An aerial photograph of the Pentagon and its surrounding area. The Pentagon is a large, five-sided building with a flat roof, surrounded by parking lots and roads. To the left, a complex highway interchange with multiple overpasses is visible. The background shows a mix of urban and green spaces, including other buildings and fields.

CSIS – Center for Strategic and  
International Studies  
1616 Rhode Island Avenue NW  
Washington, DC 20036

Anthony H. Cordesman  
Phone: 1.202.361.8085

Email: [acordesman@gmail.com](mailto:acordesman@gmail.com)

# The U.S. Defense Budget in FY2019: Underlying Trends

Anthony H. Cordesman  
[acordesman@gmail.com](mailto:acordesman@gmail.com)

Photo: STAFF/AFP/GettyImages

*August 15, 2018*



# Introduction

**This report provides a broad survey of the major trends in the FY2019 U.S. defense budget as reported from the time the President made his original budget request in February 2018 to full Congressional mark up of the National Defense Authorization Act (NDAA) and the President's signature in July 2018. It draws on a wide range of official and other sources, and is designed to provide an overview of official reporting on major trends.**

**The U.S. provides a vast amount of detail on its annual budget request for military and international affairs spending – much of its in graphic, tabular, and summary form. The material presented here is an attempt to pick the key materials show where the U.S. is focusing its military spending, how it relates to its strategy, how major force improvements will affect U.S. capabilities, and how the U.S. is dealing with its strategic partners and potential threats.**

**However, the user should be aware that much of the material presented is often uncertain, and is not comparable from source to source. There also is no easy or single way to summarize the trends in the U.S. defense budget. The materials that go into just the unclassified portions of the Department of Defense's annual submission of President's budget request to Congress, and the subsequent Congressional review of that request run well over several thousand pages.**

**It is also critical for the reader to understand that only the portion of the report dealing with the National Defense Authorization Act (pages 24-43) represent the final result of Congressional action and the FY2019 budget signed by the President, and not all of the portions reference action by the key Committees involved were approved in exactly the form shown in the final bill signed by the President. Much of the material is drawn sources that precede the final Congressional markup because the Department never updates most of the tables and charts in the Department of Defense request until the following year and new budget submission.**

**The material presented also shows that different sources define total defense spending in different ways, and include different expenditures and convert current to constant dollars in different ways.**

**More importantly, most sources report in terms of “Budget Authority” (BA) – the total money the Congress authorizes in a given Fiscal Year that can be spent over a period of years. This is the best estimate of what the Congress is actually approving.**

**However, some sources in terms of “Budget Outlays”(BO) – only the money that can be spent in 12 month period of that U.S. Fiscal Year. (Which begins on 1 October of the year the Congress acts upon, and ends on 30 September of the following year). This is the best way of assessing the impact of spending on how well the budget is balanced, the size of the deficit, and impact on the federal debt.**

**Budget projections for future years present other problems. The Congressional Budget Office (CBO) provides detailed estimates of how the President’s budget request – and the final budgets the Congress authorizes – will impact over time. Many such estimate precede Congressional action on the budget, and it then takes several months for the CBO to estimate the probable future trends in the total federal budget and impact of the final Congressionally approved levels of U.S. defense spending on that total federal budget and the U.S. GDP. This often creates major lags in official estimates of the trends in every aspect of federal spending, the budget deficit, and the national debt.**

**More broadly, the Department of Defense has effectively abandoned any serious effort to create a program budget, and to provide a realistic estimate of the cost of the Future Year Defense Program beyond the fiscal year directly under review. It essentially rolls forward current activities and plans to make estimates of the next four years that are based on the spending levels in the budget year under review. It bases such estimates largely on input categories such as personnel, O&M, RDT&E, and procurement.**

**The Department of Defense does not report expenditures by major mission or command. It also Department defines “strategy” largely in terms of broad concepts and goals. It does not tie its “strategy” to net assessments of the balance in terms of threats and strategic partners, to specific force plans, to specific actions and schedules, to specific costs, or to measures of success and effectiveness. Unclassified reporting in “PPB” -- or planning, programming, and budgeting -- form has become a functional oxymoron.**

**The Congress does hold strategy hearings and direct studies of key strategic issues but these efforts rarely address any of the practical details of any aspect of the nature and cost of U.S. strategy. Similarly, the outyear estimates of military spending by the Department of Defense, OMB, and the Congressional Budget Office (CBO) focus on a “Baseline” that assumes the United States does not actually use its military forces in any operational form. The limited estimates provides for future Overseas Contingency Operations are “placeholders” and not actual estimates.**

**This is partly inevitable given the inability to predict these aspects of the future, but it creates a practical problem in a country whose civil plans call for major future increases in mandatory spending on retirement, medical care, and welfare. This means the official U.S. projections of civil spending rise relative to military spending in ways history indicates will be highly unrealistic.**



# Table of Contents

<b>Introduction</b>	<b>2-4</b>
<b>Key Elements of the “New” Trump Strategy</b>	<b>7-9</b>
<b>Estimates of the Impact of U.S. Defense Spending Relative to the World in 2017</b>	<b>10-16</b>
<b>Estimates of Actual U.S. Defense Spending Relative to NATO: 2011-2018</b>	<b>17-24</b>
<b>Key Trends in the Final FY2019 National Defense Authorization Act (NDAA) Signed by the President in August 2018</b>	<b>24-43</b>
<b>Topline Trends in Total National Security Spending Request (With Department of Energy, Homeland Defense and Veteran’s Administration)</b>	<b>44-48</b>
<b>Topline Trends in the President’s Total National Security FY2019 Budget Request, (050)</b>	<b>49-67</b>
<b>Administration Estimate of Impact of Total Federal Spending Levels on U.S. Fiscal Posture, Debt, and Deficit</b>	<b>68-70</b>
<b>CBO Estimate of Impact of Total Federal Spending Levels on U.S. Fiscal Posture, Debt, and Deficit</b>	<b>71-78</b>
<b>CBO Estimate of Impact of Defense Spending Levels on U.S. Fiscal Posture, Debt, and Deficit</b>	<b>79-83</b>
<b>CBO Estimate of Impact of President’s Military Force Goals on Rise in Defense Spending: FY2018-FY2019</b>	<b>84-88</b>

<b>Wartime Overseas Contingency Operations (OCO) and Alliance</b>	<b>89-96</b>
<b>CBO Summary of Key Issues in FY2019 Spending Trends</b>	<b>97-98</b>
<b>FY2019 Request by Appropriation and Military Service</b>	<b>99-102</b>
<b>Military Personnel</b>	<b>103-105</b>
<b>Military Entitlement Priorities</b>	<b>106-108</b>
<b>Readiness and Operations &amp; Maintenance (O&amp;M) Priorities</b>	<b>109-112</b>
<b>Key Investment/Procurement Priorities</b>	<b>113-120</b>
<b>Science and Technology</b>	<b>121-122</b>
<b>Department of Energy Nuclear Weapons Programs</b>	<b>123-127</b>
<b>Homeland Security</b>	<b>128-133</b>
<b>Veterans Administration</b>	<b>134-138</b>

# **Key Elements of the “New” Trump Strategy**



# Key Elements of New US National Security Strategy: “Global Rebalancing”

- **Respond to growing political, economic, military, information competitions**
  - Revisionist powers such as China and Russia
  - Regional dictators such as Iran and North Korea
  - Transnational threats, including jihadist terrorists and transnational criminal organizations
- **Protect four vital national interests**
  - Protect the American people, homeland, and way of life
  - Promote American prosperity
  - Preserve peace through strength
  - Advance American Influence

## A Strategy of Principled Realism

# Key Elements of New US National Defense Strategy

- **Compete, Deter, and Win to Preserve Peace through Strength**
  - Expand the competitive space leveraging all elements of national power
- **Competition with China and Russia is central challenge**
  - Continue efforts to deter and counter North Korea, Iran, and terrorists
- **Sustain U.S. influence and ensure favorable regional balances of power**
  - Build a more lethal, resilient, agile, and ready Joint Force
  - Strengthen alliances and attract new partners
  - Reform the Department's business practices for greater performance and affordability

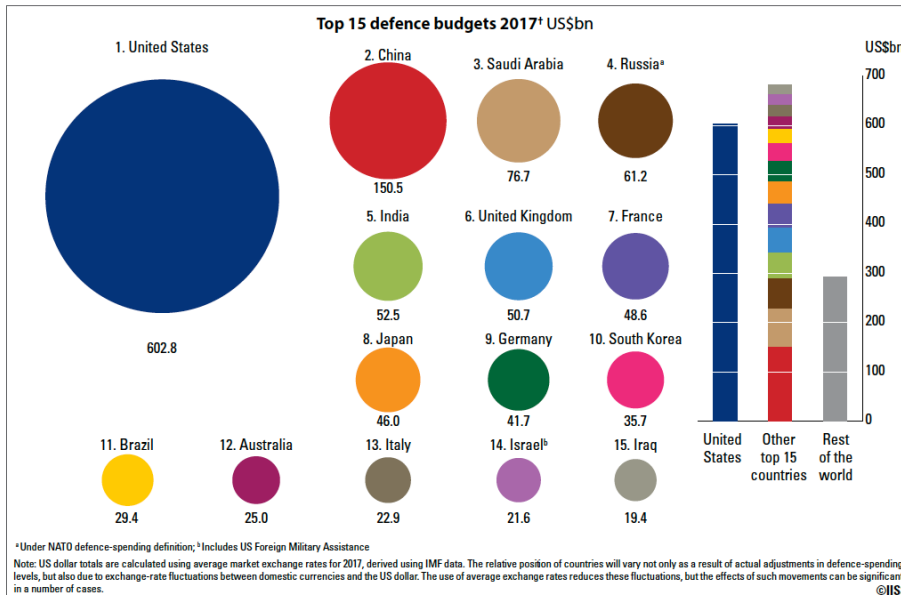
**Great Power Competition is now the Primary Focus**

# **Estimates of the Impact of U.S. Defense Spending Relative to the World in 2017**



# The U.S. Dominates Military Spending in 2017

## (Before major U.S. increase in FY2019)



IISS

SIPRI

### TOP 15 MILITARY SPENDERS IN 2017

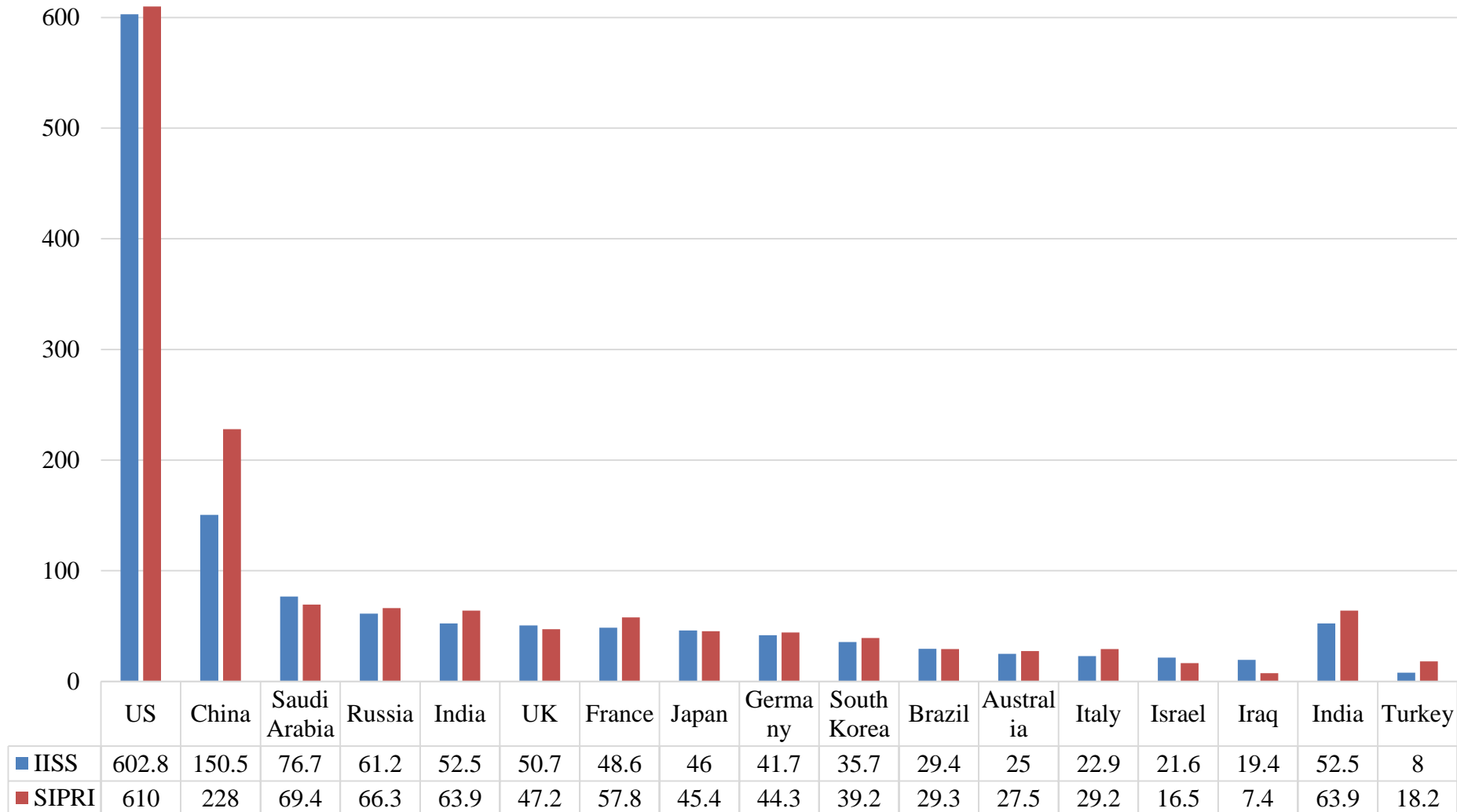
Countries with highest military expenditure  
In current 2017 US\$ billion



Source: SIPRI Military Expenditure Database

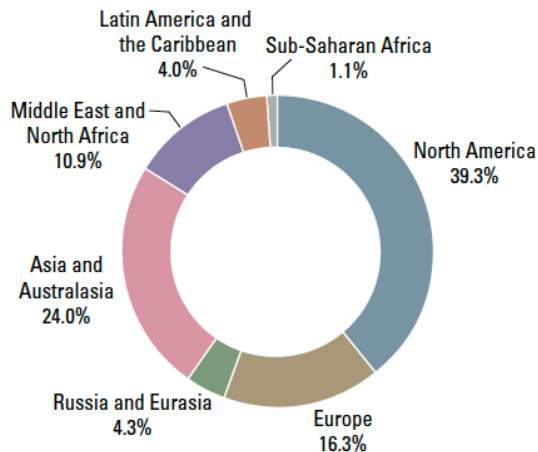
# Top Defense Budgets, by Country, 2017

## Current Prices & Exchange Rates (billion \$USD)



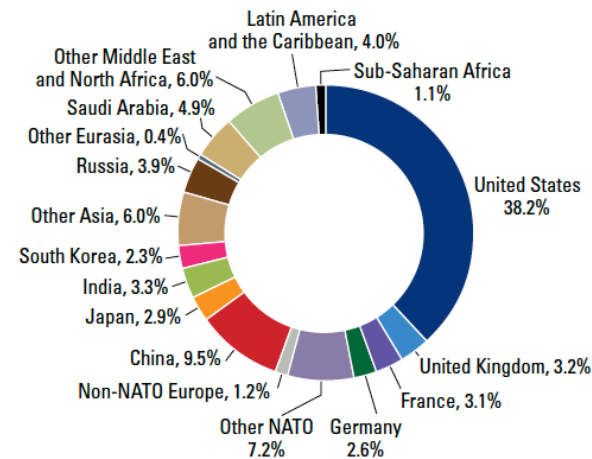
# Comparative Military Efforts: IISS vs. SIPRI

Planned global defence expenditure by region 2017<sup>†</sup>



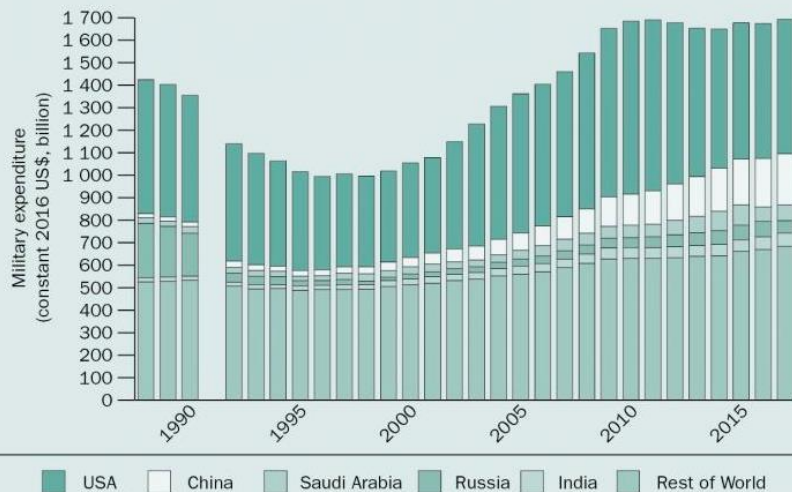
IISS

Planned defence expenditure by country 2017<sup>†</sup>



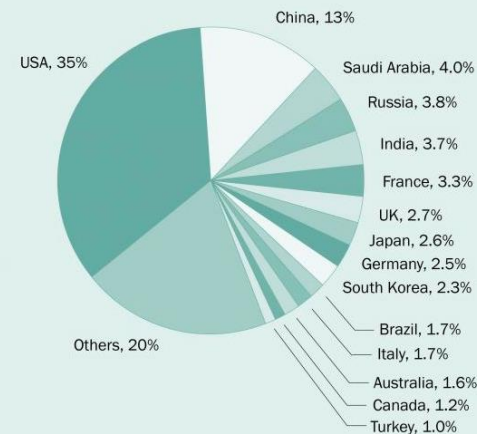
©IISS

World military expenditure, top global spenders, 1988–2017\*



SIPRI

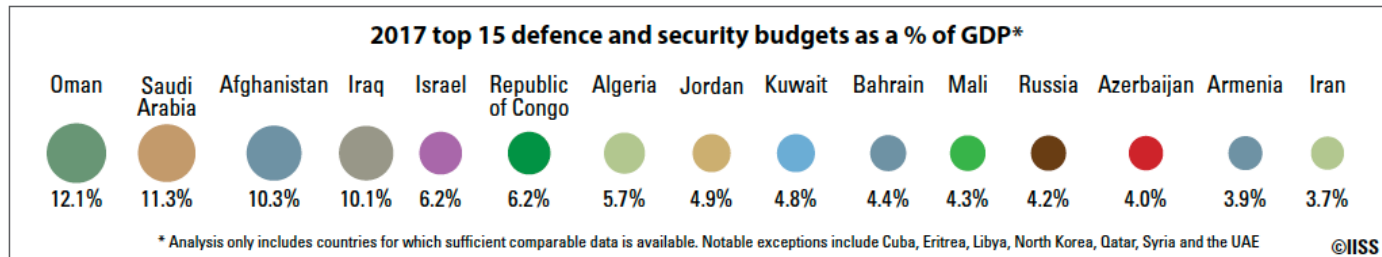
The share of world military expenditure of the 15 states with the highest spending in 2017





# Comparative Percent of GDP: IISS vs. SIPRI

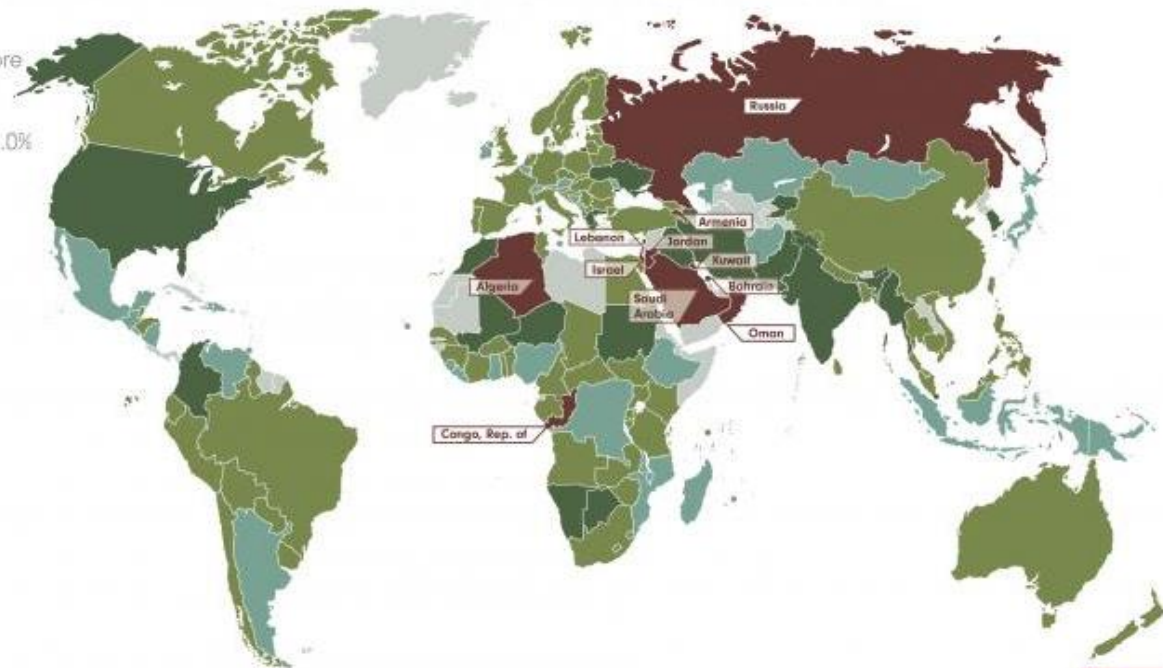
IISS



SIPRI

## MILITARY SPENDING AS A PERCENTAGE OF GDP

2017

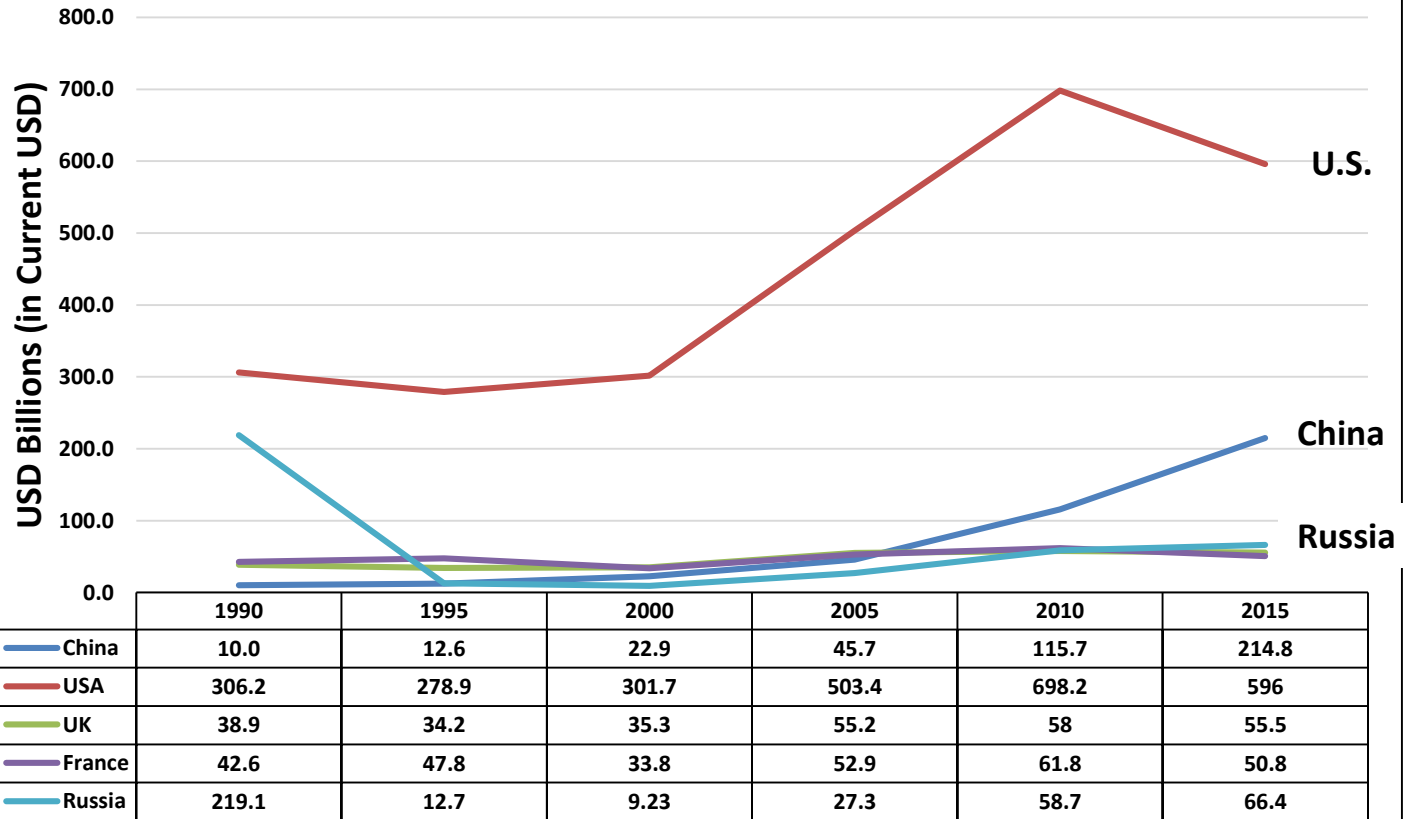


Source: SIPRI Military Expenditure Database

www.sipri.org  
© SIPRI 2018

# Trend in Military Expenditures by UNSC Country: SIPRI 1990-2015

(Current \$US Billions)



Source: SIPRI, *Military Expenditure Data 1988-2015*, <https://www.sipri.org/databases/milex>. Adapted by Anthony H. Cordesman and Joseph Kendall at the Center for Strategic and International Studies, September 2016.

