303	$101.047	$95.863
MDA	$236.455	$253.512	$249.876
OSD	$195.734	$214.806	$203.249
PFPA	$37.357	$35.964	$39.879
SOCOM	$283.100	$289.992	$312.307
TRANSCOM	$442.873	$481.814	$483.323
FIELD ACTIVITIES	**$934.638**	**$708.177**	**$753.150**
OEA	$3.020	$3.333	$3.499

BY COMPONENT - continued (DOLLARS IN MILLIONS)			
	FY2017	**FY2018**	**FY2019**
CMO	$0.221	$3.253	$3.543
DHRA	$320.790	$345.945	$361.342
DMACT	$74.426	$77.364	$91.775
DODEA	$161.766	$163.908	$166.197
DTIC	$17.869	$28.574	$31.047
DTSA	$5.916	$5.960	$6.055
IG	$38.716	$39.055	$36.958
NDU	$24.981	$25.986	$37.986
OASD(PA)	$4.836	$0.000	$0.000
WHS	$282.097	$14.799	$14.748

DoD INFORMATION TECHNOLOGY BUDGET REQUEST BY MISSION AREA (DOLLARS IN MILLIONS)			
MISSION AREA	**FY2017**	**FY2018**	**FY2019**
BUSINESS	$7,867.087	$9,034.021	$9,413.281
DEFENSE INTELLIGENCE	$121.795	$116.430	$124.961
ENTERPRISE INFORMATION ENVIRONMENT	$18,364.619	$18,592.928	$18,704.521
WARFIGHTING	$7,097.716	$7,931.768	$8,167.324
DOD TOTALS	**$33,451.217**	**$35,675.147**	**$36,410.087**

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DoD INFORMATION TECHNOLOGY BUDGET REQUEST SEGMENTS BY COMPONENT (DOLLARS IN MILLIONS)			
ACQUISITION	**FY2017**	**FY2018**	**FY2019**
ARMY	$74.858	$78.489	$109.171
NAVY	$216.676	$231.634	$244.184
AIR FORCE	$71.425	$88.399	$103.669
DEFENSE WIDE	$170.055	$201.393	$206.737
	$533.014	$599.915	$663.761
BATTLESPACE AWARENESS-ENVIRONMENT	**FY2017**	**FY2018**	**FY2019**
ARMY	$32.547	$47.611	$33.892
NAVY	$78.693	$70.164	$65.494
AIR FORCE	$148.800	$194.540	$232.314
	$260.040	$312.315	$331.700
BATTLESPACE AWARENESS-ISR	**FY2017**	**FY2018**	**FY2019**
ARMY	$5.556	$5.847	$5.179
NAVY	$102.976	$93.433	$102.502
AIR FORCE	$13.263	$17.150	$17.280
	$121.795	$116.430	$124.961
BATTLESPACE NETWORKS	**FY2017**	**FY2018**	**FY2019**
ARMY	$992.149	$1,162.223	$1,184.763
NAVY	$531.321	$731.895	$836.055
AIR FORCE	$620.699	$527.709	$599.969
DEFENSE WIDE	$549.375	$583.902	$577.826
	$2,693.544	$3,005.729	$3,198.613
BUILDING PARTNERSHIPS	**FY2017**	**FY2018**	**FY2019**
ARMY	$0.568	$0.590	$0.000
AIR FORCE	$115.247	$120.899	$123.518
DEFENSE WIDE	$14.554	$21.818	$14.566
	$130.369	$143.307	$138.084

SEGMENTS BY COMPONENT - continued (DOLLARS IN MILLIONS)			
BUSINESS SERVICES TBD	**FY2017**	**FY2018**	**FY2019**
ARMY	$99.176	$141.983	$136.607
NAVY	$98.307	$125.815	$125.546
AIR FORCE	$10.566	$10.530	$10.158
DEFENSE WIDE	$25.602	$21.743	$21.696
	$233.651	$300.071	$294.007
COMMAND & CONTROL	**FY2017**	**FY2018**	**FY2019**
ARMY	$539.967	$475.810	$420.240
NAVY	$723.380	$833.494	$781.870
AIR FORCE	$960.657	$1,221.423	$1,533.714
DEFENSE WIDE	$462.293	$553.651	$501.805
	$2,686.297	$3,084.378	$3,237.629
CORE MISSION TBD	**FY2017**	**FY2018**	**FY2019**
NAVY	$153.249	$151.507	$140.439
AIR FORCE	$63.208	$20.066	$11.558
DEFENSE WIDE	$9.746	$4.316	$4.530
	$226.203	$175.889	$156.527
DOD IT INFRASTRUCTURE	**FY2017**	**FY2018**	**FY2019**
ARMY	$7,146.719	$6,457.110	$6,407.063
NAVY	$2,793.562	$3,193.322	$3,090.109
AIR FORCE	$2,264.397	$2,190.780	$2,001.859
DEFENSE WIDE	$4,702.410	$5,469.869	$5,875.178
	$16,907.088	$17,311.081	$17,374.209
FINANCIAL MANAGEMENT	**FY2017**	**FY2018**	**FY2019**
ARMY	$158.050	$205.858	$205.700
NAVY	$181.790	$206.055	$195.874
AIR FORCE	$143.146	$231.818	$248.622
DEFENSE WIDE	$363.526	$469.416	$442.111
	$846.512	$1,113.147	$1,092.307