# China versus U.S. Convergence in Military Spending: IISS vs. OSD Guesstimate

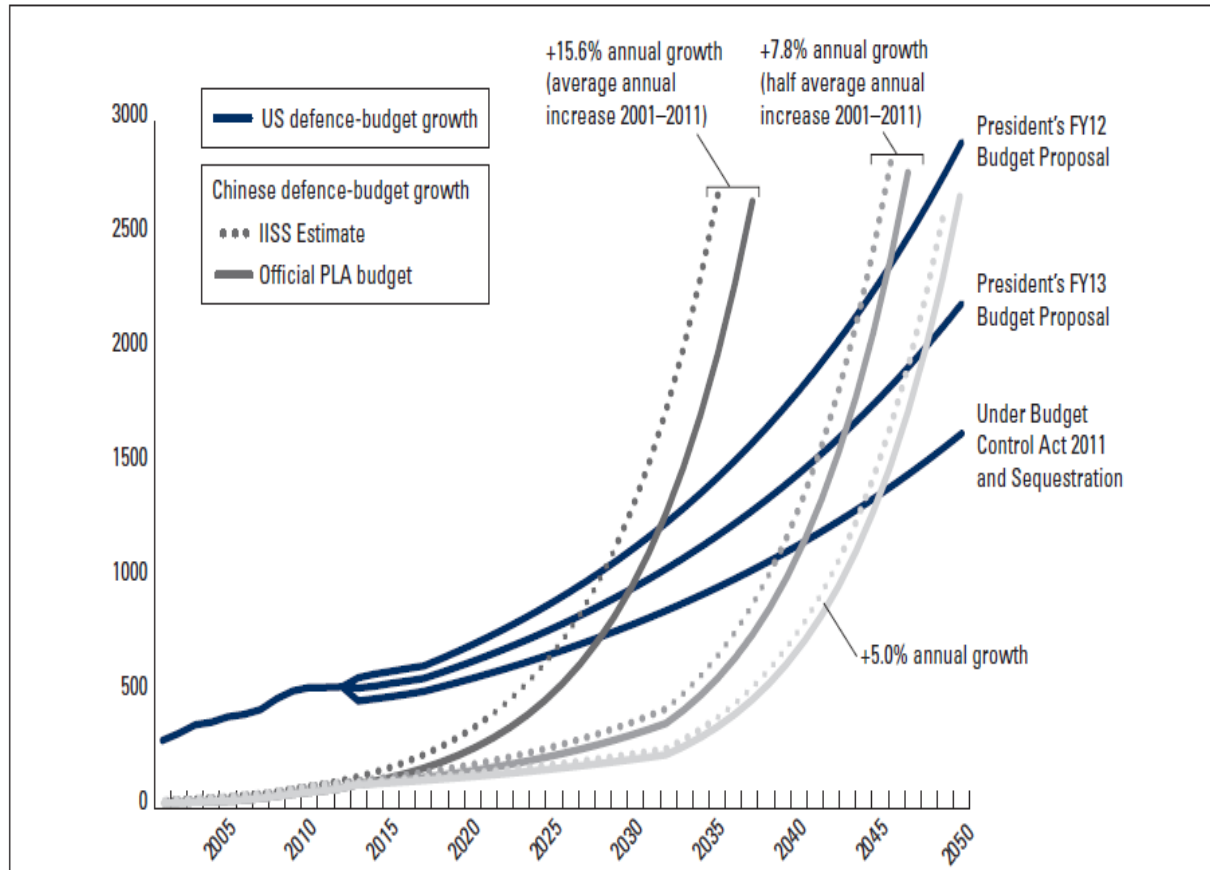


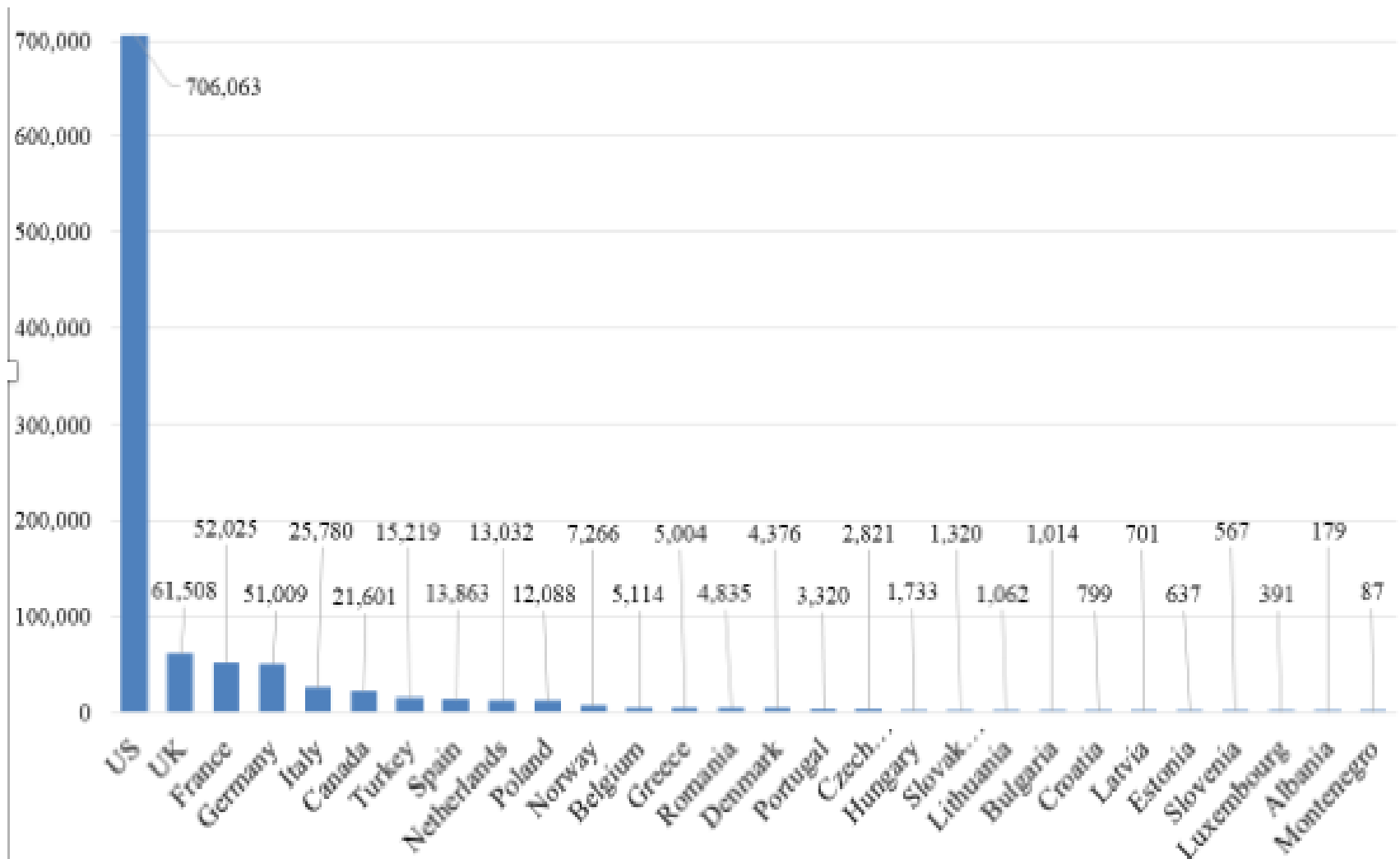
Figure 19 China–United States Defence Expenditure Convergence 2001–2050

OSD expects China's defense budget to increase by an annual average of 7 percent... Growing to \$260 billion by 2020 for a force that, although expanding, is expected over the near-term to remain primarily regional.

As of March 2016, the DoD Comptroller forecasted that U.S. defense budget outlays will reach \$606 billion in current dollars over the same period for a force with a global footprint.

# **Estimates of Actual U.S. Defense Spending Relative to NATO: 2011- 2018**

## NATO Defense Expenditure, by Country, 2018e Current Prices & Exchange Rates (million \$USD)



Source: NATO Public Diplomacy Division: Defense Expenditure of NATO Countries (2010-2018). PR/CP(2018)16

[https://www.nato.int/nato\\_static\\_fl2014/assets/pdf/pdf\\_2018\\_03/20180315\\_180315-pr2018-16-en.pdf](https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2018_03/20180315_180315-pr2018-16-en.pdf)

# Comparative NATO Defense Spending in 2011-2018

## (Outlay Equivalent in \$US Current Millions)

	2011	2012	2013	2014	2015	2016	2017e	2018e
Current prices and exchange rates								
<b>NATO Europe</b>	<b>281,683</b>	<b>263,654</b>	<b>269,434</b>	<b>270,171</b>	<b>235,121</b>	<b>237,921</b>	<b>250,287</b>	<b>285,742</b>
Albania	197	183	180	178	132	131	144	179
Belgium	5,500	5,169	5,264	5,192	4,202	4,315	4,504	5,114
Bulgaria*	758	722	811	747	633	671	723	1,014
Croatia	996	865	850	805	669	623	698	799
Czech Republic	2,437	2,185	2,148	1,975	1,921	1,866	2,255	2,821
Denmark	4,518	4,423	4,217	4,057	3,364	3,593	3,780	4,376
Estonia	389	437	480	513	463	497	540	637
France	53,441	50,245	52,316	51,940	43,474	44,191	46,036	52,025
Germany	48,140	46,470	45,931	46,102	39,813	41,590	45,580	51,009
Greece	6,858	5,633	5,309	5,226	4,517	4,635	4,748	5,004
Hungary	1,472	1,322	1,280	1,210	1,132	1,289	1,468	1,733
Italy	30,223	26,468	26,658	24,448	19,566	22,373	23,852	25,780
Latvia**	286	248	281	293	281	403	512	701
Lithuania**	344	324	355	427	471	636	816	1,062
Luxembourg	232	214	234	253	249	236	325	391
Montenegro	80	68	65	69	57	62	66	87
Netherlands	11,339	10,365	10,226	10,332	8,668	9,108	9,788	13,023
Norway	7,232	7,143	7,407	7,337	5,816	6,064	6,463	7,266
Poland**	9,106	8,710	9,007	10,104	10,596	9,405	9,935	12,088
Portugal	3,652	3,040	3,262	3,003	2,644	2,615	2,702	3,320
Romania**	2,380	2,100	2,452	2,691	2,581	2,645	3,643	4,835
Slovak Republic	1,065	1,020	968	997	986	1,003	1,053	1,320
Slovenia	666	543	507	486	401	449	476	567
Spain	13,984	13,912	12,607	12,614	11,090	9,971	11,864	13,863
Turkey	13,616	13,895	14,427	13,583	11,957	12,649	12,972	15,219
United Kingdom	62,852	58,016	62,258	65,658	59,492	56,964	55,344	61,508
<b>North America</b>	<b>762,784</b>	<b>732,941</b>	<b>699,077</b>	<b>672,092</b>	<b>659,938</b>	<b>673,770</b>	<b>708,424</b>	<b>727,664</b>
Canada	22,040	19,994	18,221	18,150	18,685	17,711	22,467	21,601
United States	740,744	712,947	680,856	653,942	641,253	656,059	685,957	706,063
<b>NATO Total</b>	<b>1,044,467</b>	<b>996,595</b>	<b>968,512</b>	<b>942,263</b>	<b>895,059</b>	<b>911,692</b>	<b>958,711</b>	<b>1,013,406</b>

Notes: Figures for 2017 and 2018 are estimates. The NATO Europe and NATO Total aggregates from 2017 include Montenegro, which became an Ally on 5 June 2017.

\* Defence expenditure does not include pensions.

\*\* With regard to 2018, these countries have either national laws or political agreements which call for at least 2% of GDP to be spent on defence annually, consequently these estimates are expected to change accordingly.



# Comparative NATO Defense Spending in 2011-2018

## (Outlay Equivalent in \$US Constant 2010 Millions)

Constant 2010 prices and exchange rates

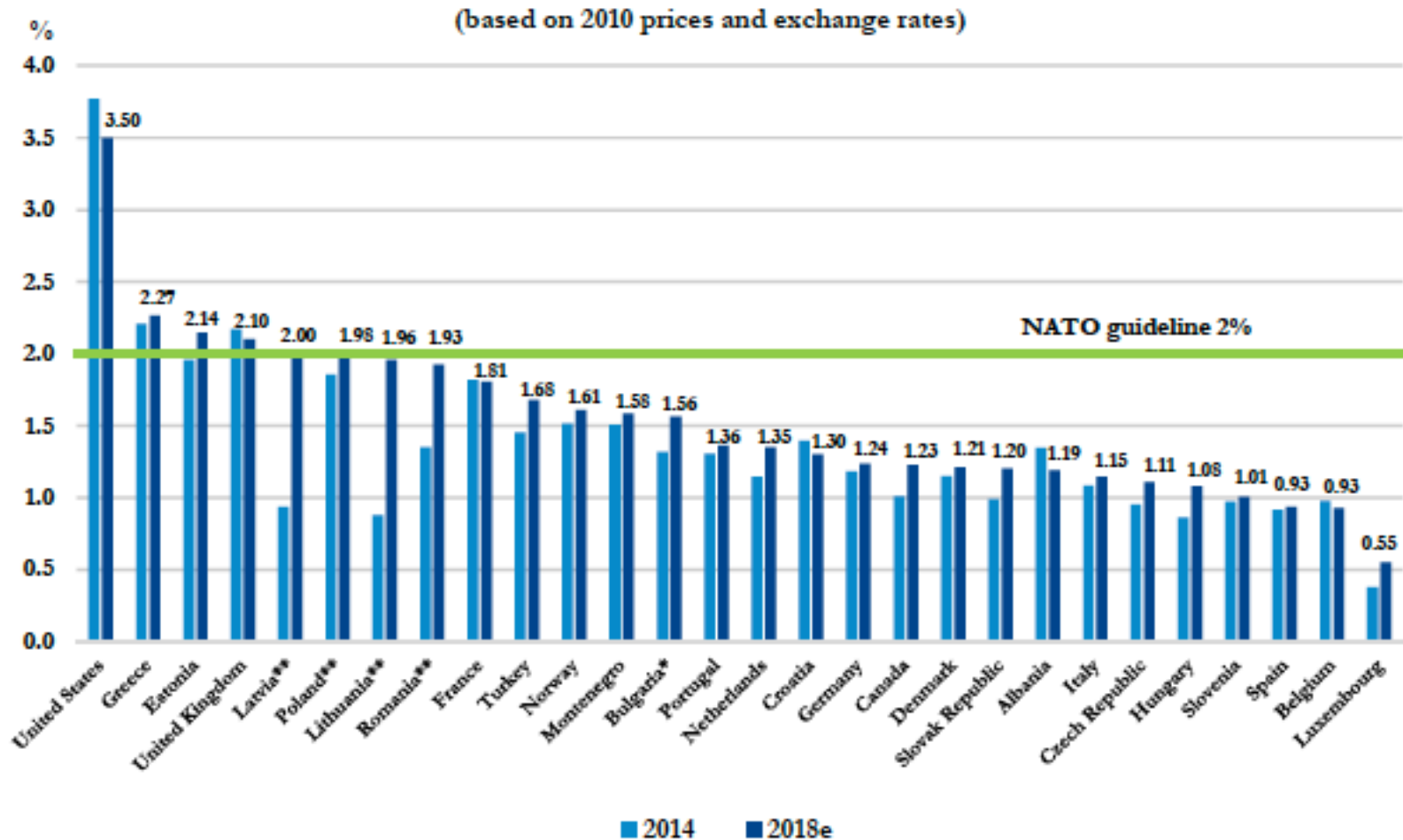
<b>NATO Europe</b>	<b>265,904</b>	<b>260,793</b>	<b>257,691</b>	<b>254,164</b>	<b>255,546</b>	<b>264,766</b>	<b>  275,342</b>	<b>288,679</b>
Albania	187	184	177	172	151	148	155	173
Belgium	5,137	5,123	4,996	4,898	4,691	4,754	4,790	4,940
Bulgaria*	681	691	757	695	689	715	748	954
Croatia	952	891	847	808	801	742	800	839
Czech Republic	2,258	2,207	2,138	2,035	2,319	2,210	2,519	2,776
Denmark	4,286	4,421	4,051	3,855	3,805	4,069	4,135	4,376
Estonia	352	414	426	448	479	508	520	555
France	50,438	50,718	50,712	50,098	49,619	50,471	51,273	53,038
Germany	45,374	46,673	43,778	43,201	43,753	45,221	47,909	48,862
Greece	6,490	5,789	5,421	5,444	5,687	5,904	5,905	5,735
Hungary	1,392	1,354	1,265	1,203	1,327	1,508	1,615	1,725
Italy	27,746	25,853	24,536	22,130	20,840	23,352	24,278	24,560
Latvia**	256	232	250	257	295	422	510	629
Lithuania**	312	309	323	385	507	680	821	961
Luxembourg	210	206	213	227	265	254	337	369
Montenegro	75	69	63	66	64	66	67	79
Netherlands	10,670	10,367	9,747	9,766	9,791	10,225	10,627	12,845
Norway	6,530	6,556	6,659	6,947	6,833	7,281	7,458	7,890
Poland**	8,667	8,904	8,910	9,927	12,346	11,427	11,354	12,419
Portugal	3,489	3,155	3,203	2,929	3,023	2,953	2,955	3,317
Romania**	2,195	2,105	2,281	2,478	2,770	2,820	3,683	4,308
Slovak Republic	999	1,022	934	964	1,142	1,170	1,190	1,354
Slovenia	627	551	490	467	456	508	518	560
Spain	13,319	14,327	12,519	12,560	13,130	11,802	13,654	14,490
Turkey	13,970	14,224	14,789	14,873	15,066	16,378	18,299	21,170
United Kingdom	59,368	54,517	58,269	57,399	55,761	59,243	59,222	59,755
<b>North America</b>	<b>746,525</b>	<b>704,836</b>	<b>661,929</b>	<b>629,091</b>	<b>615,331</b>	<b>624,126</b>	<b>643,268</b>	<b>646,878</b>
Canada	20,504	18,557	17,158	18,002	21,594	21,081	25,599	23,637
United States	726,021	686,280	644,772	611,089	593,737	603,046	617,669	623,241
<b>NATO Total</b>	<b>1,012,430</b>	<b>965,629</b>	<b>919,620</b>	<b>883,255</b>	<b>870,878</b>	<b>888,892</b>	<b>  918,610</b>	<b>935,557</b>

Notes: Figures for 2017 and 2018 are estimates. The NATO Europe and NATO Total aggregates from 2017 include Montenegro, which became an Ally on 5 June 2017.

\* Defence expenditure does not include pensions.

\*\* With regard to 2018, these countries have either national laws or political agreements which call for at least 2% of GDP to be spent on defence annually, consequently these estimates are expected to change accordingly.

# Comparative Total Defense Spending as % of GDP: 2014 vs. 2018



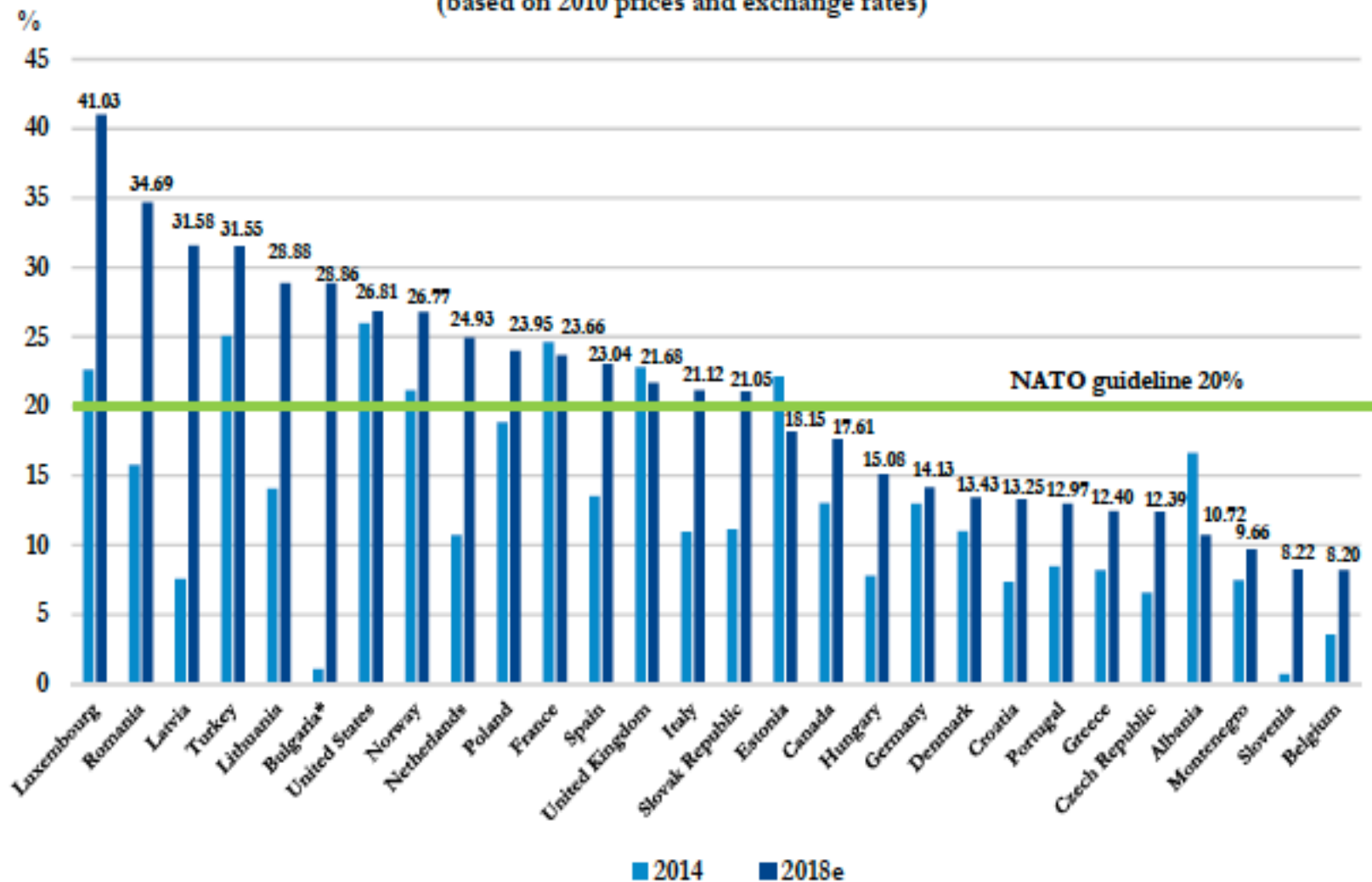
Notes: Figures for 2018 are estimates.

\* Defence expenditure does not include pensions.

\*\* With regard to 2018, these countries have either national laws or political agreements which call for at least 2% of GDP to be spent on defence annually, consequently these estimates are expected to change accordingly.

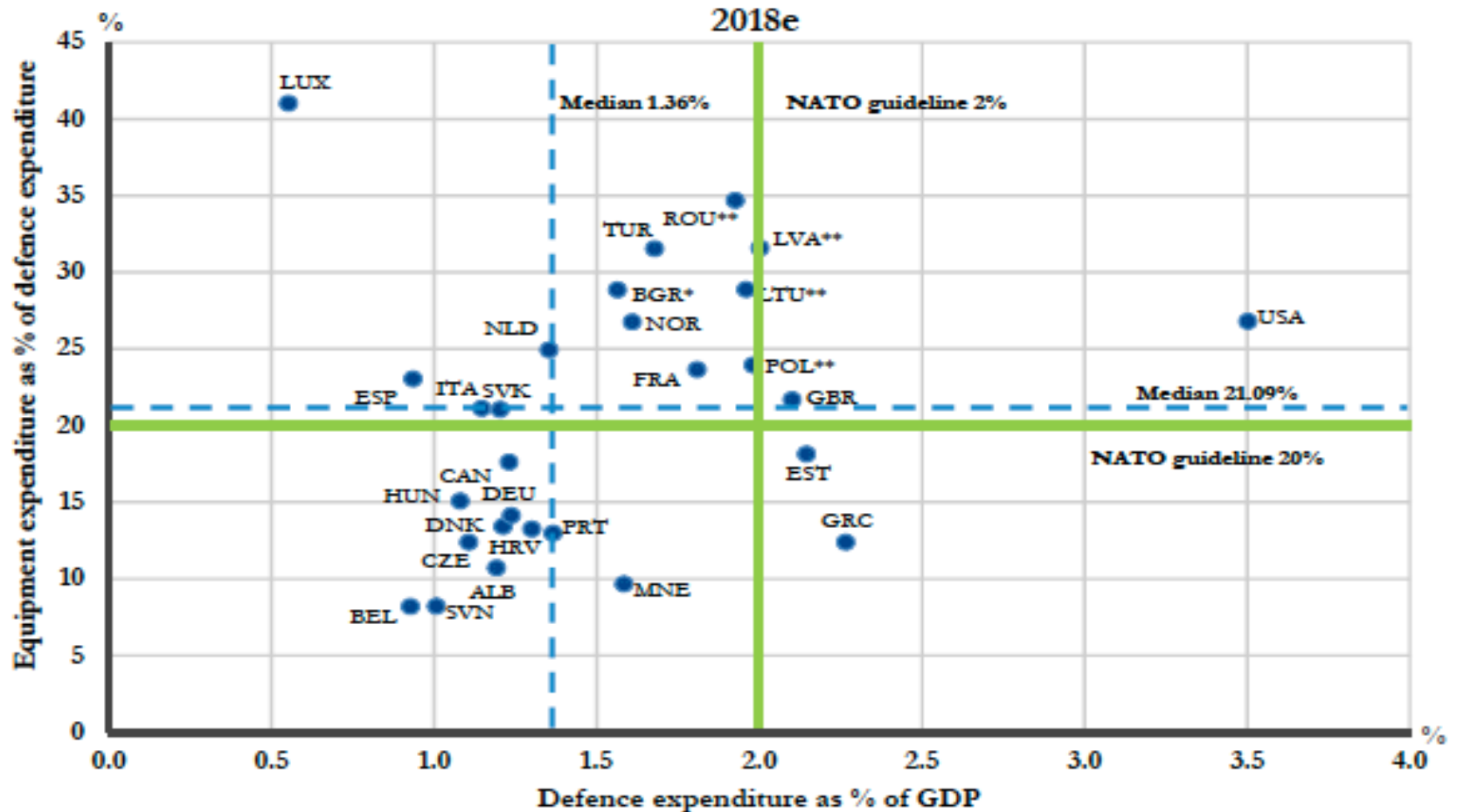
# Comparative Equipment Expenditure as a % of Defense Expenditure: 2014 vs. 2018

(based on 2010 prices and exchange rates)



# Comparative NATO Efforts in 2018

## (Before major U.S. increase in FY2019)



Notes: Figures for 2017 and 2018 are estimates. The NATO Europe and Canada aggregate from 2017 includes Montenegro, which became an Ally on 5 June 2017.

\* Defence expenditure does not include pensions.

\*\* With regard to 2018, these countries have either national laws or political agreements which call for at least 2% of GDP to be spent on defence annually, consequently these estimates are expected to change accordingly.

**Key Trends in the Final FY2019  
National Defense Authorization Act  
(NDAA) Signed by the President in  
August 2018**

# NDAA FY2019

## Congressional Action

The FY2019 National Defense Authorization Act (NDAA) approved by Congress would authorize \$708.1 billion in discretionary appropriations for national defense-related activities of the Department of Defense (DOD) and other agencies. The bill (H.R. 5515) would authorize \$16 billion (2.3%) more than the amount authorized by the FY2018 NDAA (P.L. 115-91) and match the amount requested by the Administration.

The bill would authorize \$639.1 billion for so-called base budget activities—activities DOD and other agencies would pursue even if U.S. forces were not engaged in operations in Iraq, Syria, Afghanistan, and elsewhere. This figure includes \$616.9 billion for DOD, \$21.9 billion for defense-related atomic energy programs of the Department of Energy, and \$300 million for other defense-related activities.

The bill would also authorize additional DOD appropriations totaling \$69 billion—funding designated for Overseas Contingency Operations (OCO)—to cover the incremental cost of U.S. operations in the Middle East and South Asia as well as other costs Congress and President Donald Trump agree to designate for OCO.

The legislation would authorize a level of funding that is consistent with the spending limits (or caps) on defense activities originally established by the Budget Control Act of 2011 (P.L. 112-25) and amended most recently by the Bipartisan Budget Act of 2018 (P.L. 115-123). The FY2019 defense spending cap is \$647 billion and applies to discretionary programs within the national defense budget function (excluding OCO). The cap includes programs outside the scope of the NDAA and for which the Administration requested approximately \$8 billion. Thus, the portion of the cap applicable to spending directly authorized by the NDAA is approximately \$639 billion.

On May 24, 2018, the House passed H.R. 5515, an amended version of the NDAA reported by the House Armed Services Committee. The Senate replaced the House-passed text of the bill with the text of S. 2987, the version of the NDAA reported by the Senate Armed Services Committee, and passed its amended version on June 18. The initial conference report to H.R. 5515 filed on July 23 required revision, so the House sent it back to conference. A new conference report filed on July 25 (H.Rept. 115-874) became the basis for further congressional action.

The House approved the final version of the bill on July 26 and the Senate passed it on August 1. The legislation, if signed by the President before October 1, would mark the first NDAA since the FY1997 version enacted prior to the start of the fiscal year.



# NDAA FY2019

## 2018 NDAA, Request, HASC, SASC, Conference

(in billions of dollars of discretionary budget authority)

National Defense Budget (Budget Subfunction)	2018 Enacted NDAA (P.L. 115-91)	FY2019 President's Budget Request	HASC-Reported H.R. 5515	SASC-Reported S. 2987	FY2019 Conference Authorized
DOD-Military (051)	605.5	617.1	616.7	617.6	616.9
Atomic Energy Defense Activities (053)	20.6	21.8	22.1	21.7	21.9
Defense-Related Activities (054)	0.3	0.2	0.3	n/a	0.3
<b>Subtotal (Base Budget)</b>	<b>626.4</b>	<b>639.1</b>	<b>639.1</b>	<b>639.4</b>	<b>639.1</b>
Overseas Contingency Operations (OCO)	65.7	69.0	69.0	68.5	69.0
<b>Total (Base + OCO)</b>	<b>692.1</b>	<b>708.1</b>	<b>708.1</b>	<b>707.9</b>	<b>708.1</b>

**Source:** FY2018 data from H.Rept. 115-404, *Conference Report to Accompany H.R. 2810*; FY2019 President's Budget Request and conference authorized data from H.Rept. 115-874, *Conference Report to Accompany H.R. 5515*; HASC-reported data from H.Rept. 115-676, *Report on H.R. 5515*; SASC-reported data from S.Rept. 115-262, *Report to Accompany S. 2987*.

**Notes:** Totals may not reconcile due to rounding.

# NDAA FY2019

## CRS Selected Highlights

**Low-Yield Nuclear Warhead.** The bill would authorize \$65 million, as requested, to develop a low-yield nuclear warhead for submarine-launched ballistic missiles. The Administration’s February 2018 Nuclear Posture Review called for “low-yield” nuclear options to preserve “credible deterrence against regional aggression.”

**Pacific Ship Collisions Response.** Parts of the bill respond to the two ship collisions in 2017 involving Pacific Fleet destroyers that resulted in the deaths of 17 U.S. sailors. Section 322 would require that Navy ships be subject to inspections with “minimal notice” to the crew. Section 323 would limit to 10 years the time that aircraft carriers, amphibious ships, cruisers, destroyers, frigates, and littoral combat ships can be based outside the United States.

**Another Carrier.** The bill would authorize procurement of a fourth Ford-class aircraft carrier (CVN-81). While it does not authorize appropriations for the ship, the legislation allows for the procurement to occur in conjunction with CVN-80. Lawmakers said a two-ship procurement “could result in significant cost savings.”

**Selected Aircraft.** The bill would authorize:

- \$7.6 billion in procurement (excluding advance procurement and modifications) for 77 F-35 Joint Strike Fighter aircraft, \$133 million less than the request.
- \$342 million in procurement for 14 MQ-9 Reaper drones, \$120 million and 6 aircraft more than the request to accelerate development of a network of sensors called Advanced Battle Management System to replace E-8 JSTARS surveillance planes.
- \$300 million in procurement to begin buying an unspecified number of new OA-X light attack aircraft, not included in the President’s request.

**Selected Missiles.** The bill would authorize:

- \$414 million in research, development, test, and evaluation (RDT&E) for the Ground Based Strategic Deterrent to replace the Minuteman III intercontinental ballistic missile, \$69 million more than the request.
- \$700 million in RDT&E for the Long Range Standoff Weapon to replace the AGM-86 nuclear cruise missile, \$85 million more than the request.

**Fourth Estate.** Section 921 of the bill would require the DOD Chief Management Officer to certify savings of least 25% by FY2020 from the business operations of defense agencies and field activities responsible for logistics, human resources, and other functions—which are sometimes referred to as the Pentagon’s Fourth Estate.

**Officer Management Overhaul.** Title 5 of the bill contains provisions that would modify key parts of the Defense Officer Personnel Management Act (DOPMA; P.L. 96-513) governing the appointment, promotion, and separation of military officers. Changes include allowing civilians with operationally relevant training or experience to enter the military up to the rank of O-6 and creating an “alternative promotion” process for officers in specialized fields.

### Foreign Investment Reform

Title 17 of H.R. 5515 includes provisions designed to limit foreign access to sensitive U.S. technology, including *the Foreign Investment Risk Review Modernization Act of 2018*, which expands the purview of the Committee on Foreign Investment in the United States (CFIUS) to address national security concerns; and *the Export Controls Act of 2018*, which controls the export of certain “dual-use” and military items. For more information, see CRS Report RL33388, *The Committee on Foreign Investment in the United States (CFIUS)*, by James K. Jackson.

# NDAA FY2019 Spending

## (Budget Authority in Current \$USD Billions)

**China.** The bill would prohibit the heads of federal agencies from procuring telecommunications equipment or services from companies linked to the government of China—Huawei Technologies Company and ZTE Corporation, among others. It would also prohibit the obligation of funds for Chinese language instruction provided by Confucius Institutes, language and culture centers affiliated with China’s Ministry of Education.

**Europe.** The bill would authorize \$6.3 billion for the European Deterrence Initiative (EDI), plus an additional \$250 million for Ukraine security assistance that includes lethal defensive weapons, to counter Russian military aggression. The funding would remain designated for OCO rather than the base budget and mostly go toward prepositioning a division-sized set of equipment in Europe and boosting the regional presence of U.S. forces.

**Iraq and Syria.** The bill would authorize \$1.4 billion for activities to counter the Islamic State of Iraq and Syria (ISIS) by training and equipping Iraqi Security Forces and vetted Syrian opposition forces. It would limit the use of roughly half of the \$850 million for Iraq until the Secretary of Defense submits a report to the congressional defense committees on the U.S. strategy in Iraq and all of the \$300 million for Syria until the President submits a report to congressional committees on the U.S. strategy in Syria.

**Turkey.** The bill would prohibit the delivery of any F-35s to Turkey (which plans to buy 100 of the aircraft) until the Secretary of Defense submits a report to congressional committees on the Turkish government’s plan to purchase the S-400 air and missile defense system from Russia.

# Strategic Competition – I

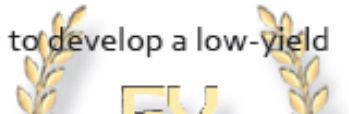
## (SASC)

The National Defense Strategy identifies the reemergence of long-term, strategic competition as the central challenge facing the United States. It classifies China and Russia as revisionist powers and strategic competitors that seek to shape the world toward their authoritarian model through destabilizing activities that threaten the security of the United States and its allies. To help deter further Chinese and Russian aggression, the NDAA:

- Includes the *Foreign Investment Risk Review Modernization Act* as adopted by the Senate Banking Committee to give the Committee on Foreign Investment in the United States (CFIUS) the authority it needs to address national security concerns.
- Requires a public report on the military and coercive activities of China in the South China Sea and encourages the Secretary of Defense to require the public release of declassified aircraft-generated imagery illustrating Chinese activities of concern.
- Extends authority for the Maritime Security Initiative (MSI) for an additional 5 years, re-designates the Southeast Asia MSI as the Indo-Pacific MSI, includes Bangladesh and Sri Lanka as recipient countries of assistance and training, and adds India as a covered country eligible for payment of certain expenses.
- Requires the Secretary of Defense to submit a 5-year plan for an “Indo-Pacific Stability Initiative.”
- Limits DOD funds for Chinese language programs at universities that host a Confucius Institute.
- Modifies the annual report on Chinese military and security developments to include malign influence, including efforts to influence media, cultural institutions, business, and academic and policy communities in the United States.
- Authorizes an additional \$235 million to procure deployable air base systems in the U.S. Pacific Command area of responsibility to support NDS priorities and “resiliency” and “agile logistics” force posture initiatives as well as to enhance the credible combat power of U.S. forces in the Indo-Pacific region.
- Prohibits the Secretary of Defense from procuring or obtaining, as well as entering into, extending, or renewing a contract with an entity that uses telecommunications equipment or services produced by Huawei Technologies Company or ZTE Corporation.

## Strategic Competition – II (SASC)

- Extends the limitation on U.S.-Russian military cooperation.
- Expresses the sense of the Senate that it is the policy of the United States to pursue an integrated approach to strengthening the defense of allies and partners in Europe as part of a broader strategy backed by all elements of U.S. power to deter and, if necessary, defeat Russian aggression and calls on the Secretary of Defense to consider specific steps to: enhance U.S. forward presence, combat capability, and capacity in Europe; maintain robust security assistance for allies and partners in Europe; promote reforms within the North Atlantic Treaty Organization (NATO); and enhance multilateral security cooperation among U.S. partners and allies.
- Requires the Secretary of Defense to report on the feasibility and advisability of permanently stationing a U.S. Army brigade combat team in Poland.
- Authorizes the National Command Authority to direct U.S. Cyber Command to take appropriate and proportional action through cyberspace to disrupt, defeat, and deter systematic and ongoing attacks by Russia in cyberspace.
- Supports implementation of the Nuclear Posture Review by authorizing \$65 million to develop a low-yield submarine-launched ballistic missile.
- Directs the Army to acquire an interim short-term capability to fill gaps in cruise missile defense, which is a critical capability to defend against Chinese and Russian threats, in anticipation of the Indirect Fire Protection Capability.
- Continues the work of the Department to maximize as many munitions production lines as possible—particularly those specific to the high-end fight, such as the Long Range Anti-Ship Missile (LRASM), Joint Air-to-Surface Standoff Missile Extended Range (JASSM-ER), the MK-48 torpedo, and the Harpoon missiles.
- Authorizes an increase of \$18.6 million for additional civilian positions to support Defense Security Service efforts to protect classified information, technologies, and material from foreign adversaries.
- Requires the development of a Militarily Critical Technologies List to inform technology protection, export control, and research investment decisions.





## Allies and Partners (SASC)

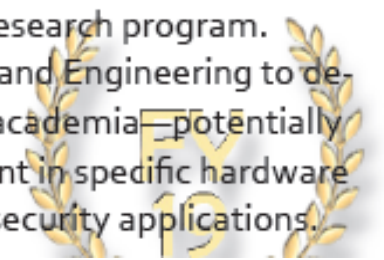
America's global system of alliances and partnerships provides the basis for security and stability around the world. With adversaries actively working to erode that system, it is imperative that the U.S. commitment to our allies and partners remains strong. Therefore, the committee markup:

- Authorizes \$5.2 billion for the Afghanistan Security Forces Fund.
- Authorizes \$350 million in Coalition Support Funds to reimburse certain nations for support provided to or in connection with U.S. military operations.
- Authorizes \$300 million to train and equip the vetted Syrian opposition to counter ISIS, but limits the use of funds until the President submits the report on U.S. strategy in Syria required by the NDAA for Fiscal Year 2018.
- Authorizes \$850 million to train and equip Iraqi Security Forces to counter ISIS and requires a report that describes the roles, missions, and responsibilities of any future U.S. military presence in Iraq and provides information on anticipated funding requirements.
- Requires the Under Secretary of Defense for Policy to conduct a review of the legal and policy frameworks associated with advise, assist, and accompany missions by U.S. military personnel outside of Iraq, Syria, and Afghanistan.
- Authorizes \$200 million to provide security assistance to Ukraine, including defensive lethal assistance.
- Expresses the sense of the Senate that the United States should strengthen and enhance its major defense partnership with India.
- Expresses the sense of the Senate that if Turkey purchases the S-400 air defense system from Russia, the President should impose sanctions against Turkey under the Countering America's Adversaries through Sanctions Act.
- Fully supports the administration's request for Israeli missile defense by authorizing \$500 million to co-develop and co-produce the Iron Dome, Arrow, and David's Sling weapon systems.



# Innovation in Research and Engineering (SASC)

- Authorizes an increase of more than \$600 million above the administration's request for science, technology, and testing programs, including \$75 million for university research.
  - Adds \$150 million for hypersonics.
  - Adds \$110 million for space constellation efforts.
  - Adds nearly \$100 million for test infrastructure and workforce, including for cybersecurity, directed energy, and hypersonics.
  - Adds \$50 million for rocket propulsion.
  - Adds \$40 million for directed energy.
  - Adds \$20 million for quantum information sciences.
- Adds \$15 million for microelectronics research and the DARPA Electronics Resurgence Initiative.
- Gives the Under Secretary of Defense for Research and Engineering directive authority for priority emerging technologies for one year.
- Directs a review of the defense research and engineering enterprise by the Under Secretary of Defense for Research and Engineering to maximize innovation.
- Establishes coordinated defense research efforts in the critical emerging technology areas of artificial intelligence and quantum information science.
- Supports DOD's access to innovative high tech small businesses by continuing to streamline procurement practices and permanently authorizing the successful Small Business Innovation Research program.
- Authorizes \$150 million and requires the Under Secretary of Defense for Research and Engineering to develop interaction between the DOD and the commercial technology industry and academia—potentially by establishing a non-profit entity—with the goal of encouraging private investment in specific hardware technologies of interest to future defense technology needs with unique national security applications.



# Modernization of Joint Force – I (SASC)

- Authorizes \$7.6 billion to procure 75 Joint Strike Fighter aircraft, which is 2 aircraft fewer than the administration's request, to realign the program towards sustainment.
  - Includes \$4.2 billion to procure 47 F-35A fighters.
  - Includes \$2.4 billion to procure 20 F-35B fighters.
  - Includes \$1 billion to procure 8 F-35C fighters.
  - Increases funding for F-35 spares, modifications, and depot repair capability in order to establish a solid sustainment base before the steep ramp of production overwhelms the enterprise's ability to sustain the aircraft.
  - Fully funds Block 4 Continuous Capability Development and Delivery.
  - Mandates quarterly updates to Congress on the status and direction of the F-35 program.
- Authorizes \$23.1 billion for shipbuilding to fully fund 10 new construction battle force ships and accelerate funding for several future ships, which is \$1.2 billion more than the administration's request.
  - Includes \$5.9 billion for *Arleigh Burke*-class destroyers, which is \$250 million more than the administration's request for long lead material.
  - Includes \$7.4 billion for *Virginia*-class submarines, which is \$250 million more than the administration's request for either economic order quantity procurement or initiatives to expand the submarine industrial base.
  - Includes \$3 billion for *Columbia*-class submarines, which fully funds the administration's request.
  - Includes \$650 million for either multiyear economic order quantity procurement for *San Antonio*-class flight II amphibious ships (LPD) and/or advance procurement for LPD-31, which is in addition to the administration's request.
  - Includes \$250 million for 1 cable ship, which is in addition to the administration's request.
  - Includes \$25 million to accelerate replacement of Yard Patrol training ships.
- Authorizes the full budget request procurement quantities of:
  - 3 *Arleigh Burke*-class destroyers;
  - 2 *Virginia*-class submarines;
  - 1 Littoral Combat Ship;
  - 1 *Puller*-class expeditionary transport dock;
  - 2 *Lewis*-class oilers; and
  - 1 Towing, Salvage, and Rescue Ship.

# Modernization of Joint Force – II (SASC)

- Authorizes 117 naval aviation aircraft, including:
  - 24 F/A-18 Super Hornets;
  - 10 P-8A Poseidons;
  - 2 KC-130J Hercules;
  - 25 AH-1Z Cobras;
  - 8 CH-53K King Stallions;
  - 7 MV-22/CMV-22B Ospreys;
  - 6 VH-92A Presidential Helicopters;
  - 3 MQ-4 Tritons; and
  - 5 E-2D Advanced Hawkeyes, including \$175 million for 1 additional E-2Ds above the administration's request.
- Authorizes multiyear contract authority for up to:
  - 72 F/A-18 Super Hornet;
  - 24 E-2D Advanced Hawkeye;
  - 625 SM-6 standard missiles; and
  - 204 SM-3 IB guided missiles.
- Authorizes \$100 million to procure Marine Corps light attack aircraft and associated long lead material.
- Authorizes \$100 million to procure a Marine Corps Group 5 Unmanned Aerial System.
- Authorizes several provisions, based on the *Surface Warfare Enhancement Act of 2018*, to improve the readiness of naval surface ships in the wake of the *USS Fitzgerald* and *USS John S. McCain* collisions.
- Limits funds for the Littoral Combat Ship until the Under Secretary of Defense for Acquisition and Sustainment submits a certification related to the transition to the guided missile frigate (FFG(X)).
- Authorizes the Coast Guard to enter into a contract or contracts for up to 6 polar-class heavy icebreakers.
- Authorizes \$2.3 billion to procure 14 KC-46 aircraft, which is 1 aircraft fewer than the administration's request, to restore program accountability.
- Authorizes \$350 million to procure Air Force light attack aircraft and associated long lead material.
- Fully funds development of the B-21 bomber.
- Prohibits the retirement of any E-8C Joint Surveillance Target Attack Radar (JSTARs) aircraft while increasing funding for the Advanced Battle Management System, the JSTARs replacement program.
- Authorizes multiyear procurement for the C-130J aircraft program.
- Authorizes \$144.2 million for the A-10 Wing Replacement Program, which is \$65 million more than the administration's request.



## Modernization of Joint Force – III (SASC)

- Fully funds the administration's budget request for Army helicopters.
  - Includes \$1.04 billion to procure 60 AH-64E Apaches.
  - Includes \$1 billion to procure 50 UH-60M Blackhawks.
  - Includes \$124 million to procure 7 CH-47 Chinooks.
- Authorizes \$1.53 billion to procure 135 M1A2SEP v3 Abrams tanks.
- Authorizes \$319 million for the Mobile Protected Firepower vehicle program.
- Authorizes \$205 million to procure 61 Bradley Fighting Vehicles for the European Deterrence Initiative.
- Authorizes \$190 million to prototype the next generation combat vehicle, which is \$70 million more than the administration's request, in order to increase combat power of close combat maneuver forces against peer competitors.
- Authorizes \$529 million to procure 46 Paladin Integrated Management sets, which is \$110 million and 10 sets more than the administration's request.
- Authorizes \$123 million to accelerate the development of the Extended Range Cannon Artillery gun, which is \$20 million more than the administration's request, to increase the range and lethality of field artillery.
- Authorizes \$610 million for the Armored Multi-Purpose Vehicle.
- Authorizes \$1.1 billion for the Army's Joint Light Tactical Vehicle program.
- Fully authorizes the administration's request, including \$9.9 billion for the Missile Defense Agency in support of programs vital to developing advanced technology, protecting forces in South Korea, and counter-ing emerging threats.



# Building a Modern Force (HASC)

- Authorizes \$225.3 million (an increase of \$203.4 million) for Stryker A1 combat vehicles, the most survivable and advanced version of the Stryker.
- Supports efforts to modernize Army Armored Brigade Combat Team vehicles, including 135 M1 Abrams tanks, 60 Bradley fighting vehicles, 197 Armored Multi-Purpose Vehicles, 38 Improved Recovery Vehicles, and 3,390 Joint Light Tactical Vehicles.
- Authorizes \$461.8 million (an increase of \$110 million) for the most modernized version of the Paladin self-propelled howitzer.
- Authorizes \$452.6 million (an additional \$168 million) to procure six additional AH-64E new production attack helicopters (the most modern version) for the Army National Guard in order to address current shortfalls.
- Authorizes multiyear procurement authorities for F/A-18E/F Super Hornet aircraft, C-130 Super Hercules aircraft, E-2D Advanced Hawkeye aircraft, and advanced missiles to generate better cost savings for the taxpayer and provide needed capability to the Navy;
- Supports the President's budget request for 77 F-35 Joint Strike Fighters. the conference report also authorizes the Department to procure additional F-35 aircraft, should additional funds become available utilizing cost savings and program efficiencies.
- Authorizes an additional \$85 million for additional UH-60M Black Hawk utility helicopters (the most modern version) for the Army National Guard.
- Fully funds the B-21 Raider bomber program.
- Supports 15 KC-46 Pegasus aircraft requested in the President's budget request.
- Authorizes \$161.5 million to support an additional E-2D Advanced Hawkeye aircraft.
- Expands support for legacy C-130 aircraft with an additional \$129 million for engine upgrades.
- Supports the President's budget request to maintain the maximum production rate of critical munitions, such as small diameter bombs, joint direct attack munitions, hellfire missiles, advanced precision kill weapon systems, long range anti-ship missiles, advanced medium-range air-to-air missiles and torpedoes, and also authorizes additional funding to address critical need for more munitions.
- Authorizes the fourth Ford-class aircraft carrier.
- Supports funding for the Columbia-class ballistic missile submarine.
- Authorizes \$1.56 billion (an addition of \$950 million) for three Littoral Combat Ships.
- Authorizes an additional \$750 million to more efficiently procure destroyers and amphibious ships.
- Authorizes a total of six Polar Icebreakers to assure United States commercial access to expanding Northern shipping lanes.

- Mandates retention of a United States Navy Hospital ship capability.
- Authorizes \$250 million to recapitalize the cable laying navy vessel, USNS Zeus.
- Encourages recapitalization of the Navy's 43-year old auxiliary fleet, which would help to transport Army and Marine Corps forces in times of conflict.
- Encourages the rapid development and fielding of initial maneuver short range air defense capabilities as well as capabilities to protect against "indirect fire;" all of which are meant to address the challenge of defending against cruise missiles and other aerial threats.
- In response to the critical advances Russia and China have made in developing their prompt global strike hypersonic weapons, the NDAA adds \$150 million to accelerate U.S. efforts to field a conventional prompt strike capability before FY22.

## *Airborne Intelligence Surveillance and Reconnaissance (ISR)*

The NDAA strengthens and improves oversight of the Department's investments in airborne Intelligence Surveillance and Reconnaissance (ISR) programs in order to more efficiently and effectively meet combatant commander requirements, to include:

- Holding the Secretary of the Air Force accountable for increasing current capacity and capabilities for the warfighter related to Battle-Management, Command and Control, and Ground-Moving Target Indicator intelligence capabilities, and developing a plan to sustain legacy E-8C JSTARS aircraft until the Advanced Battle-Management System concept reaches a level of acceptable maturity and capability.
- An additional \$60 million to improve the capability of the Army's Gray Eagle unmanned air system platform.
- An additional \$105 million for EQ-4 unmanned aircraft; a critical warfighting capability for providing communications relay and high-altitude intelligence, surveillance, and reconnaissance for combatant commanders.

## *Electronic Warfare*

Requires the Department of Defense to synchronize and unify efforts related to the implementation of cyber and electronic warfare strategy and capabilities. Two warfare areas in which our peer competitors are beginning to outpace U.S. capabilities, and for which the Department of Defense has struggled for years across the Services to implement capabilities coherently.

## *Rebuilding Infrastructure*

As funding for the military has declined, the Services have diverted money away from buildings and other infrastructure in order to fund training and maintenance. As a result, a considerable amount of military infrastructure urgently needs repair. The President's Budget Request makes substantial infrastructure investments. Conferees agreed on the need for even more funding. The NDAA:

- Increases funds for facilities sustainment by \$470.9 million
- Authorizes for appropriation \$11.3 billion for military construction, including family housing, and other infrastructure projects.
- Adds \$397.3 million for depot maintenance.

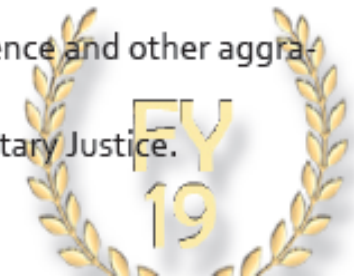
# Modernization of All Volunteer Force- I (SASC)

- Authorizes a 2.6 percent pay raise for members of the Armed Forces.
- Authorizes Active-Duty end strength at the following levels, each of which represents growth over fiscal year 18 levels to meet the requirements of the NDS:
  - 485,741 in the Army;
  - 331,900 in the Navy;
  - 186,100 in the Marine Corps; and
  - 325,720 in the Air Force.
- Begins to modernize the 38-year-old officer personnel system to provide career flexibility and better serve the demands of today's force.
  - Creates alternative promotion and continuation process for selected officers that allows for multiple opportunities for promotion, removes predetermined officer promotion timelines, and creates a term-based selective continuation process.
  - Expands officer spot promotion authority to all services up to the grade of O-6.
  - Abolishes year-group officer management policies.
  - Increases constructive credit to allow initial appointment up to the grade of O-6
  - Allows officers in grades O-2 and above to extend careers to 40 years of service
  - Repeals age-based officer appointment requirements.
  - Revokes statutory office grade limitation table and requires annual authorization of mid-grade officers.
  - Authorizes high-performing officers to be promoted ahead of peers.
  - Mandates more detailed officer manpower requirements process.



## Modernization of All Volunteer Force- II (SASC)

- Authorizes \$145.9 billion for military personnel, including costs of pay, allowances, bonuses, death benefits, and permanent change of station moves.
- Authorizes \$32.5 billion for the Defense Health Program.
- Authorizes \$11.4 billion in base and OCO funding for military construction, including family housing and operational and support infrastructure.
- Authorizes \$40 million in DOD supplemental impact aid, and \$10 million in impact aid for severely disabled military children.
- Applies the protections of title IX of the Education Amendments of 1972 to Department of Defense Education Activity (DODEA) schools to more effectively address discrimination and harassment within DODEA.
- Requires DODEA to craft a new policy combatting sexual harassment among students that provides at least the level of protection as afforded by title IX.
- Requires the service secretaries to establish and maintain multidisciplinary teams on child abuse and other domestic violence at military installations.
- Expands eligibility for Special Victims' Counsel services to victims of domestic violence and other aggravated violent offenses.
- Establishes a new punitive article on domestic violence in the Uniform Code of Military Justice.
- Authorizes military judges and magistrates to issue military protective orders.
- Authorizes programs to carefully manage opioid prescriptions.



# Strategic Forces, Missile Defense, Space (HASC)

## *Nuclear Deterrence*

Competitors like Russia and China are investing in new strategic weapons designed to challenge the credibility of our nuclear deterrent, undermine our missile defense capabilities, and erode the advantages we derive from Space. The NDAA Conference Report takes a comprehensive approach to ensuring our security by answering each one of those challenges.

Russia and China are building new modern nuclear weapons. At the same time, America's nuclear deterrent has been neglected. The NDAA supports the efforts outlined in Secretary Mattis' Nuclear Posture Review and **makes critical investments to modernize America's nuclear deterrent and align it with modern threats**. Critics in the nuclear disarmament community falsely claim that the cost to maintain a robust deterrent is not worth the security it provides to the country. The Committee notes that under Secretary Mattis' plan spending to operate and restore the nuclear deterrent **will never exceed 7 percent of defense spending** - a reasonable expenditure when one considers that deterrence is the cornerstone of America's security. The NDAA:

- Supports the Nuclear Posture Review's recommendation to pursue a **lower-yield ballistic missile warhead to strengthen deterrence**.
- Supports the President's budget request to restore the nuclear arsenal and adds **\$142.2 million for the National Nuclear Security Administration's (NNSA) nuclear weapons activities** and defense nuclear nonproliferation program, including efforts to modernize the nuclear weapons stockpile and address NNSA's aging facilities and other infrastructure.
- Provides increased funding to accelerate two key Air Force nuclear modernization programs: **the Ground Based Strategic Deterrent and the Long Range Standoff cruise missile**.

## *Missile Defense*

The threats from North Korea and Iran demonstrate that the time to debate the utility or practicality of missile defenses has passed. The NDAA:

- Supports the President's request for missile defense and adds **\$140 million to the Missile Defense Agency (MDA)** for development of critical directed energy and Space sensing projects, and the acceleration of hypersonic defense capabilities.
- Adds **\$284 million** to accelerate integration of Patriot (for lower altitudes) and **Terminal High Altitude Area Defense** (higher altitudes) missiles to meet the requirements of the Commander of U.S. Forces in Korea.
- Requires the director of MDA establish a **boost phase intercept program** using kinetic interceptors, initiate development of a missile defense tracking and discrimination Space sensor layer, and continue efforts to develop high power directed energy for missile defense applications.
- Requires the Director of MDA to continue development of **the homeland defense radar in Hawaii**, and that it be operationally capable by FY23.

- Provides increased funding to address **cyber threats** to our missile defense systems.
- Supports the President's request of **\$500 million** for co-development of missile defense systems with Israel, and co-production of **Iron Dome, David's Sling, and Arrow weapons systems**.

## *Space Warfighting*

Russia and China are developing capabilities to **deny the United States the advantages we derive from operating in Space**. Equally concerning is the inability of the organizations responsible for the nation's national security-related Space activities to prepare for Space to become a warfighting domain and to adequately develop and/or acquire essential national security Space systems.

Efforts to reform the Department's approach to Space issues can be summarized in four equally important elements: acquisition reform, resources, cadre development, and joint warfighting. The NDAA comprehensively addresses each one of these to **ensure that our Servicemembers are ready to defend our vital national interests in Space**. The conference report also ensures that the Department's Space investments are being executed in a way to ensure increased agility, lethality, and accountability. The NDAA:

- Directs the Department of Defense to develop a plan to establish a **separate alternative process for Space-related acquisitions**.
- Directs the Secretary of the Air Force to develop a plan to improve the **quality of the Space cadre within the Air Force**.
- Establishes a **subunified command for Space** under United States Strategic Command for carrying out joint Space warfighting.
- Directs the Secretary of Defense to develop a space warfighting policy and plan that **identifies joint mission-essential tasks for Space as a warfighting domain**.
- Supports the President's request for **Next Generation Overhead Persistent Infrared, Protected Satellite Communications**, and the Air Force's Space launch efforts.