SEGMENTS BY COMPONENT - continued (DOLLARS IN MILLIONS)			
FORCE APPLICATION	**FY2017**	**FY2018**	**FY2019**
ARMY	$214.413	$323.426	$278.109
NAVY	$10.008	$31.891	$33.338
AIR FORCE	$116.449	$196.631	$166.230
DEFENSE WIDE	$25.465	$21.334	$19.878
	$366.335	$573.282	$497.555
FORCE MANAGEMENT	**FY2017**	**FY2018**	**FY2019**
ARMY	$2.618	$1.621	$1.520
NAVY	$64.832	$52.280	$50.114
AIR FORCE	$11.126	$11.262	$12.381
DEFENSE WIDE	$9.673	$4.565	$5.054
	$88.249	$69.728	$69.069
FORCE TRAINING	**FY2017**	**FY2018**	**FY2019**
ARMY	$232.736	$229.705	$190.780
NAVY	$1.029	$0.689	$2.985
AIR FORCE	$31.591	$35.087	$39.851
DEFENSE WIDE	$49.530	$55.083	$51.860
	$314.886	$320.564	$285.476
HEALTH	**FY2017**	**FY2018**	**FY2019**
NAVY	$6.370	$9.012	$6.543
DEFENSE WIDE	$1,296.920	$1,743.354	$1,847.037
	$1,303.290	$1,752.366	$1,853.580
HUMAN RESOURCE MANAGEMENT	**FY2017**	**FY2018**	**FY2019**
ARMY	$652.483	$761.112	$819.978
NAVY	$485.074	$607.346	$599.518
AIR FORCE	$204.649	$188.312	$213.329
DEFENSE WIDE	$575.126	$632.343	$651.743
	$1,917.332	$2,189.113	$2,284.568

SEGMENTS BY COMPONENT - continued (DOLLARS IN MILLIONS)			
INSTALLATION SUPPORT	**FY2017**	**FY2018**	**FY2019**
ARMY	$157.121	$177.134	$149.428
NAVY	$112.720	$111.243	$110.862
AIR FORCE	$69.388	$87.027	$92.913
DEFENSE WIDE	$13.906	$12.244	$12.242
	$353.135	$387.648	$365.445
IT MANAGEMENT	**FY2017**	**FY2018**	**FY2019**
ARMY	$108.788	$34.638	$37.687
NAVY	$676.009	$716.101	$730.409
AIR FORCE	$11.205	$9.050	$9.415
DEFENSE WIDE	$661.529	$522.058	$552.801
	$1,457.531	$1,281.847	$1,330.312
LOGISTICS/SUPPLY CHAIN MANAGEMENT	**FY2017**	**FY2018**	**FY2019**
ARMY	$810.378	$677.149	$682.396
NAVY	$819.169	$1,007.363	$1,118.181
AIR FORCE	$333.220	$368.608	$379.095
DEFENSE WIDE	$804.169	$771.458	$806.437
	$2,766.936	$2,824.578	$2,986.109
PROTECTION	**FY2017**	**FY2018**	**FY2019**
ARMY	$159.075	$33.428	$40.100
NAVY	$10.801	$13.655	$15.646
AIR FORCE	$35.928	$28.744	$31.200
DEFENSE WIDE	$39.206	$37.932	$39.229
	$245.010	$113.759	$126.175
DoD Totals	**$33,451.217**	**$35,675.147**	**$36,410.087**

DoD INFORMATION TECHNOLOGY BUDGET REQUEST BY SEGMENT (DOLLARS IN MILLIONS)			
SEGMENT	**FY2017**	**FY2018**	**FY2019**
ACQUISITION	$533.014	$599.915	$663.761
BATTLESPACE AWARENESS-ENVIRONMENT	$260.040	$312.315	$331.700
BATTLESPACE AWARENESS-ISR	$121.795	$116.430	$124.961
BATTLESPACE NETWORKS	$2,693.544	$3,005.729	$3,198.613
BUILDING PARTNERSHIPS	$130.369	$143.307	$138.084
BUSINESS SERVICES TBD	$233.651	$300.071	$294.007
COMMAND & CONTROL	$2,686.297	$3,084.378	$3,237.629
CORE MISSION TBD	$226.203	$175.889	$156.527
DOD IT INFRASTRUCTURE	$16,907.088	$17,311.081	$17,374.209
FINANCIAL MANAGEMENT	$846.512	$1,113.147	$1,092.307
FORCE APPLICATION	$366.335	$573.282	$497.555
FORCE MANAGEMENT	$88.249	$69.728	$69.069
FORCE TRAINING	$314.886	$320.564	$285.476
HEALTH	$1,303.290	$1,752.366	$1,853.580
HUMAN RESOURCE MANAGEMENT	$1,917.332	$2,189.113	$2,284.568
INSTALLATION SUPPORT	$353.135	$387.648	$365.445
IT MANAGEMENT	$1,457.531	$1,281.847	$1,330.312
LOGISTICS/SUPPLY CHAIN MANAGEMENT	$2,766.936	$2,824.578	$2,986.109
PROTECTION	$245.010	$113.759	$126.175
DOD TOTALS	**33,451.217**	**35,675.147**	**36,410.087**

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