# Russia, Europe, NATO (HASC)

## *Russia*

The National Defense Strategy points out that Russia seeks to “shatter the North Atlantic Treaty Organization and change European and Middle East security and economic structures to its favor.” Russia has violated key arms control treaties, expanded and modernized its nuclear arsenal, tested counter-space weapons, and used emerging technologies to undermine its neighbors. In addition to measures listed above that restore overall military readiness in order to face emerging threats, the NDAA includes the following steps confront Russia’s misdeeds:

- **Provides flexibility for strategic partners and allies to move away from the use of Russian military equipment to American equipment**, while ensuring that U.S. defense and security interests remain protected, through a modified waiver under the Countering America’s Adversaries Through Sanctions Act.
- **Restricts the Administration from voting to approve new sensor requests under the Open Skies Treaty and withholds funding for upgrades or recapitalization of U.S. Open Skies Treaty aircraft and sensors until the President makes certain certifications**, including that the Russian Federation is taking steps to return to compliance with the treaty.
- **Funds research and development to counter weapons being deployed by Russia that are in contravention of the Intermediate Nuclear Forces treaty, and requires the President to make a final determination regarding whether Russia is in material breach of the treaty.**
- **Prohibits military-to-military cooperation with Russia.**
- **Prohibits U.S. government recognition of the absorption of Crimea into the Russian Federation.**
- **Funds the President’s request for Ukraine, including \$250 million for lethal defensive items.**
- **Funds the President’s request for \$6.3 billion for the European Deterrence Initiative to further increase number of U.S. troops in Europe, reassure U.S. partners and allies, and deter Russian aggression.**
- **Authorizes U.S. Special Operations Command programs and activities, including ongoing efforts in Eastern Europe.**
- **Instructs the President to designate an official on the staff of the National Security Council to coordinate a whole-of-government response to malign foreign influence campaigns against the United States.**
- **Bolsters international partnerships and provides additional funding for cyber warfare and influence operations to counter Russian aggression, cyber, and information warfare threats.**



# Technology and New Threats (HASC)

## *Emerging Technologies*

America's security is challenged by our strategic competitors' advances in Artificial Intelligence, Quantum Sciences, Space and counter-Space capabilities, Cyber, Influence Operations, and Hypersonics, among others. To address these threats, the NDAA:

- Places emphasis on policy and programs to advance **Artificial Intelligence, machine learning, quantum sciences, and other critical national security technologies**;
- Establishes a **National Security Commission on Artificial Intelligence** to review advances in AI and associated technologies. The commission is authorized \$10 million to support its critical national security mandate.
- Provides additional funds to accelerate Artificial Intelligence and machine learning programs, as well as directed energy, and hypersonics programs;
- Fully supports innovation efforts of the **Defense Advanced Research Projects Agency, and Defense Innovation Unit Experimental** to ensure our technological superiority and dominance over current and future threats; and
- **Advances hypersonic and directed energy weapons research, development, and transition efforts within DoD.**

## *Cyber Policy and Operations*

- **Strengthens cyber defense** against active, systematic and ongoing campaigns of cyber attacks by nation-states;
- **Prioritizes the readiness of U.S. Cyber Command, cyber mission forces, and cyber warfare tools and capabilities**, including initiatives to strengthen the cyber workforce;
- Provides a pilot-authority to **improve coordination between DOD and the Department of Homeland Security** to strengthen defense of critical infrastructure and networks.
- **Enhances resiliency of DoD networks, weapons systems, supply chains, and capabilities**;
- **Affirms the authority of the Secretary of Defense to conduct clandestine military activities and operations in cyberspace**;
- **Clarifies cyberspace, cybersecurity, cyber warfare and cyber deterrence policy to deter and respond to malicious cyber activities targeting the United States**;
- Requires the Department of Defense to provide **Congressional notification of cybersecurity breaches and loss of controlled, unclassified information from cleared defense contractors**;
- **Strengthens congressional oversight of sensitive cyber military operations and cyber**

warfare tools and capabilities; and

- Includes several provisions to **further strengthen critical cybersecurity programs and initiatives within the Department of Defense** including Information Security Continuous Monitoring, cybersecurity assistance to small manufacturers and universities, and SharkSeer.

## *Countering Weapons of Mass Destruction*

- Fully authorizes and strengthens **Countering Weapons of Mass Destruction (CWMD) programs and activities**, including the recommendation for the **appointment of a Principal Advisor for CWMD** to more effectively oversee policies and activities within the Department.
- Directs the Secretary to develop a plan to **streamline oversight of CWMD policies, programs, and activities**.
- Fully authorizes the **Joint Improvised-Threat Defeat Organization** and stabilizes the mission to defeat improvised threats by directing the Secretary to develop a plan to transition funding for this effort from overseas contingency operations to base appropriations.

# China, North Korea (HASC)

## China

According to the National Defense Strategy, China is using an “all-of-nation long-term strategy” and “leveraging military modernization, influence operations, and predatory economics to coerce neighboring countries to reorder the Indo-Pacific region to their advantage.” It also classifies China as a strategic competitor that seeks to shape the world toward their authoritarian model through destabilizing activities that threaten the security of the United States and its allies. To counter this approach and reassure our allies and partners, the NDAA:

- Prohibits any U.S. government agency from using risky technology produced by Huawei or ZTE, two companies linked to the Chinese Communist Party’s intelligence apparatus. The NDAA also prohibits any entity doing business with the US Government from using Huawei or ZTE technology. The NDAA also prohibits the use in security related functions of equipment produced by several other Chinese companies with ties to the Chinese government (This Proposal enjoys wide bipartisan support and is in concert with recent unanimous regulatory actions by the Federal Communications Commission.)
- Directs a whole-of-government strategy on China to address the Chinese Communist Party’s use of political influence, economic tools, cyber activities, global infrastructure and development projects, and military activities against the United States and allies and partners.
- Requires the Secretary of Defense to submit a 5-year plan for an “Indo-Pacific Stability Initiative” to bolster DOD’s efforts to plan for and provide the necessary forces and military infrastructure, and logistics capabilities in the Indo-Pacific region.
- Extends authority for the Maritime Security Initiative (MSI) for an additional 5 years, re-designates the Southeast Asia MSI as the Indo-Pacific MSI, includes Bangladesh and Sri Lanka as recipient countries of assistance and training, and adds India as a covered country with the aim to increase maritime security and maritime domain awareness in the South China Sea and Indian Ocean.
- Requires a strategy with specific benchmarks toward enhancing India’s status as major defense partner and defense and security cooperation with India.
- Prohibits China’s participation at the Rim of Pacific (RIMPAC) naval exercises unless the Secretary provides a national security waiver or certification requirements to do so.
- Requires a public report on the military and coercive activities of China in the South China Sea and encourages the Secretary of Defense to require the public release of information illustrating Chinese activities of concern.
- Supports improving Taiwan’s defense capabilities and force readiness, expands joint training, foreign military sales, the use of security cooperation authorities, and senior-level military-to-military engagements.
- Modifies the annual report on Chinese military and security developments to include malign influence activities, including efforts to influence media, cultural institutions, business, and academic and policy communities in the United States, and the use of nonmilitary tools, including predatory lending practices, to support its global security and military objectives.
- Limits DOD funds for Chinese language programs at universities that host a Confucius Institute.

## CFIUS Reform

For years, China has been using America’s open economy against us. It has been leveraging our investments and stealing sensitive technology and information to overcome our military advantage. **The NDAA contains an agreement to modernize and strengthen the Committee on Foreign Investment in the United States** to more effectively guard against the risk to U.S. national security posed by certain types of foreign investment. It also includes key reforms to our export controls that will better protect emerging technology and intellectual property from Beijing and other potential adversaries.

- **Increases the CFIUS oversight of foreign investment** in U.S. businesses to protect national security.
- **Authorizes the disclosure of information** related to CFIUS’s national security analysis to a U.S. government agency or a governmental entity of a U.S. ally or partner.
- Establishes **mandatory thresholds for declaring foreign investment** in U.S. businesses involving critical technologies, critical infrastructure, or sensitive personal data of U.S. citizens.
- Ensures that the **Department of Defense has a strong voice in ensuring appropriate national security review** of emerging technologies and other dual-use items.

## North Korea

Although the recent summit and diplomatic talks between the United States and North Korea provides some basis for a possible agreement on denuclearization, North Korea is known for its dangerous and destabilizing development of nuclear weapons, ballistic missiles, and other weapons of mass destruction. According to the National Defense Strategy, North Korea seeks “a mixture of nuclear, biological, chemical, conventional, and unconventional weapons and a growing ballistic missile capability to gain coercive influence over South Korea, Japan, and the United States.” Accordingly, the NDAA:

- Expresses that the **United States stands behind its treaty obligations and extended nuclear deterrence commitments**, and that the presence of United States Forces on the Korean Peninsula should remain strong and enduring.
- **Prohibits the use of DoD funds to reduce the number of armed forces deployed to South Korea** below 22,000 unless the Secretary certifies that it is in the national security interest of the United States, the reduction will not significantly undermine the security of U.S. allies, and that allies (including South Korea and Japan) have been appropriately consulted.
- Directs the Department of Defense, in coordination with other agencies, to **report on the status of North Korea’s nuclear, missile, and other weapons of mass destruction** (including chemical and biological weapons), and in the case of an agreement between the United States and North Korea, to provide updates and verification assessments on any that have been verifiably dismantled, destroyed, or rendered permanently unusable.
- **Continues to strengthen our military capability to ensure US forces are ready to defend ourselves and our allies in any scenario on the Korean Peninsula.**
- Bolsters DOD’s efforts to plan for and provide the necessary forces, military infrastructure, and basing, logistics capabilities, and invests in **new missile defense capabilities** (as discussed above).
- Supports the President’s budget request for the **Army’s precision strike missile program.**

# Counterterrorism, Syria, Iraq, Iran, Cooperation (HASC)

## Counterterrorism

Even as America's Military prepares for new threats, we must also keep up the pressure on terrorist groups that threaten U.S. interests, including ISIS and al Qaeda. The NDAA:

- Authorizes the **Counter ISIS Train and Equip fund** to aid partners and allies fighting ISIS.
- **Extends the Syria Train and Equip Authority** through 2019 so that U.S. partners in Syria can consolidate gains against ISIS, and requires the President to submit an updated implementation plan.
- Authorizes **continued security cooperation with the Government of Iraq** to consolidate gains against ISIS.
- Maintains the **Coalition Support Fund** to reimburse partners and allies that contribute to U.S. counterterrorism efforts.
- **Supports the Afghan military** (particularly the Afghan Special Security Forces and the Afghan Air Force) in its fight against the Taliban, and ISIS Khorasan, by reauthorizing the Afghan Security Forces Fund.
- Authorizes U.S. **Special Operations Command** programs and activities, including ongoing efforts in Iraq, Syria, Afghanistan, Yemen, and Somalia.
- **Extends critical authorities for special operations.**
- **Improves congressional oversight of ongoing counterterrorism and sensitive activities.**
- **Expands border security authority** so that **Pakistan and Oman** are eligible for U.S. assistance in securing their borders against the threats posed by transnational terrorism.

## Iran

The NDAA is designed to revitalize America's alliances, including as a bulwark against Iranian influence. The NDAA also ensures the U.S. military posture in the region will deter Iranian aggression, allows the Pentagon to plan for a robust defense against Iran, and increases pressure on Iran's proxy network in Syria, Iraq, Yemen, and elsewhere. The NDAA:

- **Revitalizes partnerships in the region** by authorizing DoD to create a **strategy to counter the destabilizing activities of Iran.** The NDAA also counters Iranian support for Iraq and ensures that U.S. support does not flow into the affiliates of the Iranian Revolutionary Guard Corps (the Quds Force) by extending the authority for the Counter ISIS fund which the Iraqi government uses in its fight against ISIS.
- Provides for a robust military posture in the region by increasing oversight of countermine assets, **accelerates the next Ford Class aircraft carrier** (as discussed above) to close the carrier gap in the Gulf, and increases regional missile defense cooperation and deployment.
- **Increases oversight of items essential to deterring Iran and other hostile actors,** including munitions stockpiles, Patriot missiles, cooperative efforts to counter Unmanned Aerial Systems, and missile defense of the United States.

## Security Cooperation

U.S. national security is bolstered by **ensuring that allies and partners can defend themselves,** operate alongside U.S. forces, and contribute to coalitions supporting U.S. objectives. Allies and partners must also be able to interoperate with the United States, conduct counterterrorism operations, and help to deter the malign influence of shared competitors and adversaries. The NDAA:

- Authorizes the **transfer of a U.S. Navy frigate to the Kingdom of Bahrain.**
- **Builds upon previous reforms** to ensure the security cooperation enterprise is efficient and effective.
- **Continues to improve the Foreign Military Sales process** to support U.S. security objectives and the defense industry.
- **Improves security cooperation to counter China's rising influence** in Africa, Southeast Asia, and other regions.
- **Provides flexibility for strategic partners and allies to move away from the use of Russian military equipment** to American equipment through a modified waiver under the Countering America's Adversaries Through Sanctions Act.
- Includes a Sense of Congress **calling on Turkey to release wrongfully detained U.S. citizens** including Andrew Brunson and Serkan Golge.

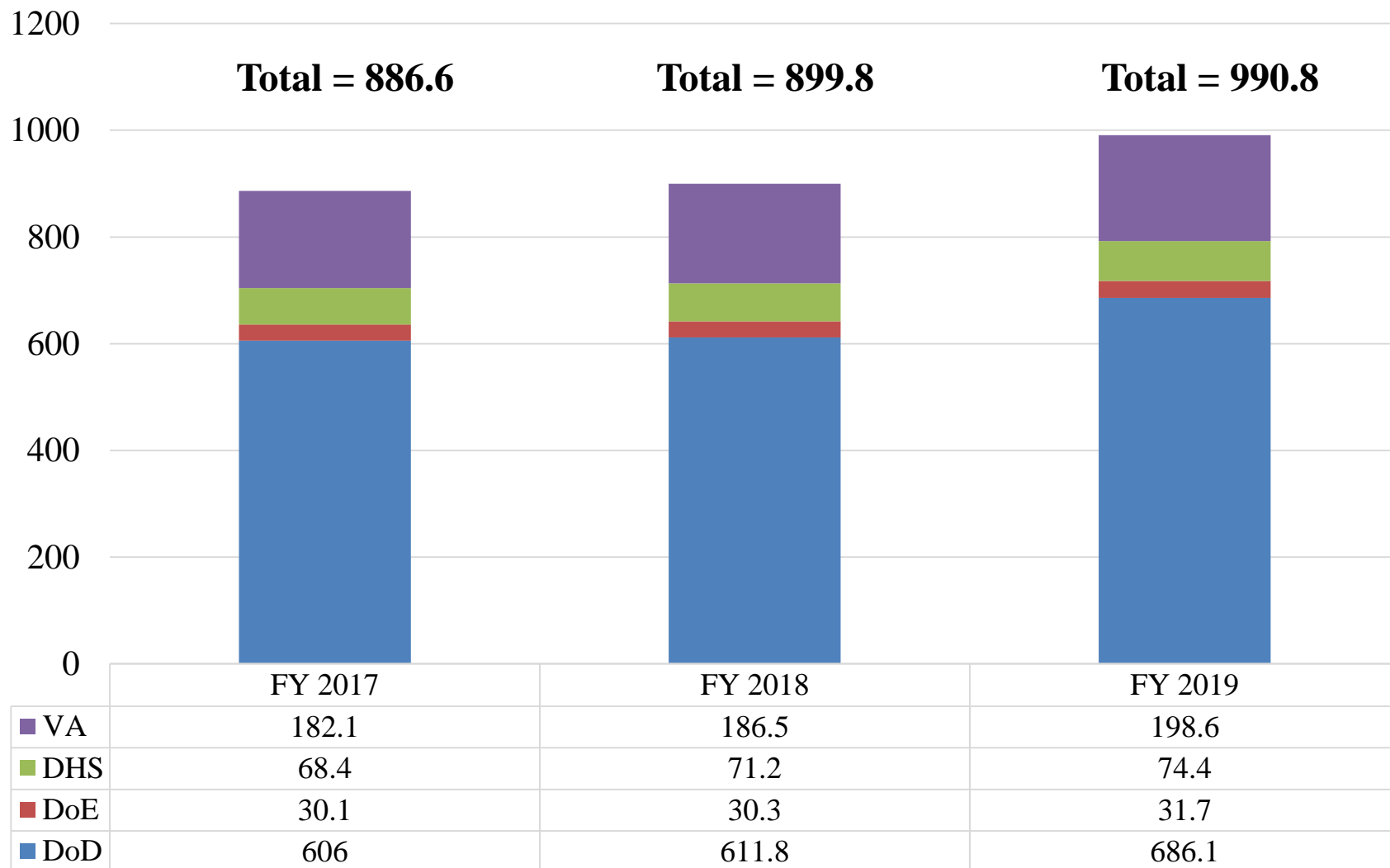


# **Topline Trends in Total National Security Spending in the President's FY2019 Budget Request**

**(With Department of Energy, Homeland  
Defense and Veteran's Administration)**

# Including All Key Elements: Total U.S. National Security Spending

(Budget Authority in Current \$USD Billions)



# Including All Key Elements of National Defense Spending (DoD, DoE, Homeland Defense, and Veteran's Administration): FY2017-FY2019

Budget Authority in Current \$US Billions)

<b>Department</b>	<b>FY2017</b>	<b>FY2018</b>	<b>FY2019</b>
<b>Department of Defense</b>	<b>606.0</b>	<b>611.8</b>	<b>686.1</b>
<b>Department of Energy</b>	<b>30.1</b>	<b>30.3</b>	<b>31.7</b>
<b>Homeland Security</b>	<b>68.4</b>	<b>71.2</b>	<b>74.4</b>
<b>Sub-Total</b>	<b>704.5</b>	<b>713.3</b>	<b>792.2</b>
<b>Veteran's Administration</b>	<b>182.1</b>	<b>186.5</b>	<b>198.6</b>
<b>TOTAL</b>	<b>886.6</b>	<b>899.8</b>	<b>990.8</b>

**Source: FY2019 Budget Summaries of each Department and Agency**

Notes:

1. Uses summary totals in Budget Summaries. Full funding with mandatory and incidental spending is often higher.

2 Uses Maximum DoE Figure in DoD Green Book, Discretionary spending is \$19 to \$21 billion a year

# DoD Estimate of Defense and International Affairs Share of Total Federal Spending FY2017-FY2023

Budget Authority in \$US Billions

Function	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
050 National Defense .....	656.3	683.2	726.8	744.2	753.9	771	788.7
150 International Affairs .....	66.7	78.9	41.8	31.9	30.2	32.0	35.5
250 General Science, Space, and Technology .....	32.2	31.7	28.5	28.5	28.5	28.5	28.5
270 Energy .....	5.9	4.7	-3.1	-5.1	1.1	0.7	-0.4
300 Natural Resources and Environment .....	44.4	41.7	35.5	35.8	35.3	34.1	34.5
350 Agriculture .....	14.2	20.7	22.2	19.7	19.7	18.6	18.6
370 Commerce and Housing Credit .....	-14.2	6.5	-3.0	0.7	-5.3	-4.0	-2.4
400 Transportation .....	92.3	91.4	90.2	82.9	90.5	80.1	80.2
450 Community and Regional Development .....	43.2	42.7	62.9	13.4	13.3	13.8	13.9
500 Education, Training, Employment, and Social Services .....	148.4	100.7	89.4	90.3	88.5	88.1	86.0
550 Health .....	556	585	569	632	606	621	641
570 Medicare .....	607.1	623.7	672.6	662.2	709.6	804.3	830.1
600 Income Security .....	514.2	503.7	501.2	509.8	522.3	540.5	550.8
650 Social Security .....	946.2	997.1	1,057.2	1,118.8	1,184.0	1,254.2	1,328.4
700 Veterans Benefits and Services .....	179.3	184.5	193.2	209.8	217.6	224.0	231.8
750 Administration of Justice .....	65.7	59.7	62.5	63.5	64.5	65.9	66.9
800 General Government .....	23.5	25.1	37.6	27.8	28.2	29.5	29.3
900 Net Interest .....	262.5	310.3	363.4	446.6	510.4	567.7	618.5
920 Allowances .....	.....	-24.8	127.3	-42.2	-53.3	-66.9	-79.5
950 Undistributed Offsetting Receipts .....	-89.8	-102.0	-104.1	-92.7	-91.4	-91.9	-91.8
<b>Grand Total .....</b>	<b>4,153.9</b>	<b>4,264.4</b>	<b>4,571.2</b>	<b>4,577.6</b>	<b>4,753.3</b>	<b>5,011.2</b>	<b>5,208.0</b>

From OMB Historical Table 5-1 (Budget Authority by Function and Subfunction).

# CBO Estimate of Baseline Defense and International Affairs Share of Total Federal Spending FY2017-FY2028

Budget Authority in \$US Billions

## Outlays Projected in CBO's Baseline

	Actual, 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total	
													2019– 2023	2019– 2028
In Billions of Dollars														
<b>Mandatory</b>														
Social Security	939	984	1,043	1,110	1,180	1,253	1,330	1,410	1,495	1,583	1,676	1,774	5,915	13,853
Medicare <sup>a</sup>	702	707	776	830	893	996	1,032	1,062	1,181	1,267	1,358	1,521	4,527	10,915
Medicaid	375	383	401	417	437	465	493	524	554	587	620	655	2,213	5,152
Other spending	756	724	758	776	808	857	854	851	891	920	928	981	4,053	8,624
Offsetting receipts	-253	-252	-260	-272	-286	-305	-317	-334	-361	-374	-393	-406	-1,439	-3,306
Subtotal	2,519	2,546	2,719	2,861	3,031	3,266	3,392	3,513	3,760	3,983	4,189	4,524	15,269	35,238
<b>Discretionary</b>														
Defense	590	622	669	651	655	671	679	688	710	727	745	769	3,325	6,964
Nondefense	610	658	693	689	693	708	727	748	771	794	817	839	3,511	7,480
Subtotal	1,200	1,280	1,362	1,340	1,348	1,380	1,406	1,436	1,481	1,522	1,562	1,608	6,836	14,445
<b>Net Interest</b>	263	316	390	485	570	643	702	739	774	817	864	915	2,789	6,897
<b>Total</b>	<b>3,982</b>	<b>4,142</b>	<b>4,470</b>	<b>4,685</b>	<b>4,949</b>	<b>5,288</b>	<b>5,500</b>	<b>5,688</b>	<b>6,015</b>	<b>6,322</b>	<b>6,615</b>	<b>7,046</b>	<b>24,893</b>	<b>56,580</b>
On-budget	3,180	3,288	3,556	3,706	3,901	4,168	4,303	4,414	4,658	4,883	5,084	5,416	19,634	44,088
Off-budget <sup>b</sup>	801	853	915	980	1,048	1,120	1,197	1,274	1,357	1,439	1,531	1,631	5,259	12,492
<b>Memorandum:</b>														
Outlays Adjusted to Exclude Timing Shifts														
Mandatory outlays	2,516	2,587	2,719	2,861	3,031	3,208	3,387	3,575	3,760	3,983	4,189	4,440	15,206	35,154
<b>Total outlays</b>	<b>3,978</b>	<b>4,186</b>	<b>4,470</b>	<b>4,685</b>	<b>4,949</b>	<b>5,226</b>	<b>5,495</b>	<b>5,755</b>	<b>6,015</b>	<b>6,322</b>	<b>6,615</b>	<b>6,957</b>	<b>24,826</b>	<b>56,490</b>
Gross Domestic Product	19,178	20,103	21,136	22,034	22,872	23,716	24,621	25,583	26,595	27,608	28,677	29,803	114,379	252,646

# **Topline Trends in Defense 050 Spending in the President's FY2019 Budget Request**

**(Less Homeland Defense and Veteran's  
Administration)**



# **CRS Estimate of Total Defense Spending Less Veteran's, and Homeland Defense**

The \$726.8 billion national defense budget request includes \$716.0 billion in discretionary spending and \$10.8 billion in mandatory spending (see Figure 1). The discretionary spending is, for the most part, provided by the annual appropriations bill drafted by the House and Senate Appropriations Committees.

The \$716.0 billion requested for national defense discretionary spending breaks down as follows:

- \$686.1 billion for DOD (96% of the total);
- \$21.9 billion for atomic energy activities (3%); and
- \$8.0 billion for other defense-related activities (1%).

Of the total, \$708.1 billion falls under the jurisdiction of the House and Senate Armed Services Committees and is subject to authorization by the annual National Defense Authorization Act (NDAA). The remaining \$7.9 billion falls under the jurisdiction of other congressional committees.

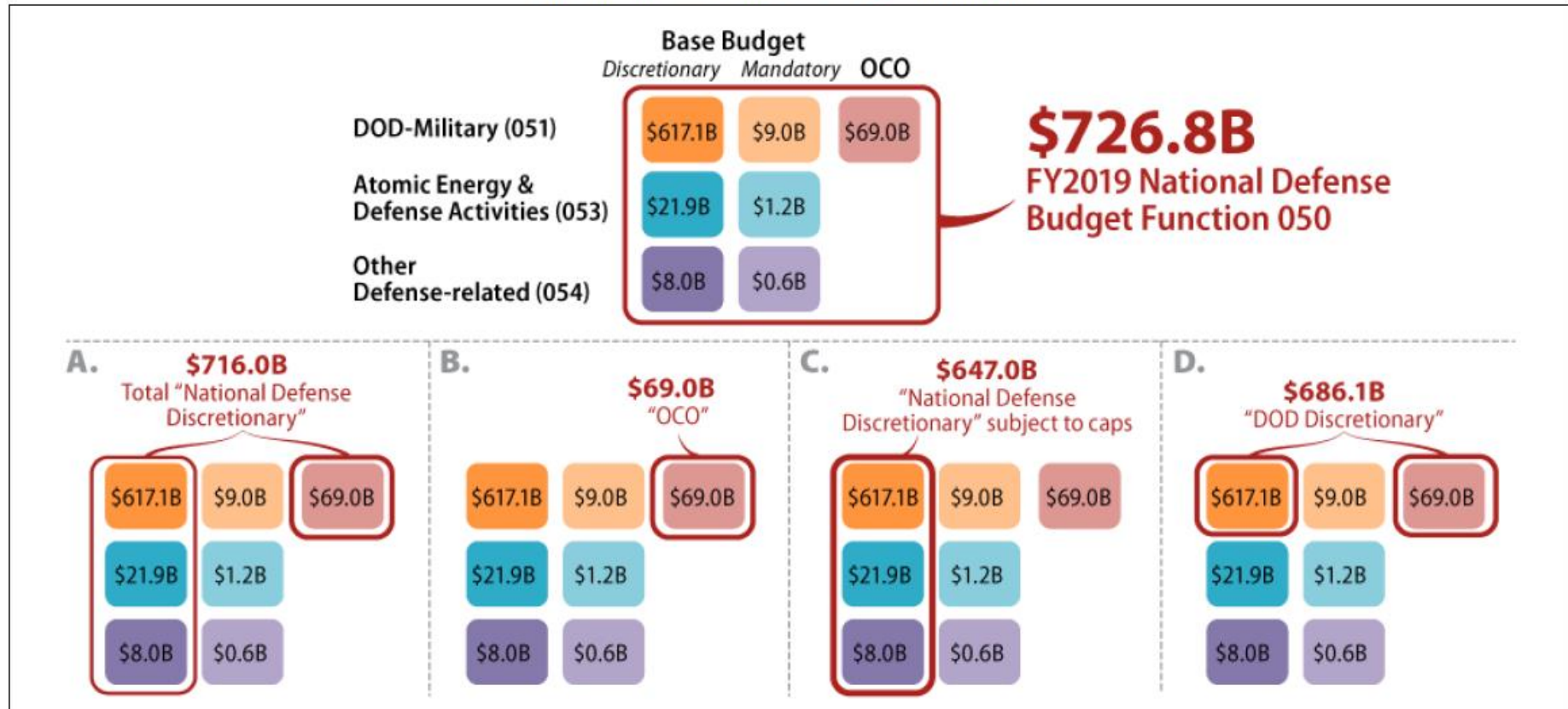
## **In Line with Revised Budget Cap**

The President's budget request conforms to the spending limits (or caps) established by the Budget Control Act of 2011 (BCA; P.L. 112-25) and amended by the Bipartisan Budget Act of 2018 (BBA of 2018; P.L. 115-123).

The request for national defense discretionary spending includes \$647 billion in base budget spending and \$69 billion in funding for Overseas Contingency Operations (OCO). Because the caps do not apply to spending that is designated for OCO or for emergency purposes, the request is in line with the limits enacted February 9, 2018, under the BBA of 2018.

# CRS Estimate of Total Defense Spending Less Veteran's and Homeland Defense

(in billions of dollars of budget authority)



**Source:** Office of Management and Budget (OMB), Analytical Perspectives, Table 26-I. *Budget Authority and Outlays by Function, Category, and Program*, at <https://www.whitehouse.gov/wp-content/uploads/2018/02/26-I-fy2019.pdf>.

# CRS Estimate of Department of Defense Spending Less DoE, Veteran's and Homeland Defense

The \$686.1 billion in discretionary spending for DOD includes \$617.1 billion for the base budget (that is, for the most part, activities DOD would pursue even if U.S. forces were not engaged in combat) and \$69.0 billion for the OCO budget (the incremental cost of those military operations).

## Budget Comparisons

The FY2019 DOD discretionary budget of \$686.1 billion, including base and OCO funding, represents an increase of \$15.4 billion (2.3%) over the enacted FY2018 amount (see Table 1). The FY2019 DOD discretionary base budget of \$617.1 billion represents an increase of \$18.2 billion (3.0%) over the enacted FY2018 amount. The FY2019 DOD OCO budget of \$69 billion represents an increase of \$3.1 billion (4.7%) over the enacted FY2018 amount.

## OCO Funding Shift

The Administration's initial FY2019 DOD budget request, released on February 12, 2018, included \$89.0 billion designated for OCO. In a budget amendment published April 13, 2018, the Administration removed the OCO designation from \$20.0 billion of funding in its initial request, in effect, shifting that amount into the base budget request after Congress agreed to raise the spending caps.

In a statement on the budget amendment, White House Office of Management and Budget Director Mick Mulvaney said the FY2019 budget request fixes "long-time budget gimmicks" in which OCO funding has been used for base budget requirements. Beginning in FY2020, "the Administration proposes returning to OCO's original purpose by shifting certain costs funded in OCO to the base budget where they belong," he wrote.

## Selected Highlights

### Personnel/Policy

- **16K More Military Personnel.** The request includes funding to expand the military to 1.34 million active-duty personnel and 817,700 Guard and Reserve personnel, an increase of 15,600 and 800, respectively, from the FY2018 enacted level.
- **Increased Force Levels.** The request assumes a force level of 11,958 personnel in Afghanistan, 5,765 in Iraq and Syria, 59,463 for in-theater support, and 16,610 for other mobilization, for a total of 93,796, an increase of 3,153 troops, or 3.5%, over the FY2018 request.
- **2.6% Military Pay Raise.** The request calls for a 2.6% military pay raise, the largest since 2010 and in keeping with private-sector wage growth.

### Weapons/Equipment

- **Aircraft.** The request includes \$10.7 billion in funding for 77 F-35 Joint Strike Fighter jets, \$3.0 billion for 15 KC-46A refueling tankers, and \$2.2 billion for 10 P-8A Poseidon maritime surveillance aircraft.
- **Missile Defense/Nuclear Deterrence.** The request includes \$9.9 billion for the Ballistic Missile Defense System, \$3.7 billion for the Navy's Columbia-class submarine program, and \$2.3 billion for the Air Force's future stealth bomber, the B-21 Raider.
- **Ships.** The request includes \$7.4 billion for two Virginia-class submarines and other program costs, \$6.0 billion for three Arleigh Burke-class destroyers, and \$1.8 billion for the Ford-class aircraft carrier.
- **Tactical Vehicles.** The request includes \$2.0 billion for 5,113 Joint Light Tactical Vehicles.

---

Brendan W. McGarry, [bmcgarry@crs.loc.gov](mailto:bmcgarry@crs.loc.gov), 7-2023

# Historic Increases in U.S. Defense Spending: FY1950-FY2019

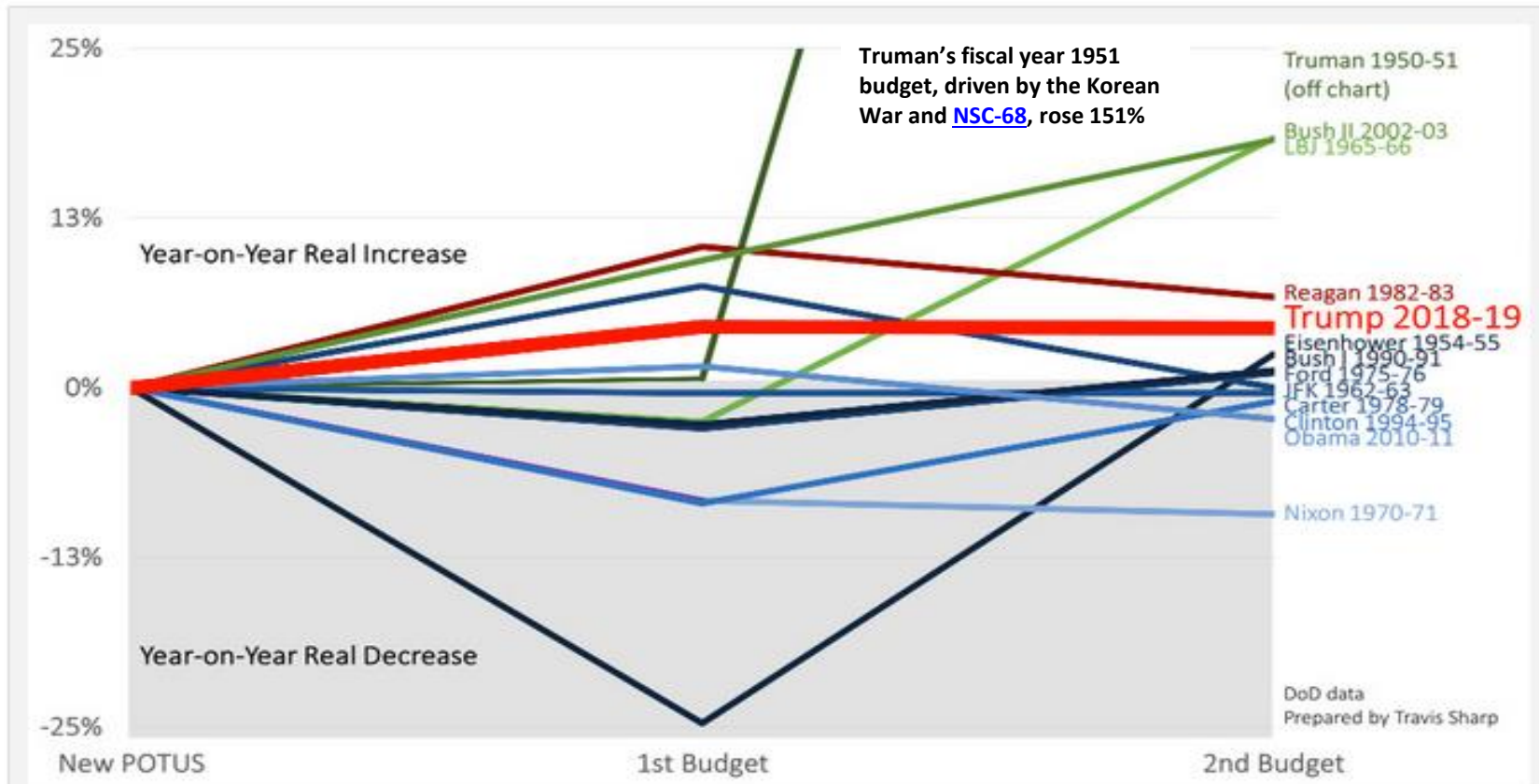


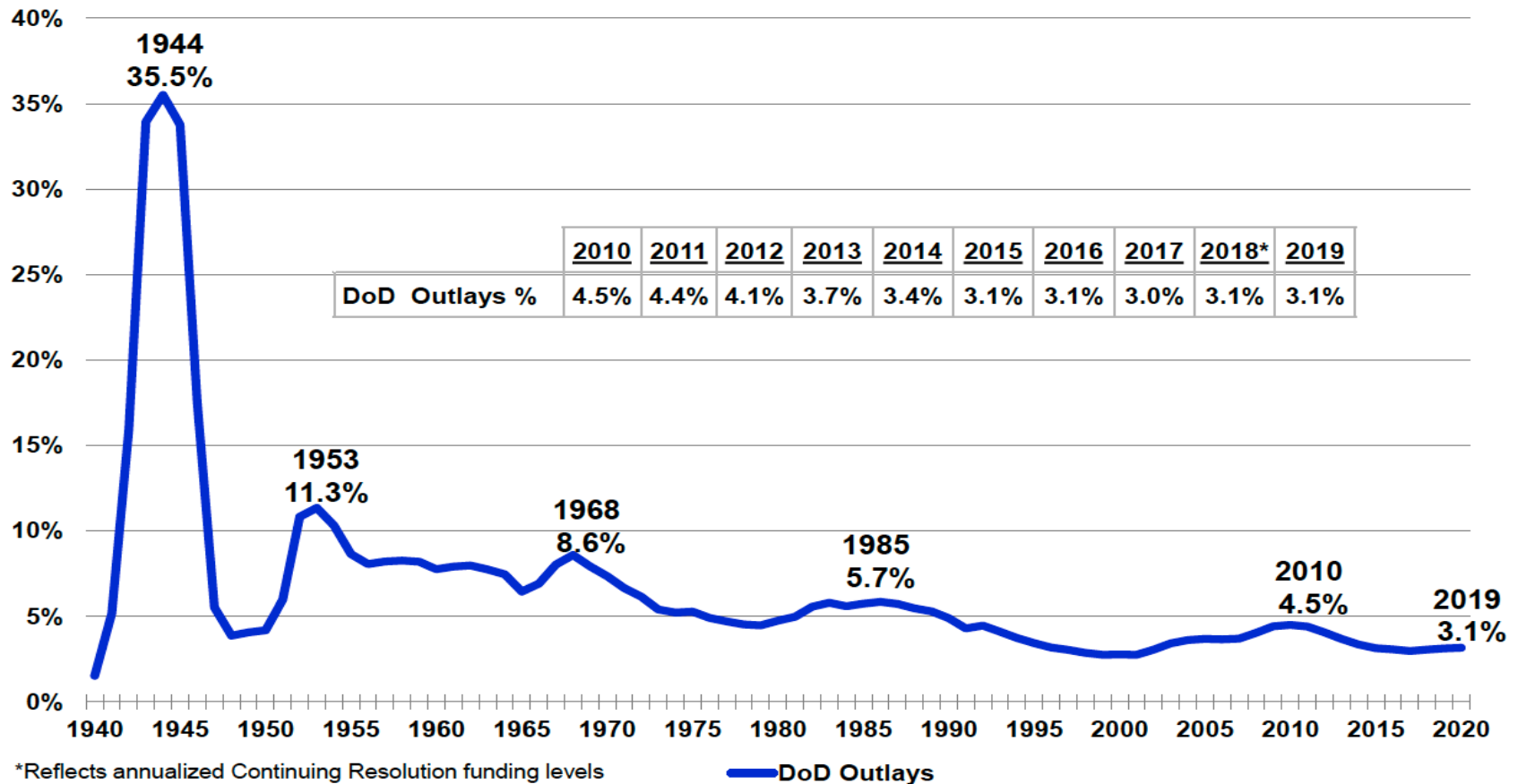
Figure 1. Real Growth Rates in Presidents' First Two Defense Budgets, 1950–Present (includes base budget, war, and supplemental funds).

*Notes: Historical data is DoD total obligational authority, Green Book Table 6-1. Using budget authority vice total obligational authority moves Eisenhower and Bush I down near Nixon due to differences in war spending accounting but does not otherwise change the substantive results.*



# Defense Alone is Well Over 2% of GDP NATO Goal, But Poses a Steadily Lower “Burden” on the U.S.

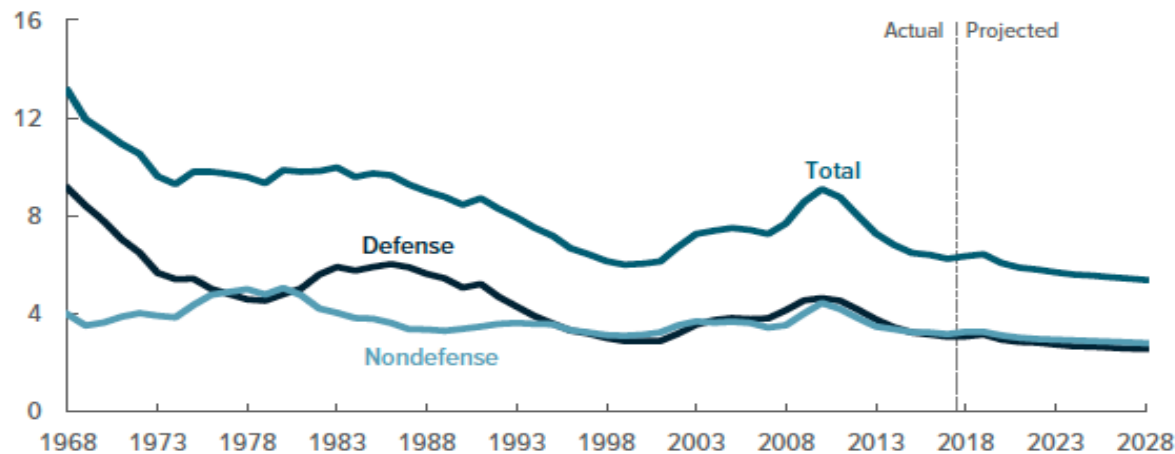
(DoD is Only 86% of Total. Real FY2019 Percent is 3.6%)



# CBO Estimate of Baseline Defense and International Affairs Share of GDP FY2017-FY2028

## Discretionary Outlays, by Category

Percentage of Gross Domestic Product



CBO's projections of discretionary spending incorporate budgetary caps through 2021 and the assumption that discretionary budget authority grows with inflation thereafter.

Discretionary budget authority is projected to decline by 8 percent in 2020 because of scheduled reductions to the caps.

Total Budget													Total	
	Actual, 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2019– 2023	2019– 2028
<b>Mandatory</b>														
Social Security	4.9	4.9	4.9	5.0	5.2	5.3	5.4	5.5	5.6	5.7	5.8	6.0	5.2	5.5
Medicare <sup>a</sup>	3.7	3.5	3.7	3.8	3.9	4.2	4.2	4.2	4.4	4.6	4.7	5.1	4.0	4.3
Medicaid	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2	1.9	2.0
Other spending	3.9	3.6	3.6	3.5	3.5	3.6	3.5	3.3	3.3	3.3	3.2	3.3	3.5	3.4
Offsetting receipts	-1.3	-1.3	-1.2	-1.2	-1.2	-1.3	-1.3	-1.3	-1.4	-1.4	-1.4	-1.4	-1.3	-1.3
Subtotal	13.1	12.7	12.9	13.0	13.3	13.8	13.8	13.7	14.1	14.4	14.6	15.2	13.3	13.9
<b>Discretionary</b>														
Defense	3.1	3.1	3.2	3.0	2.9	2.8	2.8	2.7	2.7	2.6	2.6	2.6	2.9	2.8
Nondefense	3.2	3.3	3.3	3.1	3.0	3.0	3.0	2.9	2.9	2.9	2.8	2.8	3.1	3.0
Subtotal	6.3	6.4	6.4	6.1	5.9	5.8	5.7	5.6	5.6	5.5	5.4	5.4	6.0	5.7
<b>Net Interest</b>	1.4	1.6	1.8	2.2	2.5	2.7	2.8	2.9	2.9	3.0	3.0	3.1	2.4	2.7
<b>Total</b>	<b>20.8</b>	<b>20.6</b>	<b>21.2</b>	<b>21.3</b>	<b>21.6</b>	<b>22.3</b>	<b>22.3</b>	<b>22.2</b>	<b>22.6</b>	<b>22.9</b>	<b>23.1</b>	<b>23.6</b>	<b>21.8</b>	<b>22.4</b>
On-budget	16.6	16.4	16.8	16.8	17.1	17.6	17.5	17.3	17.5	17.7	17.7	18.2	17.2	17.5
Off-budget <sup>b</sup>	4.2	4.2	4.3	4.4	4.6	4.7	4.9	5.0	5.1	5.2	5.3	5.5	4.6	4.9



# **CBO Estimate of Cost of End of Budget Caps Under Budget Control Act (BCA)**

- **The Administration requested \$575 billion for DoD's base budget for 2018. The Congress authorized \$605 billion but has not appropriated it**
- **That total will exceed DoD's share of the BCA cap for 2018 by \$54 billion**
- **The cost of implementing the Administration's goals through 2021 will exceed BCA caps by \$295 billion, by CBO's estimate**
- **Reports suggest the 2019 budget request will exceed CBO's estimate of about \$600 billion for 2019**

# Major U.S. Increase in FY2019 Military Spending

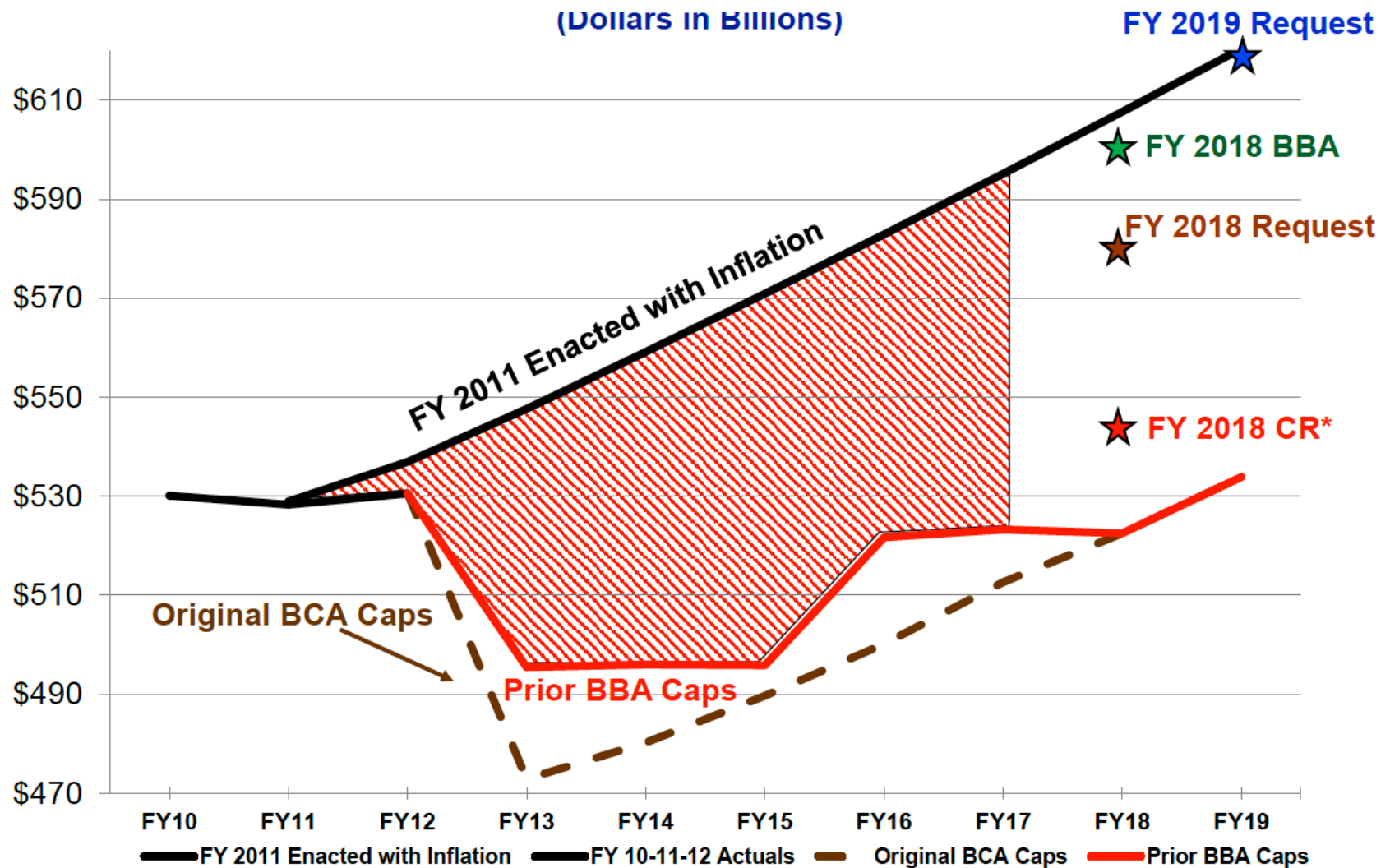
(Dollars in Billions)

DoD – Military - Base Budget Request	\$617
DoD - Military - Overseas Contingency Operations (OCO)	<u>69</u>
Total DoD Military (051)	\$686
Other National Defense (053/054)	<u>30</u>
Total National Defense (050)	\$716

- Budget driven by the National Defense Strategy
- \$74 Billion (10% real growth) over DoD's current CR levels

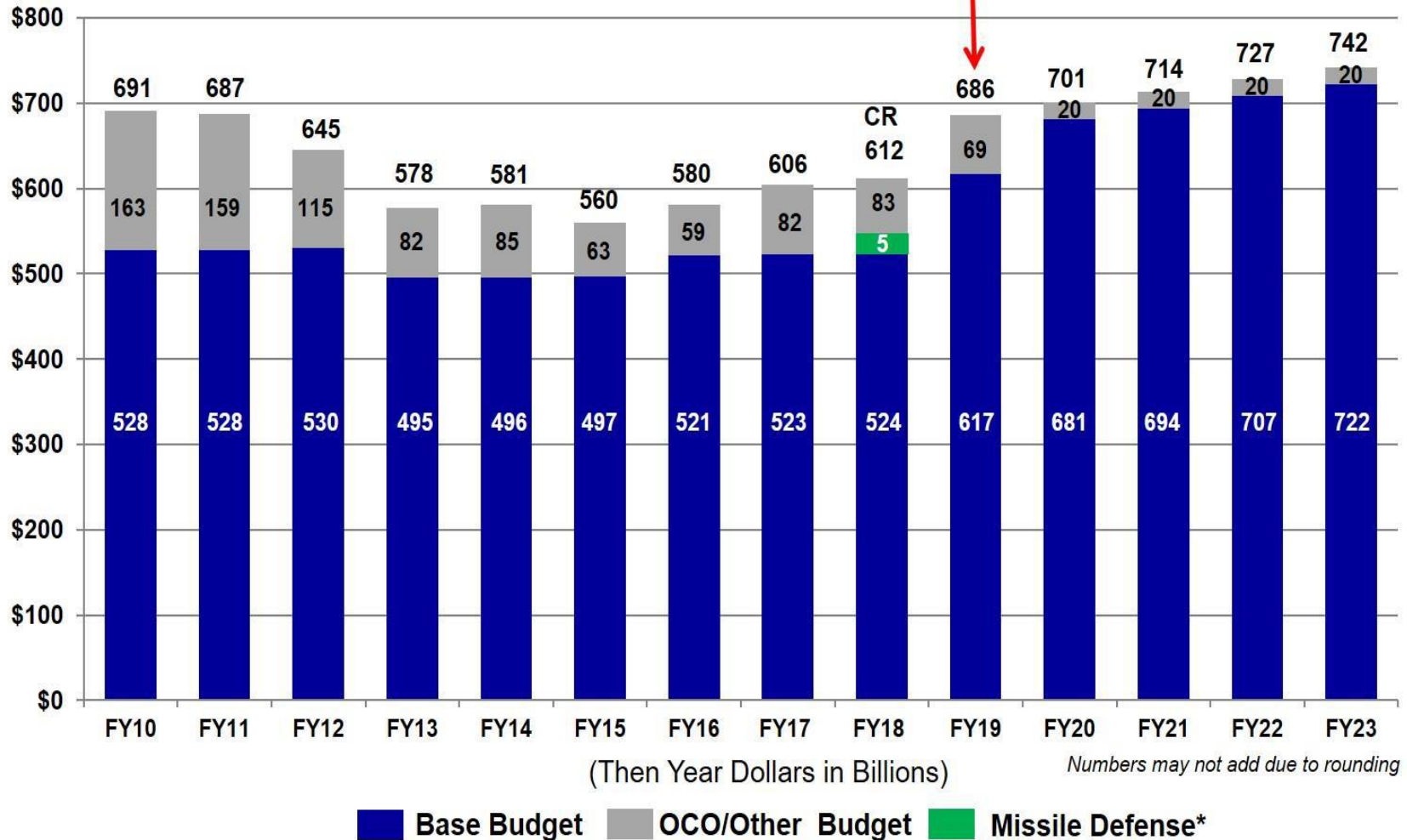
**U.S. \$74 billion increase in DoD FY2019 budget higher than NATO Estimate of any Total European 2017 Defense Budget: UK = \$55.2 billion; France = \$45.9 billion, Germany = \$45.5 billion, Italy = \$23.4 Billion**

# End of Budget Caps



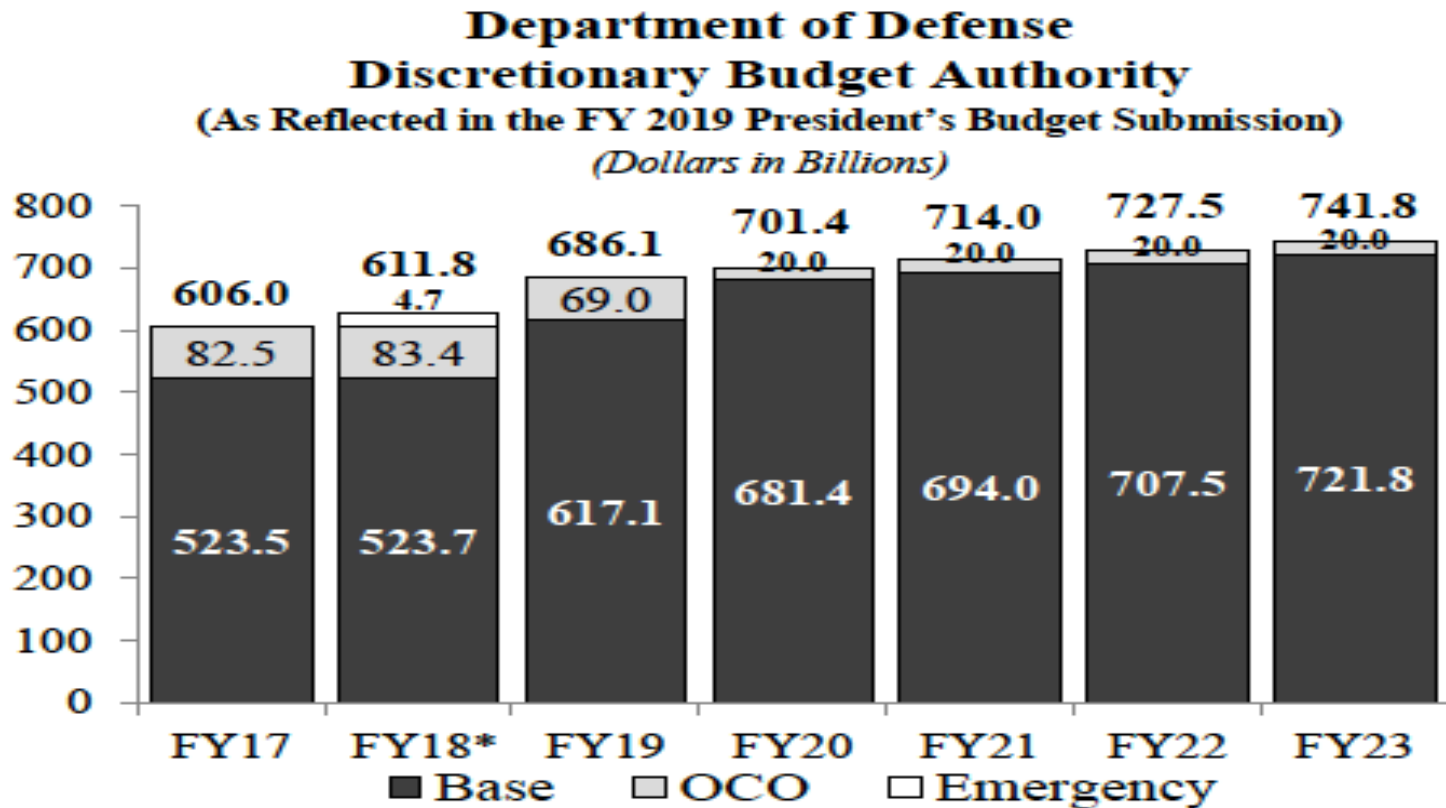
# Where Defense Has Been and Where It is Going

(Discretionary Budget Authority)



\*Division B, P.L. 115-96, DoD Missile Defeat and Defense Enhancements Appropriations Act, 2018

# DoD Future Year Defense Spending: FY2017-FY2023



\* Continuing resolution funding, as well as emergency funding per Division B of Public Law 115-96 (Missile Defeat and Defense Enhancements).

NOTE: DoD is showing funding levels reflected in OMB's detailed budget addendum dated February 12, 2018. OMB does not report OCO-to-base funding adjustments that DoD reports (\$20.0B in FY19, \$53.0B in FY20, \$45.8B in FY21, \$45.8B in FY22, and \$45.8B in FY23).

# National Defense Spending (DoD & DoE): FY2017-FY2019

Budget Authority

CURRENT DOLLARS

(Dollars in Millions)

Function and Subfunction	FY 2017 <sup>1</sup>	FY 2018				FY 2019		
	Total	Base <sup>2</sup>	OCO <sup>2</sup>	Emerg. <sup>3</sup>	Total	Base	OCO	Total
<b>051 - Department of Defense</b>								
Military Personnel (No MERHFC) .....	139,187	134,655	3,839		138,494	149,333	4,661	153,994
Operation and Maintenance .....	258,707	200,451	61,258	716	262,425	235,240	49,313	284,553
Procurement .....	124,337	107,188	15,998	2,423	125,609	131,763	12,782	144,545
RDT&E .....	74,129	72,027	1,479	1,347	74,853	91,326	1,308	92,634
Revolving and Management Funds .....	15,134	1,502	426		1,928	1,542	15	1,557
Department of Defense (No MERHFC) .....	611,494	515,823	83,000	4,486	603,309	609,204	68,079	677,283
Medicare-Eligible Retiree Health Fund Contribution .....	6,960	8,147			8,147	7,533		7,533
Department of Defense Plus MERHFC .....	618,454	523,970	83,000	4,486	611,456	616,737	68,079	684,816
Military Construction .....	6,894	6,448	432	200	7,080	8,880	921	9,801
Family Housing .....	1,335	1,276			1,276	1,583		1,583
Military Construction .....	8,229	7,724	432	200	8,356	10,463	921	11,384
Offsetting Receipts (Net) and Other .....	-445	-1,168			-1,168	-1,133		-1,133
<b>051 - Total Department of Defense (DoD Record) .....</b>	<b>626,239</b>	<b>530,526</b>	<b>83,431</b>	<b>4,686</b>	<b>618,643</b>	<b>626,066</b>	<b>69,000</b>	<b>695,066</b>
Scoring and Rounding <sup>4</sup> .....	-9				34,301			25
<b>051 - Total Department of Defense (OMB Record)<sup>5</sup> .....</b>	<b>626,230</b>				<b>652,944</b>			<b>695,091</b>
<b>053 / 054 - Energy and Defense-Related Activities<sup>5</sup></b>								
Department of Energy .....	19,807				19,765			21,741
Formerly Utilized Sites Remedial Action .....	112				111			120
Defense Nuclear Facilities Safety Board .....	31				31			31
Energy Employees Occupational Illness Comp .....	1,367				1,216			1,227
Other .....	50				739			-13
<b>053 - Total Atomic Energy Defense Activities .....</b>	<b>21,367</b>				<b>21,862</b>			<b>23,106</b>
Federal Bureau of Investigation .....	5,097				5,061			5,185
Other Discretionary Programs .....	3,066				3,016			2,839
Radiation Exposure Compensation Trust Fund .....	65				50			45
Payment to CIA Retirement Fund and Other .....	514				514			514
Other .....					-211			10
<b>054 - Total Defense-Related Activities .....</b>	<b>8,742</b>				<b>8,430</b>			<b>8,593</b>
<b>053 / 054 - Total Energy and Defense-Related Activities .....</b>	<b>30,109</b>				<b>30,292</b>			<b>31,699</b>
<b>050 - Total National Defense<sup>5</sup> .....</b>	<b>656,339</b>				<b>683,236</b>			<b>726,790</b>

1. Consists of base plus war and supplemental funding.

2. Continuing resolution funding.

3. Emergency funding per Division B of Public Law 115-96 (Missile Defeat and Defense Enhancements).

4. For budget authority, OMB is reporting -\$9M in FY17 net spending authority that DoD is not. In FY18, OMB reports \$34,301M in Continuing Resolution adjustments that DoD does not. In FY19, DoD is reporting a \$20 billion OCO-to-base funding transfer, while OMB is not. Finally, OMB is reporting \$25M in FY19 Spectrum Relocation Allowance funding that DoD is not.

5. From OMB Analytical Perspectives Table 26-1 (Net Budget Authority and Outlays By Function, Category, and Program) and OMB Historical Table 5-1 (Budget Authority by Function and Subfunction).



# National Defense Spending (DoD & DoE): FY2017-FY2019

## Budget Outlays CURRENT DOLLARS

(Dollars in Millions)

Function and Subfunction	FY 2017 <sup>1</sup>	FY 2018 <sup>2</sup>				FY 2019		
	Total	Base <sup>3</sup>	OCO <sup>4</sup>	Emerg. <sup>4</sup>	Total	Base <sup>3</sup>	OCO <sup>4</sup>	Total
<b>051 - Department of Defense</b>								
Military Personnel (No MERHFC) .....	137,745	135,083	1,977		137,060	147,916	4,384	152,300
Operation and Maintenance .....	245,186	223,944	31,548	369	255,861	246,109	29,118	275,227
Procurement .....	104,119	97,935	8,239	1,248	107,422	115,461	3,182	118,643
RDT&E .....	68,126	71,332	762	694	72,788	85,508	608	86,116
Revolving and Management Funds .....	-383	1,164	219		1,383	-23	13	-10
Department of Defense (No MERHFC) .....	554,793	529,458	42,745	2,311	574,514	594,971	37,305	632,276
Medicare-Eligible Retiree Health Fund Contribution .....	6,961	8,146			8,146	7,533		7,533
Department of Defense Plus MERHFC .....	561,754	537,604	42,745	2,311	582,660	602,504	37,305	639,809
Military Construction .....	6,673	7,989	222	103	8,314	9,928	21	9,949
Family Housing .....	1,208	1,128			1,128	1,382		1,382
Military Construction .....	7,881	9,117	222	103	9,442	11,310	21	11,331
Offsetting Receipts (Net) and Other .....	-741	-1,027			-1,027	-1,092		-1,092
<b>051 - Total Department of Defense (DoD Record) .....</b>	<b>568,894</b>	<b>545,695</b>	<b>42,967</b>	<b>2,414</b>	<b>591,076</b>	<b>612,721</b>	<b>37,327</b>	<b>650,048</b>
Scoring and Rounding <sup>5</sup> .....	2				21,466			6,879
<b>051 - Total Department of Defense (OMB Record)<sup>6</sup> .....</b>	<b>568,896</b>				<b>612,542</b>			<b>656,927</b>
<b>053 / 054 - Energy and Defense-Related Activities<sup>6</sup></b>								
Department of Energy .....	18,935				19,904			21,632
Formerly Utilized Sites Remedial Action .....	94				113			117
Defense Nuclear Facilities Safety Board .....	30				31			31
Energy Employees Occupational Illness Comp .....	1,369				1,216			1,227
Other .....	54				468			157
<b>053 - Total Atomic Energy Defense Activities .....</b>	<b>20,482</b>				<b>21,732</b>			<b>23,164</b>
Federal Bureau of Investigation .....	5,770				5,069			5,168
Other Discretionary Programs .....	3,000				3,480			2,881
Radiation Exposure Compensation Trust Fund .....	60				56			47
Payment to CIA Retirement Fund and Other .....	514				514			514
Other .....					-127			-65
<b>054 - Total Defense-Related Activities .....</b>	<b>9,344</b>				<b>8,992</b>			<b>8,545</b>
<b>053 / 054 - Total Energy and Defense-Related Activities .....</b>	<b>29,826</b>				<b>30,724</b>			<b>31,709</b>
<b>050 - Total National Defense<sup>6</sup> .....</b>	<b>598,722</b>				<b>643,266</b>			<b>688,636</b>

1. Consists of base plus war and supplemental funding.

2. Continuing resolution funding, as well as emergency funding per Division B of Public Law 115-98 (Missile Defeat and Defense Enhancements).

3. Base outlays for FY 2018 and FY 2019 include outlays from previous years' base, war, and supplemental funding.

4. Emergency and OCO outlay data reflect estimated outlays for that year's funding only.

5. For budget authority, OMB is reporting -\$9M in FY17 net spending authority that DoD is not. In FY18, OMB reports \$34,301M in Continuing Resolution adjustments that DoD does not. Finally, OMB is reporting \$25M in FY19 Spectrum Relocation Allowance funding that DoD is not. These differences will impact outlay reporting as well.

6. From OMB Analytical Perspectives Table 26-1 (Net Budget Authority and Outlays By Function, Category, and Program) and OMB Historical Table 3-2 (Outlays by Function and Subfunction).

# National Defense Spending (DoD & DoE): FY2017-FY2023

Budget Authority in Billions

Function and Subfunction	FY 2017 <sup>1</sup>	FY 2018				FY 2019			FY 2020	FY 2021	FY 2022	FY 2023
	Total	Base <sup>2</sup>	OCO <sup>2</sup>	Emerg. <sup>3</sup>	Total	Base	OCO	Total	Total	Total	Total	Total
<b>051 - Dept of Defense Combined</b>												
Military Personnel (No MERHFC) .....	139,187	134,655	3,839		138,494	149,333	4,661	153,994	154,601	159,842	164,311	168,202
Operation and Maintenance .....	258,707	200,451	61,258	716	262,425	235,240	49,313	284,553	241,938	250,044	257,481	261,132
Procurement .....	124,337	107,188	15,998	2,423	125,609	131,763	12,782	144,545	132,139	137,596	141,495	150,121
RDT&E .....	74,129	72,027	1,479	1,347	74,853	91,326	1,308	92,634	89,926	90,722	87,426	85,640
Revolving and Management Funds .....	15,134	1,502	426		1,928	1,542	15	1,557	242	273	239	235
Department of Defense (No MERHFC) .....	611,494	515,823	83,000	4,486	603,309	609,204	68,079	677,283	618,846	638,477	650,952	665,330
Medicare-Eligible Ret Health Fund Contr .....	6,960	8,147			8,147	7,533		7,533	8,003	8,480	8,973	9,461
Department of Defense Plus MERHFC .....	618,454	523,970	83,000	4,486	611,456	616,737	68,079	684,816	626,849	646,957	659,925	674,791
Military Construction .....	6,894	6,448	432	200	7,080	8,880	921	9,801	9,850	9,853	10,485	10,202
Family Housing .....	1,335	1,276			1,276	1,583		1,583	1,379	1,381	1,471	1,415
Military Construction .....	8,229	7,724	432	200	8,356	10,463	921	11,384	11,229	11,234	11,956	11,617
Trust Funds .....	514	488			488	652		652	808	591	633	324
Offsetting Receipts .....	-899	-1,555			-1,555	-1,690		-1,690	-1,645	-1,682	-1,696	-1,672
Interfund Transactions .....	-60	-101			-101	-95		-95	-91	-86	-83	-79
OCO to Base .....									53,000	45,800	45,800	45,800
Outyears Placeholder for OCO .....									20,000	20,000	20,000	20,000
<b>051 - Total Dept of Defense (DoD Record) .....</b>	<b>626,239</b>	<b>530,526</b>	<b>83,431</b>	<b>4,686</b>	<b>618,643</b>	<b>626,066</b>	<b>69,000</b>	<b>695,066</b>	<b>710,149</b>	<b>722,813</b>	<b>736,536</b>	<b>750,780</b>
Scoring and Rounding <sup>4</sup> .....	-9				34,301			25	616	493	316	214
<b>051 - Total Dept of Defense (OMB Record)<sup>5</sup> .....</b>	<b>626,230</b>				<b>652,944</b>			<b>695,091</b>	<b>710,765</b>	<b>723,306</b>	<b>736,852</b>	<b>750,994</b>
<b>053 - Atomic Energy Defense Activities<sup>5</sup></b>												
053 - Atomic Energy Discretionary .....	19,950				20,596			21,892	22,983	23,485	24,040	24,543
053 - Atomic Energy Mandatory .....	1,417				1,266			1,214	1,228	1,238	1,248	1,261
<b>053 - Total Atomic Energy Defense Activities .....</b>	<b>21,367</b>				<b>21,862</b>			<b>23,106</b>	<b>24,211</b>	<b>24,723</b>	<b>25,288</b>	<b>25,804</b>
<b>054 - Defense-Related Activities<sup>5</sup></b>												
054 - Defense-Related Discretionary .....	8,163				7,866			8,034	8,649	5,288	8,308	11,409
054 - Defense-Related Mandatory .....	579				564			559	564	571	561	524
<b>054 - Total Defense-Related Activities .....</b>	<b>8,742</b>				<b>8,430</b>			<b>8,593</b>	<b>9,213</b>	<b>5,859</b>	<b>8,869</b>	<b>11,933</b>
<b>050 - National Defense<sup>5</sup></b>												
050 - National Defense Discretionary .....	634,054				674,609			716,000	733,000	742,800	759,800	777,800
050 - National Defense Mandatory .....	22,285				8,627			10,790	11,189	11,088	11,209	10,931
<b>050 - Total National Defense .....</b>	<b>656,339</b>				<b>683,236</b>			<b>726,790</b>	<b>744,189</b>	<b>753,888</b>	<b>771,009</b>	<b>788,731</b>

1. Consists of base plus war and supplemental funding.

2. Continuing resolution funding.

3. Emergency funding per Division B of Public Law 115-96 (Missile Defeat and Defense Enhancements).

4. For budget authority, OMB is reporting -\$9M in FY17 net spending authority that DoD is not. In FY18, OMB reports \$34,301M in Continuing Resolution adjustments that DoD does not. In FY19, DoD is reporting a \$20 billion OCO-to-base funding transfer, while OMB is not. Finally, OMB is reporting Spectrum Relocation Allowance funding that DoD is not (\$25M in FY19, \$816M in FY20, \$493M in FY21, \$316M in FY22, and \$214M in FY23).

5. From OMB Analytical Perspectives Table 28-1 (Net Budget Authority and Outlays By Function, Category, and Program) and OMB Historical Table 5-1 (Budget Authority by Function and Subfunction).

# Impact of National Defense Spending: FY2009-FY2019

(Percentages of Indicated Totals)

Fiscal Year	% of Federal Spending		% of Net Public Spending (Federal, State & Local)		DoD as % of Public Employment				DoD as % of Total Labor Force	% of Gross Domestic Product	
	DoD	National Defense	DoD	National Defense	Military & Civilian		Civilian Only				
					Federal	Federal, State & Local	Federal	Federal, State & Local		DoD	National Defense
2009 Base ....	14.0		9.0							3.4	
2009 Total .....	18.1	18.8	11.6	12.1	51.3	9.1	25.4	3.1	1.4	4.4	4.6
2010 Base ....	14.6		9.4							3.4	
2010 Total .....	19.3	20.1	12.4	12.9	51.4	9.4	26.3	3.3	1.4	4.5	4.7
2011 Base ....	14.6		9.4							3.4	
2011 Total .....	18.8	19.6	12.1	12.6	52.6	9.6	27.7	3.5	1.5	4.4	4.6
2012 Base ....	14.9		9.4							3.3	
2012 Total .....	18.4	19.2	11.7	12.1	52.6	9.6	27.9	3.5	1.4	4.1	4.2
2013 Base ....	14.7		9.2							3.1	
2013 Total .....	17.6	18.3	11.0	11.4	52.3	9.4	27.4	3.4	1.4	3.7	3.8
2014 Base ....	14.3		8.9							2.9	
2014 Total .....	16.5	17.2	10.2	10.7	51.9	9.2	27.2	3.3	1.4	3.4	3.5
2015 Base ....	13.2		8.3							2.7	
2015 Total .....	15.3	16.0	9.5	10.0	51.5	9.1	27.1	3.3	1.3	3.1	3.3
2016 Base ....	13.3		8.3							2.8	
2016 Total .....	14.7	15.4	9.2	9.6	50.4	8.9	26.3	3.3	1.3	3.1	3.2
2017 Base ....	12.8		7.9							2.7	
2017 Total .....	14.3	15.0	8.9	9.3	50.9	8.9	26.7	3.3	1.3	3.0	3.1
2018 Base ....	13.2		8.2							2.7	
2018 Total* ...	14.2	15.4	8.8	9.6	51.2		27.1			3.1	3.2
2019 Base ....	13.5		8.6							2.8	
2019 Total .....	14.8	15.6	9.2	9.7	51.5		27.1			3.1	3.3

\* Department of Defense figures for FY 2018 consist of continuing resolution funding, as well as emergency funding per Division B of Public Law 115-96 (Missile Defeat and Defense Enhancements).

## NOTES:

Beginning in FY 2001, some labor force data are not strictly compatible with earlier data, due to population adjustments and other changes.

These figures are calculated from data in the OMB Historical Tables, past Economic Reports of the President, U.S. Census Bureau data, and data from the Bureau of Labor Statistics. Certain non-Defense data were not available past 2017.

All fiscal years 2007 and prior include any enacted war or supplemental funding.

# Key DoD Top Line Outlays in FY2017- FY2019 with Adjusted Budget Cap

	FY 2017	FY 2018	FY 2019
<b>BCA Budget Cap for National Defense Base (050)</b>	\$551B*	\$549B	\$562B
<b>Budget Cap Increase in BBA 2018</b>	-	+\$80B	+\$85B
<b>Adjusted Budget Caps for National Defense Base (050)</b>	\$551B	\$629B	\$647B
<b>Overseas Contingency Operations (OCO) / Emergency Funding</b>	\$83B	\$71B**	\$69B***
<b>TOTAL National Defense (050)</b>	<b>\$634B</b>	<b>\$700B</b>	<b>\$716B</b>

*\* The budget cap for FY 2017 was raised from the original cap of \$536.1 billion to \$551.1 billion by the Bipartisan Budget Act of 2015.*

*\*\*The \$71 billion in OCO/emergency funding for FY 2018 includes the \$64.6 billion originally requested by the president for FY 2018 plus \$4.7 billion in emergency supplemental funding passed in the CR in late December and \$1.2 billion passed in the CR accompanying BBA 2018.*

*\*\*\*\$69 billion is the OCO funding level requested by the president for FY 2019.*

# DoD Top Line Budget Authority in FY2017- FY2019

<i>\$ in billions</i>	<b>FY 2017 Enacted</b>	<b>FY 2018 CR*</b>	<b>FY 2019 Request</b>	<b>FY18 – FY19 Change</b>
Base	523.5	523.7	617.1	+93.4
OCO	82.5	83.4	69.0	-14.4
Emergency Supplemental	--	4.7	--	-4.7
<b>Total</b>	<b>606.0</b>	<b>611.8</b>	<b>686.1</b>	<b>+74.3</b>

*Discretionary budget authority.*

*Numbers may not add due to rounding.*

\*Reflects Continuing Resolution (CR) and Division B of Public Law 115-96 (DoD Missile Defeat and Defense Enhancements Appropriations Act, 2018).



# FY2019 “Business” Reforms

- Deputy Secretary Shanahan is leading effort to reform DoD’s business operations and reapply those savings to improve readiness and to increase the lethality and capacity of the military
- Focus is on using shared, centralized services throughout DoD with the goal of using best practices to maximize effectiveness; this is a multiyear effort focused on:
  - Information Technology (IT)
  - Real Property
  - Financial Management
  - Logistics and Supply Chain
  - Testing and Evaluation
  - Healthcare
  - Human Resources
  - Contracted Goods & Services
  - Community Services
- The FY 2019 Budget reflects continued savings from ongoing reforms initiatives such as defense travel modernization and the management headquarters 25% reduction
- DoD has Implemented the FY 2017 NDAA Reforms:
  - Reorganizing the Under Secretary of Defense for Acquisition, Technology and Logistics into two new Under Secretaries of Defense
  - Appointing a Chief Management Officer to manage the business operations of DoD
  - Elevating Cyber Command

**“Business reform is the foundation of our competitive edge”  
– Secretary Mattis**



# **Administration Estimate of Impact of Spending Levels on U.S. Fiscal Posture, Debt, and Deficit**

**(As Presented in OMB Long Term Budget Estimate in  
February 2018 Budget Request)**

# Comparison of Publically Held Debt

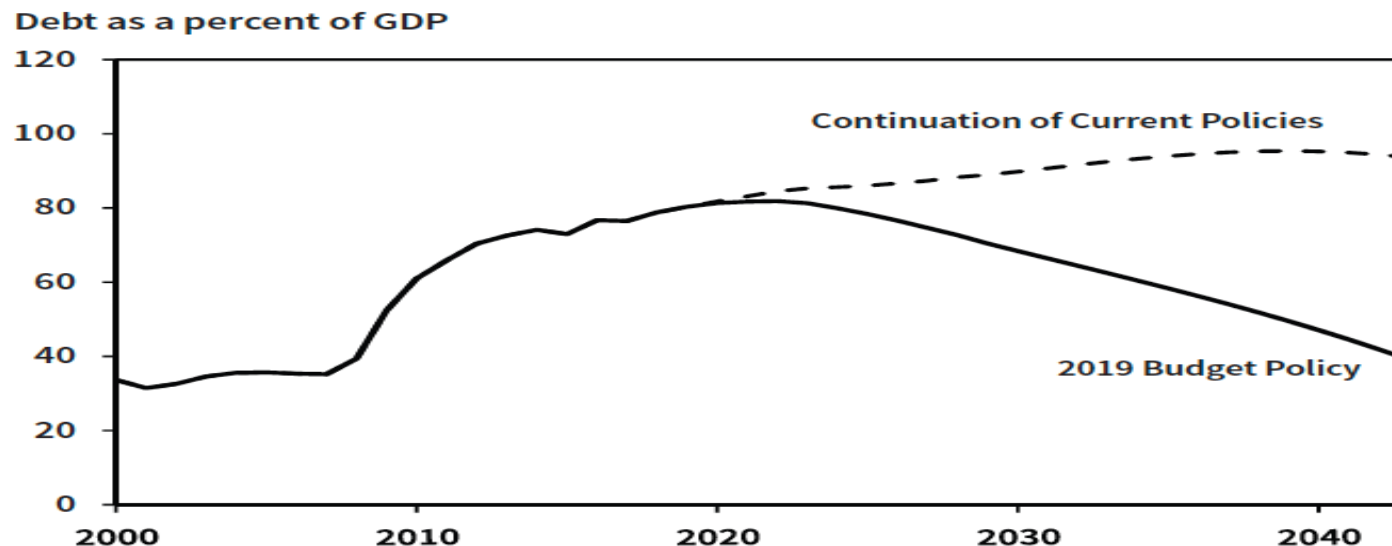
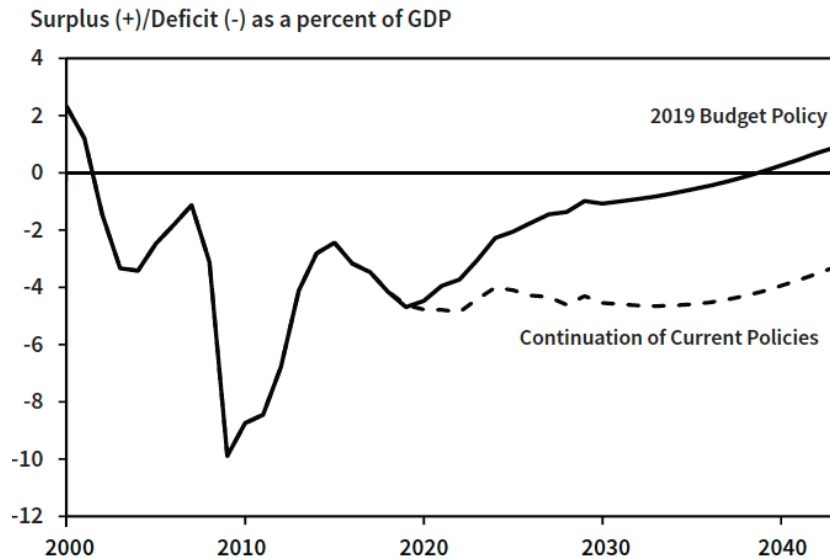


Chart shows the path of debt as a percent of GDP under continuation of current policy, *without* the proposed changes in the President’s Budget, as well as the debt trajectory under the President’s policies. Under current policy, the ratio of debt to GDP will rise from 78.8 percent in 2018 to 88.3 percent in 2028, an increase of about 9.5 percentage points over that period. In contrast, the debt ratio is projected to be 72.6 percent in 2028 under the proposed policy changes. By the end of the 25-year horizon, the difference in the debt burden—93.7 percent of GDP under current policy compared to 39.2 percent of GDP under Budget policy—is even starker. The savings proposed by the Administration from 2019-2028 are a significant down payment towards reducing debt and reaching a balanced budget by 2039.

# Comparison of Annual Surplus/Deficit



2019 Budget Policy .....	39.2
Health:	
Excess cost growth averages 1.5% .....	51.3
Zero excess cost growth .....	32.1
Discretionary Outlays:	
Grow with inflation .....	37.1
Grow with GDP .....	45.6
Revenues:	
Revenues rise as as a share of GDP, with bracket creep .....	32.7
Productivity and Interest: <sup>1</sup>	
Productivity grows by 0.25 percentage point per year faster than the base case .....	24.2
Productivity grows by 0.25 percentage point per year slower than the base case .....	56.1

<sup>1</sup> Interest rates adjust commensurately with increases or decreases in productivity.

Budget policies reduce the deficit to 1.4 percent of GDP by 2028 and ultimately lead to a balanced budget by 2039. Over the decade and a half after 2028, the debt-to-GDP ratio continues to decline. At the end of the 25-year horizon, the debt ratio would be the lowest since before 2008, representing significant progress in reducing the Federal debt burden. The President's Budget policies are projected to decrease the debt ratio within the 10-year window and reduce it by nearly 40 percentage points by 2043, more than satisfying the definition of fiscal sustainability.

The Budget achieves these fiscal goals through prioritizing expenditures that promote economic growth and security while improving the efficiency of the Federal government. For example, the President's Budget includes a \$200 billion initiative to improve the Nation's crumbling infrastructure and an increase of \$65 billion to defense spending for 2019 above the current discretionary caps. Continuing reductions of regulatory burden will promote job creation, and extending tax reform will allow families to keep more of their earnings. In addition, the Budget proposes streamlining Medicare to make it a better deal for seniors and the Government. Eliminating fraud, waste, and abuse from Medicare contributes to a lower debt and deficit in the long run.

# **CBO Estimate of Impact of Spending Levels on U.S. Fiscal Posture, Debt, and Deficit**

**(Scoring in June 2018)**

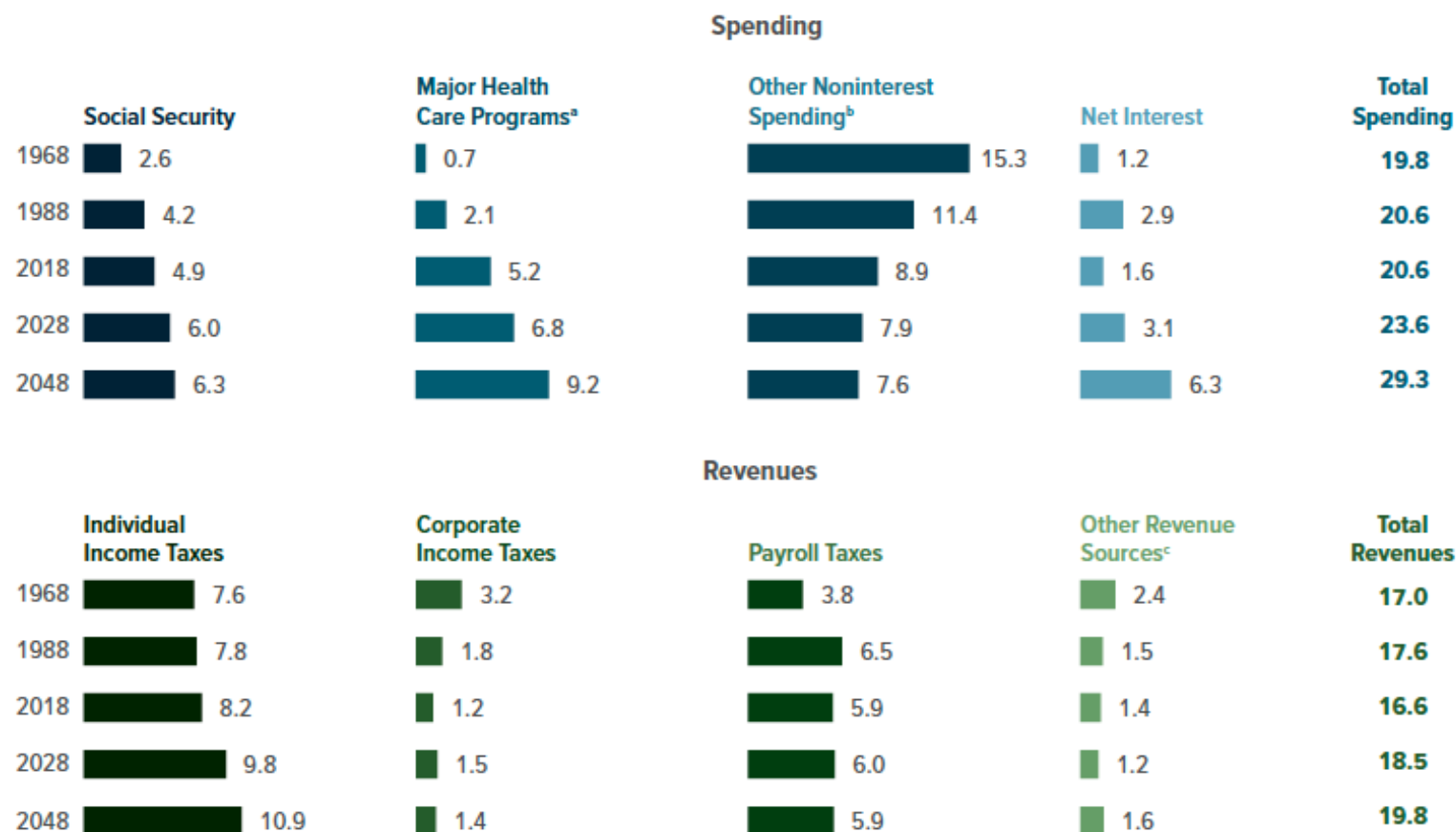
# **DoD May Face Continuing Budget Pressure in the Future**

- **The U.S. fiscal picture gets steadily worse over the next decade and even worse after that**
- **The end of the Budget Control Act may not reduce pressure on defense spending**
- **Internal pressures on DoD's budget from rising O&M and military personnel costs will:**
  - **Reduce the buying power of defense dollars by a few percentage points every year (after removing the effects of inflation)**
  - **Reduce the amount of procurement and R&D that can be done**

# Entitlement Programs Drive the Rise in the Deficit and Debt Even Though the Tax Burden Rises

## Spending and Revenues in the Past and in CBO's Extended Baseline

Percentage of Gross Domestic Product

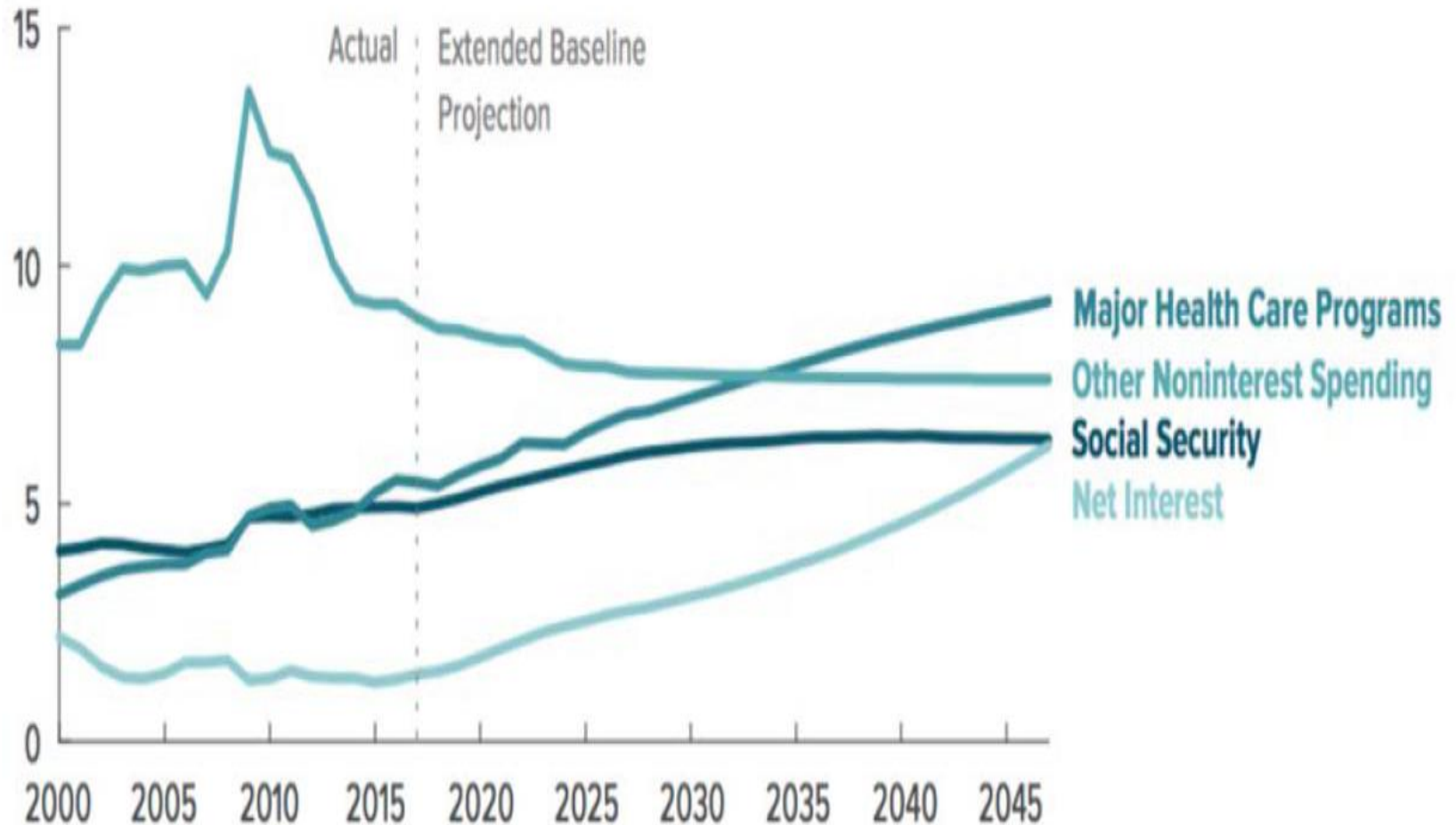


Source: Congressional Budget Office.



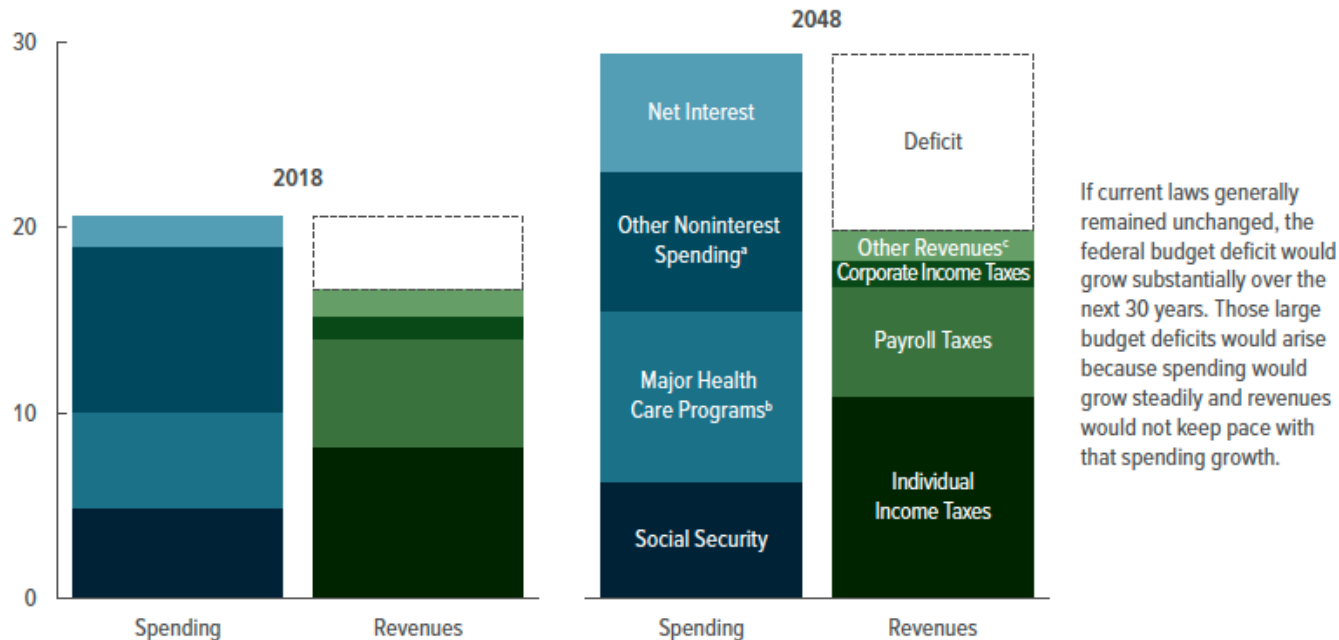
# Entitlements, Not Defense, Drive the Debt and Deficit

Percentage of Gross Domestic Product



# Federal Spending as % of GDP in 2018 versus 2048

Percentage of Gross Domestic Product



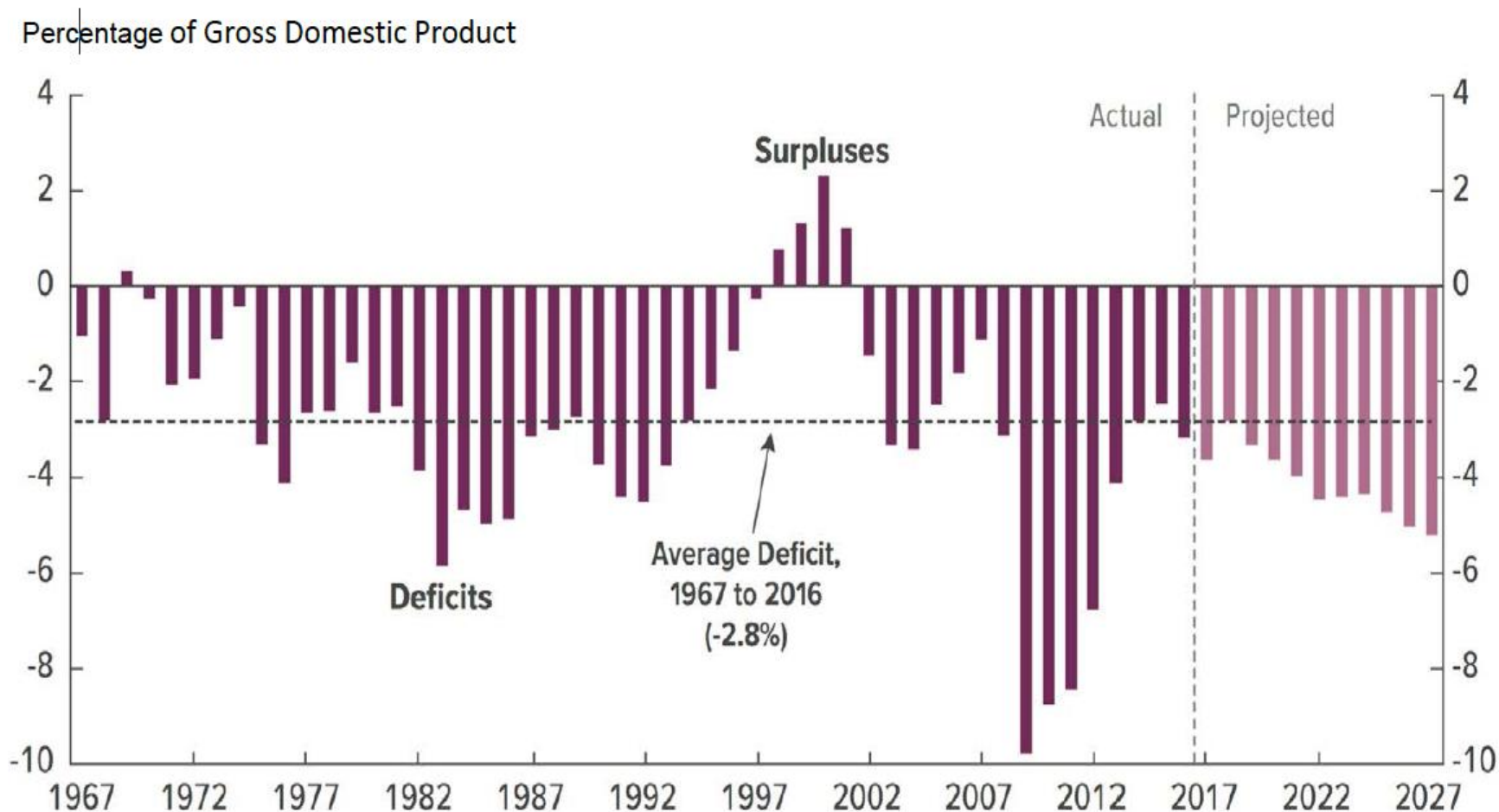
Source: Congressional Budget Office.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2028 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

- a. Consists of all federal spending other than that for Social Security, the major health care programs, and net interest.
- b. Consists of spending for Medicare (net of premiums and other offsetting receipts), Medicaid, and the Children's Health Insurance Program, as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.
- c. Consists of excise taxes, remittances to the Treasury from the Federal Reserve System, customs duties, estate and gift taxes, and miscellaneous fees and fines.

# Deficits Grow Steadily Over the Next 10 Years

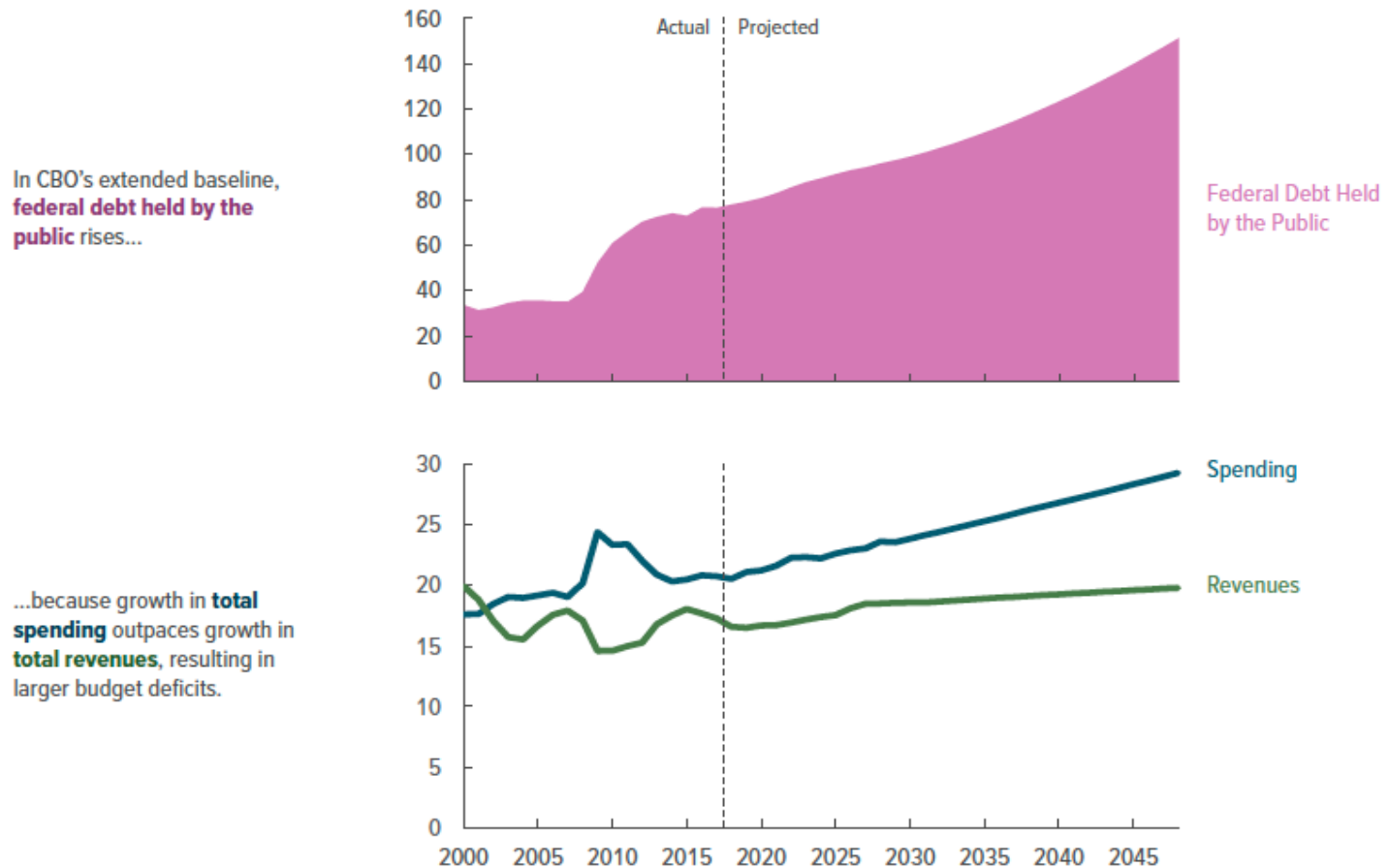
## Deficits or Surpluses Under CBO's Baseline for Fiscal Year 2017 (As of June 2017)



Source: Congressional Budget Office, *Analysis of the Long-Term Costs of the Administration's Goals for the Military* (December 2017), [www.cbo.gov/publication/53350](http://www.cbo.gov/publication/53350).

# Deficit Grows and Debt Rises to 150 Percent of GDP by 2048

Percentage of Gross Domestic Product

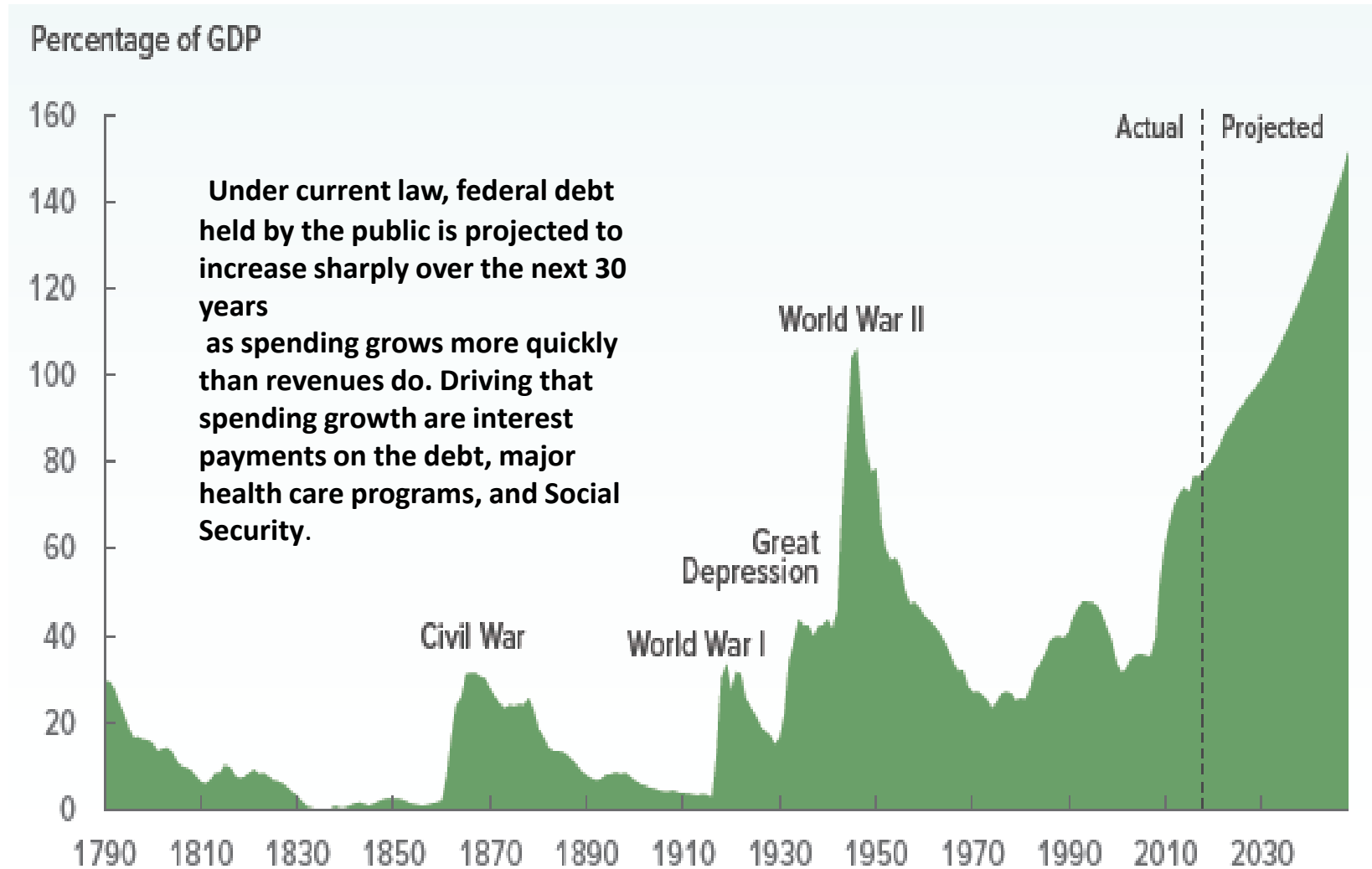


Source: Congressional Budget Office.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2028 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

GDP = gross domestic product.

# Federal Debt as % of GDP : 1790-2048



# **CBO Estimate of Impact of Defense on Federal Budget and GNP Trends (May 2018)**

**Note: A full estimate or scoring of the impact of defense spending is only made after Congressional action on the Budget and the President's signature – usually late in 2018 or early 2019**



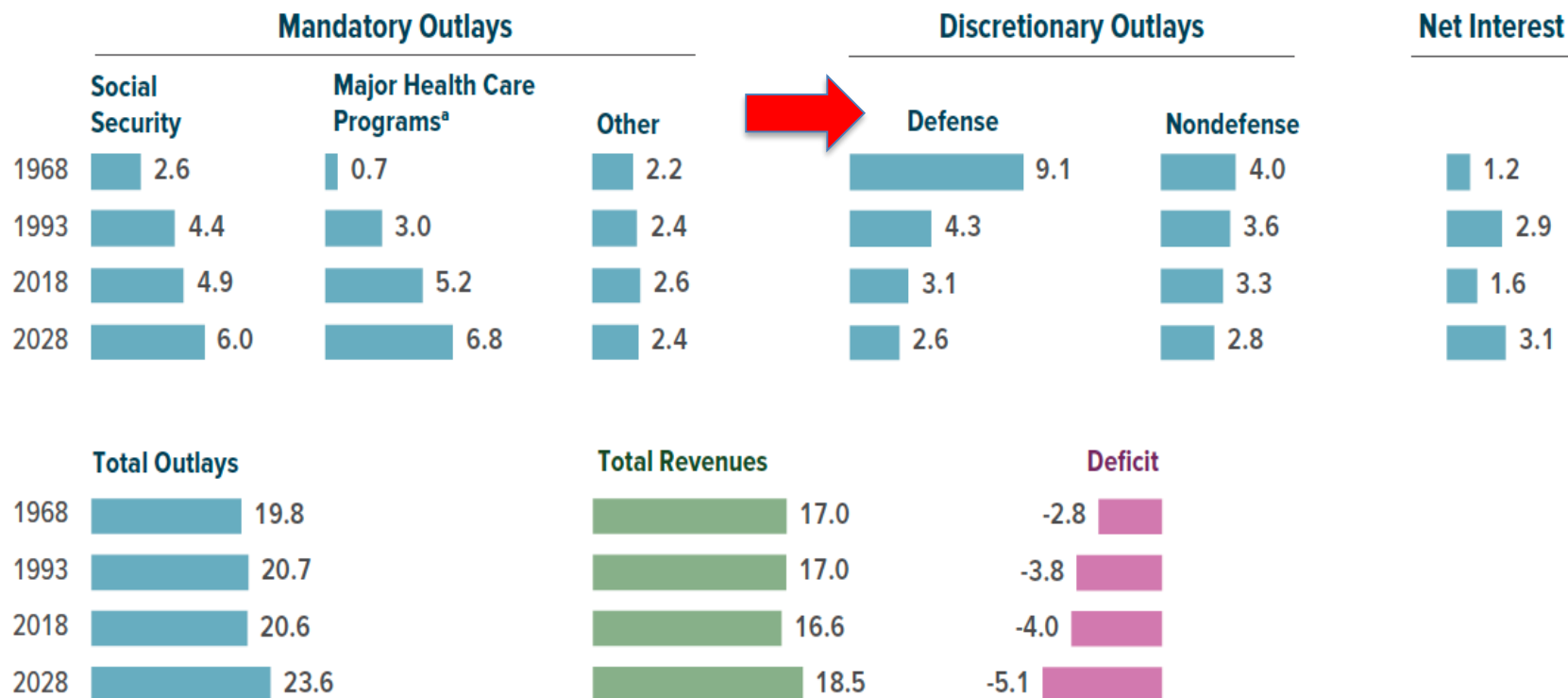
# CBO Estimate of Tax Reform Impact

- **The deficit that CBO now estimates for 2018 is \$242 billion larger** than the one that it projected for that year in June 2017. Accounting for most of that difference is a \$194 billion reduction in projected revenues, mainly because the 2017 tax act is expected to reduce collections of individual and corporate income taxes.
- **For the 2018–2027 period, CBO now projects a cumulative deficit that is \$1.6 trillion larger than the \$10.1 trillion that the agency anticipated in June. Projected revenues are lower by \$1.0 trillion, and projected outlays are higher by \$0.5 trillion.**
- Laws enacted since June 2017—above all, the three mentioned above—are estimated to make deficits \$2.7 trillion larger than previously projected between 2018 and 2027, an effect that results from reducing revenues by \$1.7 trillion (or 4 percent) and increasing outlays by \$1.0 trillion (or 2 percent).
- The reduction in projected revenues stems primarily from the lower individual income tax rates that the tax act has put in place for much of the period. Projected outlays are higher mostly because the other two pieces of legislation will increase discretionary spending. Those revenue reductions and spending increases would result in larger deficits and thus in higher interest costs than CBO previously projected.
- In contrast, revisions to CBO’s economic projections caused the agency to reduce its estimate of the cumulative deficit by \$1.0 trillion. Expectations of faster growth in the economy and in wages and corporate profits led to an increase of \$1.1 trillion in projected tax receipts from all sources. Other changes had relatively small net effects on the projections.

# CBO Estimate of Declining Defense Share of Budget : 5/2017

## Outlays and Revenues Projected in CBO's Baseline, Compared With Actual Values 25 and 50 Years Ago

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

a. Consists of spending on Medicare (net of premiums and other offsetting receipts), Medicaid, and the Children's Health Insurance Program as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.

# CBO Estimate of Trump Policy Budget Trends: 5/2017

													Total	
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029–	2019–	2019–
												2023	2028	
Deficit in CBO's Adjusted April 2018 Baseline <sup>a</sup>	-793	-973	-1,003	-1,118	-1,275	-1,273	-1,245	-1,352	-1,321	-1,314	-1,527	-5,642	-12,401	
Effects of the President's Proposals														
Outlays														
Mandatory														
Reduce federal spending for health care	0	-2	-85	-68	-94	-119	-135	-155	-174	-196	-223	-368	-1,251	
Provide mandatory funding for infrastructure	0	40	7	5	7	9	11	11	13	14	14	68	131	
Reduce subsidies for student loans	0	-2	-4	-6	-8	-9	-11	-13	-15	-17	-18	-30	-103	
Reduce spending for income security	0	-5	-10	-14	-15	-15	-16	-12	-20	6	4	-59	-97	
Other proposals	0	-10	-9	-21	1	6	12	15	16	22	-9	-33	23	
Subtotal, mandatory	0	22	-102	-104	-108	-129	-139	-154	-180	-171	-232	-421	-1,297	
Discretionary														
Reduce spending for overseas contingency operations	0	-5	-3	-8	-14	-16	-48	-66	-75	-81	-84	-46	-400	
Other defense	0	3	52	67	74	77	79	80	81	80	79	274	674	
Other nondefense	0	-33	-77	-117	-168	-206	-240	-272	-304	-335	-365	-601	-2,118	
Subtotal, discretionary	0	-34	-28	-58	-108	-145	-209	-259	-298	-335	-370	-373	-1,844	
Net interest	*	-2	-5	-11	-19	-29	-40	-53	-68	-81	-95	-65	-401	
<b>Total Effect on Outlays</b>	<b>*</b>	<b>-15</b>	<b>-134</b>	<b>-173</b>	<b>-235</b>	<b>-302</b>	<b>-388</b>	<b>-466</b>	<b>-546</b>	<b>-587</b>	<b>-696</b>	<b>-859</b>	<b>-3,542</b>	
Revenues														
Extend individual and estate and gift tax provisions of the 2017 tax act <sup>b</sup>	0	0	0	0	0	0	*	-6	-114	-233	-251	0	-604	
Modify certain provisions of the Affordable Care Act	0	0	-4	-9	-11	-15	-18	-20	-21	-22	-24	-38	-143	
Increase federal employees' retirement contributions	0	2	5	7	10	11	13	15	15	16	16	35	109	
Other proposals	*	1	2	3	1	3	2	3	2	2	3	10	22	
<b>Total Effect on Revenues</b>	<b>*</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>*</b>	<b>*</b>	<b>-2</b>	<b>-9</b>	<b>-117</b>	<b>-238</b>	<b>-256</b>	<b>7</b>	<b>-615</b>	
<b>Total Effect on the Deficit<sup>c</sup></b>	<b>*</b>	<b>17</b>	<b>137</b>	<b>174</b>	<b>235</b>	<b>302</b>	<b>386</b>	<b>458</b>	<b>429</b>	<b>349</b>	<b>440</b>	<b>866</b>	<b>2,927</b>	
Deficit Under the President's Budget as Estimated by CBO	-792	-955	-866	-945	-1,039	-971	-859	-895	-893	-965	-1,087	-4,776	-9,474	
Memorandum:														
Total Effect on Noninterest Outlays	0	-13	-130	-162	-216	-274	-348	-413	-478	-506	-601	-794	-3,141	

# CBO Estimate of Trump Budget Discretionary Spending Trends: 5/2017

Billions of Dollars

													Total	
	Actual, 2017 <sup>a</sup>	2018 <sup>a</sup>	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2019– 2023	2019– 2028
<b>Budget Authority</b>														
Defense	634	701	719	651	666	683	699	717	734	752	771	789	3,419	7,182
Nondefense	586	721	724	671	687	704	721	739	757	775	794	814	3,507	7,385
<b>Total</b>	<b>1,220</b>	<b>1,422</b>	<b>1,443</b>	<b>1,322</b>	<b>1,353</b>	<b>1,386</b>	<b>1,420</b>	<b>1,455</b>	<b>1,491</b>	<b>1,527</b>	<b>1,565</b>	<b>1,603</b>	<b>6,925</b>	<b>14,567</b>
<b>Outlays</b>														
Defense	590	622	669	651	655	671	679	688	710	727	745	769	3,325	6,964
Nondefense	610	658	693	689	693	708	727	748	771	794	817	839	3,511	7,480
<b>Total</b>	<b>1,200</b>	<b>1,280</b>	<b>1,362</b>	<b>1,340</b>	<b>1,348</b>	<b>1,380</b>	<b>1,406</b>	<b>1,436</b>	<b>1,481</b>	<b>1,522</b>	<b>1,562</b>	<b>1,608</b>	<b>6,836</b>	<b>14,445</b>
<b>Memorandum:</b>														
Caps in the Budget Control Act (As Amended), Including Automatic Reductions to the Caps														
Defense	551	629	647	576	590	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nondefense	519	579	597	542	555	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Total</b>	<b>1,070</b>	<b>1,208</b>	<b>1,244</b>	<b>1,118</b>	<b>1,145</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Adjustments to the Caps<sup>b</sup></b>														
Defense	83	72	73	75	76	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nondefense	51	125	127	129	132	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Total</b>	<b>134</b>	<b>197</b>	<b>200</b>	<b>204</b>	<b>209</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

**CBO Estimate of Impact of President's  
Military Force Goals on Defense  
Spending:  
FY2018-FY2019**

# CBO Estimated How the Administration's Goals Would Affect Budgets

- Plans are unclear, but we have some rough outlines
  - Larger Navy (355 ships, up from planned 308 and current 279)
  - Larger Army (540,000 active endstrength, up from 460,000)
  - Larger Air Force (5 more fighter squadrons)
  - Increase Marine Corps (13,000 endstrength, 4 battalions)
  - Increase in readiness and modernization (in 2018 and beyond)
- Those plans would increase budgets relative to 2018 request
  - Increase active-duty military by 237,000 in 10 years
  - Increase spending by \$342 billion over 10 years
  - Increase annual spending by \$50 billion by 2027
    - Add \$20 billion per year for Navy (costs would continue to grow)
    - Add \$22 billion per year for larger Army
    - Add \$8 billion per year for larger Air Force
- Cost \$683 billion more over the next 10 years than the Obama Administration's last plan



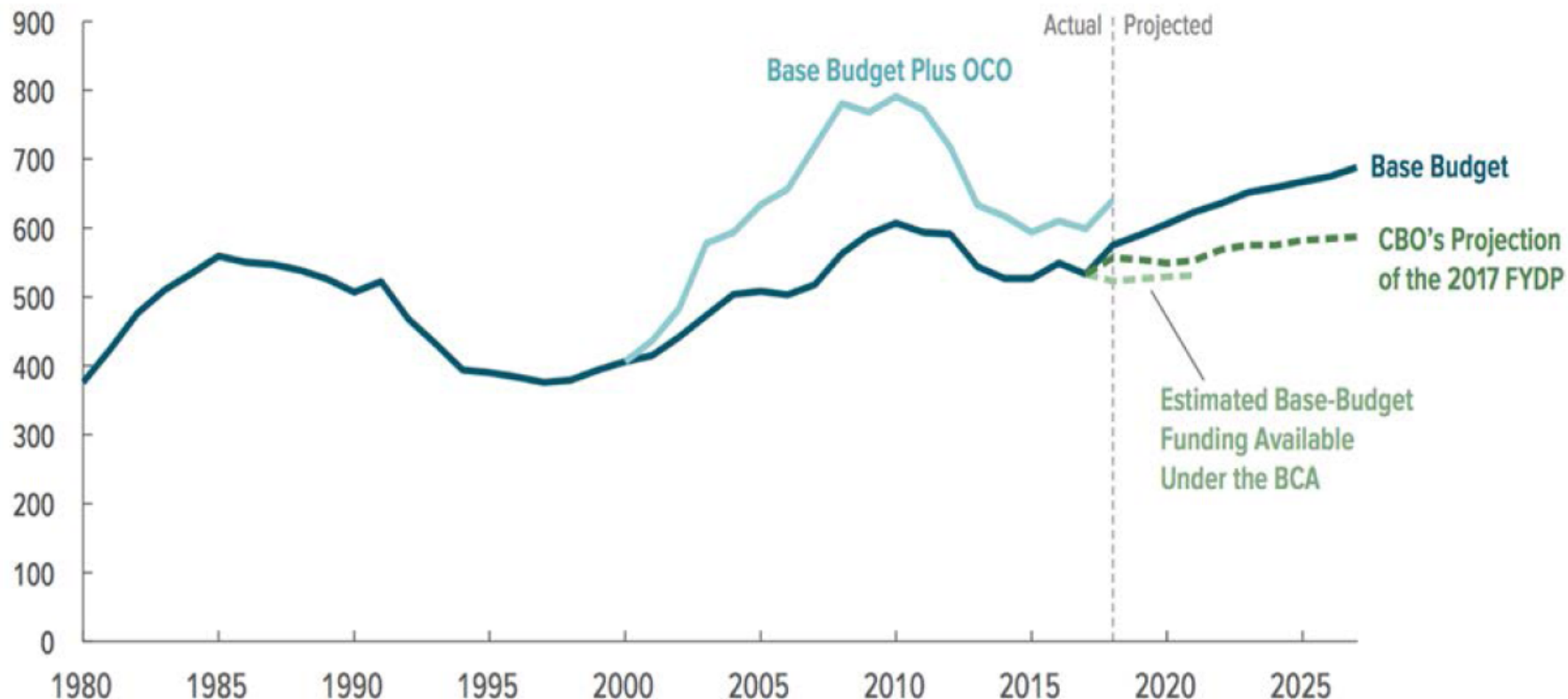
# Force Rises: FY2018-2019

Service	FY 2018*	FY 2019	Delta FY18- FY19
<b>Army Active</b>			
Brigade Combat Teams (BCT)	31	31	-
Combat Aviation Brigades (CAB)	11	11	-
<b>Army National Guard</b>			
BCT	26	27	+1
CAB/ECAB	8	8	-
<b>Army Reserve</b>			
ECAB	2	2	-
<b>Navy</b>			
Number of Ships	292	299	+7
Carrier Strike Groups	11	11	-
<b>Marine Corps Active</b>			
Marine Expeditionary Forces	3	3	-
Infantry Battalions	24	24	-
<b>Marine Corps Reserve</b>			
Marine Expeditionary Forces	-	-	-
Infantry Battalions	8	8	-
<b>Air Force Active</b>			
Combat Coded Squadrons	40	42	+2
Aircraft Inventory (TAI)	4,015	4,050	+35
<b>Air Force Reserve</b>			
Combat Coded Squadrons	3	3	-
Aircraft Inventory (TAI)	328	332	+4
<b>Air National Guard</b>			
Combat Coded Squadrons	21	20	-1
Aircraft Inventory (TAI)	1,073	1,044	-29

\* FY 2018 reflects the FY 2018 President's Budget Request.

# The Administration's Goals Would Increase Costs by \$680 Billion Over 10 Years, CBO Estimates

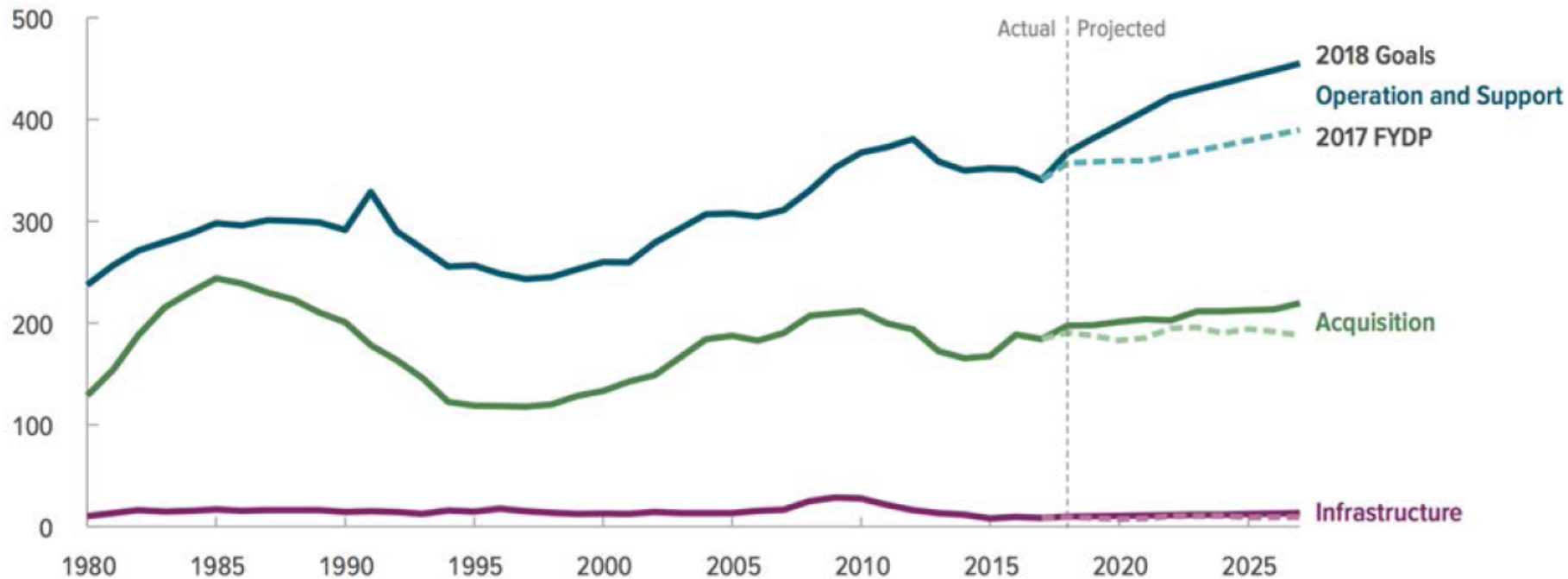
Billions of 2018 Dollars



Source: Congressional Budget Office, *Analysis of the Long-Term Costs of the Administration's Goals for the Military* (December 2017), [www.cbo.gov/publication/53350](https://www.cbo.gov/publication/53350).

# Most of the Increase in Costs of Administration Goals Would Be in Operation and Support

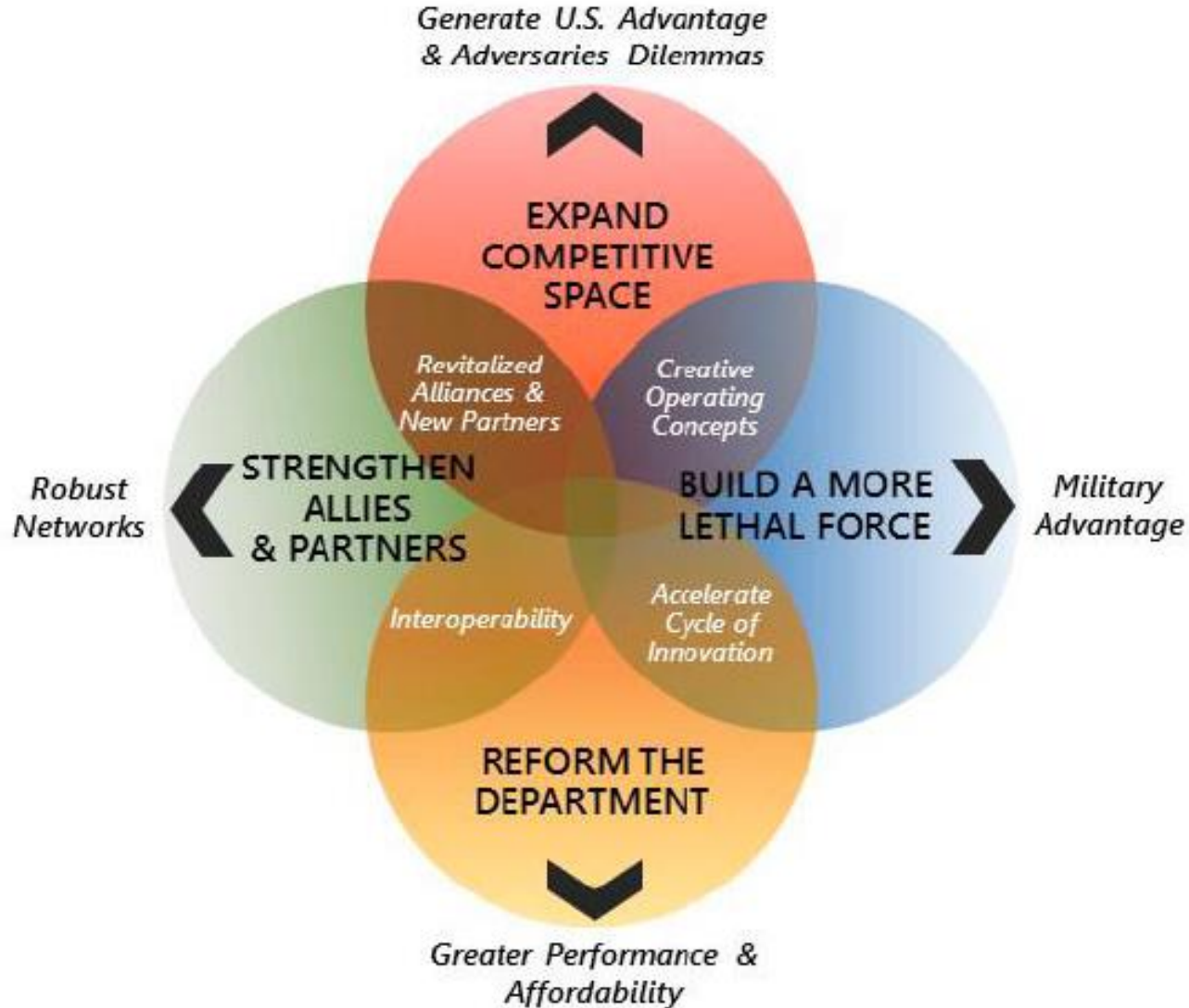
Billions of 2018 Dollars



Source: Congressional Budget Office, *Analysis of the Long-Term Costs of the Administration's Goals for the Military* (December 2017), [www.cbo.gov/publication/53350](https://www.cbo.gov/publication/53350).

**Cost of President's Request for  
FY2019 Wartime Overseas  
Contingency Operations (OCO)  
and Alliance Efforts**

# The Role of Alliances in the New Strategy



# Selected Defense and International (and OCO Contingency) Spending: FY2017-FY2028

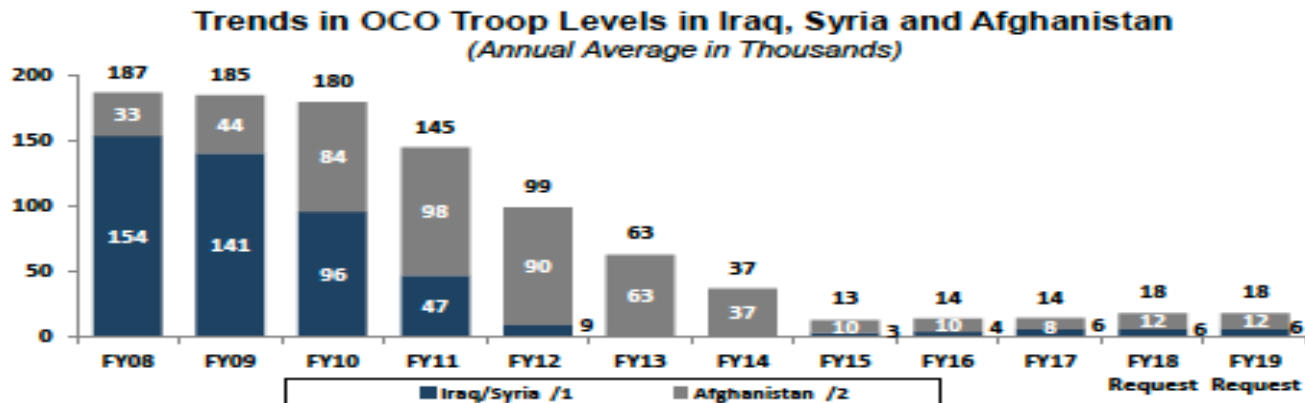
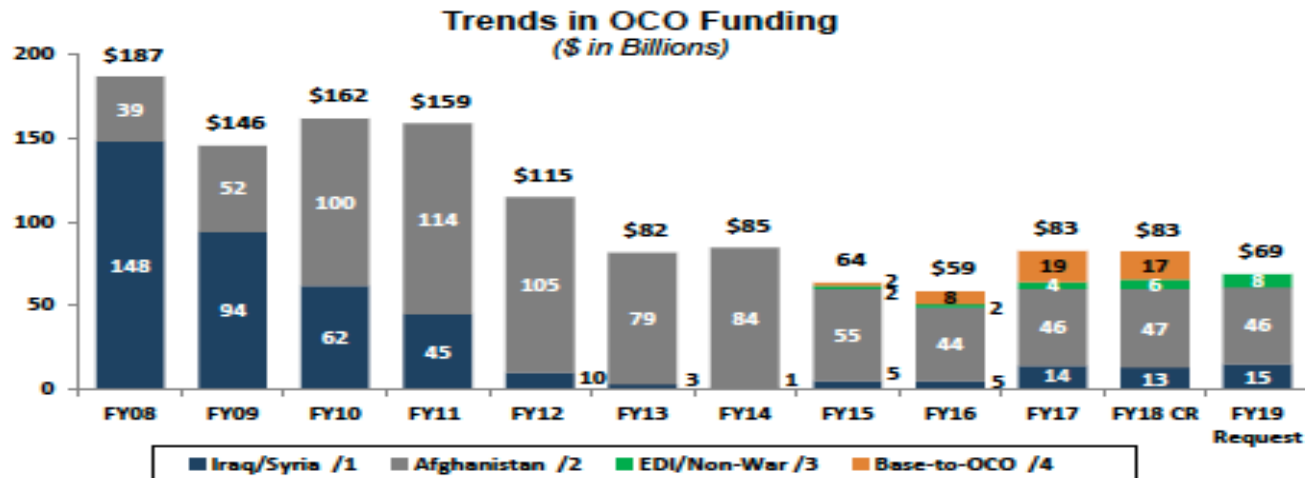
Budget Authority in \$US Billions

Function and Subfunction	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Total	
											FY19 -FY23	FY19 -FY28
<b>National Defense Base Funding</b>												
051 - Department of Defense .....	597,074	628,368	648,227	661,652	676,048	690,245	704,740	719,540	734,650	750,078	3,211,369	6,810,622
053 - Atomic Energy Defense Activities .....	21,892	22,983	23,485	24,040	24,543	25,059	25,586	26,122	26,671	27,231	116,943	247,612
054 - Defense-Related Activities .....	8,034	8,649	5,288	8,308	11,409	11,696	11,674	12,338	12,679	12,691	41,688	102,766
050 - Total National Defense .....	627,000	660,000	677,000	694,000	712,000	727,000	742,000	758,000	774,000	790,000	3,370,000	7,161,000
<b>Nat'l Defense Overseas Contingency Ops</b>												
051 - Department of Defense .....	89,000	73,000	65,800	65,800	65,800	10,000	10,000	10,000	10,000	10,000	359,400	409,400
050 - Total National Defense .....	89,000	73,000	65,800	65,800	65,800	10,000	10,000	10,000	10,000	10,000	359,400	409,400
<b>Non-Defense Overseas Contingency Ops</b>												
151 - International Development and Humanitarian Assistance .....	4,238										4,238	4,238
152 - International Security Assistance .....	4,086										4,086	4,086
153 - Conduct of Foreign Affairs .....	3,694										3,694	3,694
150 - Total International Affairs .....	12,018										12,018	12,018
Non-Specified Outyear OCO Placeholder .....		8,000	4,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	16,000	26,000

From OMB Analytical Perspectives Table 26-1 (Net Budget Authority By Function, Category, and Program), and Table 27-1 (Federal Budget by Agency and Account).



# DoD Overseas Contingency Operations: FY2018-FY-2019



<sup>1/</sup> Iraq/Syria data is for Operation IRAQI FREEDOM (OIF), Operation NEW DAWN (OND), OIR, and follow-on Iraq activities.

<sup>2/</sup> Afghanistan data is for Operation ENDURING FREEDOM (OEF) and Operation FREEDOM'S SENTINEL (OFS).

<sup>3/</sup> Data is for the European Deterrence Initiative (formerly European Reassurance Initiative) and non-war funding, which includes Security Cooperation in FY 2017-2019, and the former Counterterrorism Partnerships Fund in FY 2015 and FY 2016.

<sup>4/</sup> Base budget requirements funded in OCO. In FY 2017, this includes Bipartisan Budget Act compliance, congressional base-to-OCO (Title II to Title IX transfers), and congressional adds (Title X base requirements).

**Note:** Funding levels displayed are enacted amounts and do not reflect budget execution. The FY 2013 level includes a \$5 billion downward adjustment from the enacted appropriation due to sequestration.

# DoD Overseas Contingency Operations: FY2018-FY-2019

## (BA Dollars Billions)

Operation/Activity	FY 2018 PB Request	FY 2019 PB Request	Delta FY 2018– FY 2019
Operation FREEDOM'S SENTINEL (OFS) and Related Missions	47.1	46.3	-0.8
Operation INHERENT RESOLVE (OIR) and Related Missions	13.0	15.3	2.3
European Deterrence Initiative (EDI)	4.8	6.5	1.7
Security Cooperation	0.9	0.9	-
<b>Grand Total</b>	<b>65.8</b>	<b>69.0</b>	<b>3.2</b>

- Maintaining increased U.S. troop levels in Afghanistan to support the President's South Asia strategy
- Sustaining personnel forward deployed to the Middle East to continue operations to defeat and prevent the reemergence of the Islamic State of Iraq and Syria (ISIS)
- Building the capacity of the Iraqi Security Forces and Syrian opposition forces to counter ISIS in support of the United States' comprehensive regional strategy
- Conducting U.S. Central Command in-country and in-theater support activities, including intelligence support to military operations
- Supporting U.S. partner nations through a sustainable approach to security cooperation
- Enhancing U.S. deterrence activities in Eastern Europe to assure North Atlantic Treaty Organization (NATO) allies and partners and deter aggressive actors
- Replenishing and replacing munitions used in combat and equipment destroyed, damaged, or worn out due to use in contingency operations

(Average Annual Troop Strength)

	FY 2018 PB Request	FY 2019 PB Request
Afghanistan (OFS)	11,958	11,958
Iraq/Syria (OIR)	5,765	5,765
In-Theater Support <sup>1</sup>	56,310	59,463
In-CONUS <sup>2</sup> /Other Mobilization	16,610	16,610
<b>Total Force Levels</b>	<b>90,643</b>	<b>93,796</b>

<sup>1</sup> In-Theater support includes support for Afghanistan/Iraq, Combined Joint Task Force (CJTF) HOA, NW Africa CT, and EDI. In-theater support also includes temporary enabling forces supporting OFS in Afghanistan.

<sup>2</sup> In-CONUS = In the Continental United States

OCO Budget	FY 2018 PB Request	FY 2019 PB Request	Delta FY 2018-FY 2019
Operations/Force Protection	12.9	14.7	+1.8
In-Theater Support	19.2	20.0	+0.8
Joint Improvised-Threat Defeat	0.5	0.8	+0.1
Equipment Reset and Readiness	9.1	8.7	-0.4
Classified Programs	10.4	9.9	-0.5
Afghanistan Security Forces Fund (ASFF)	4.9	5.2	+0.3
Support for Coalition Forces	1.3	1.1	-0.2
Counter-ISIS Train and Equip Fund (CTEF)	1.8	1.4	-0.4
Security Cooperation	0.9	0.9	-
European Deterrence Initiative (EDI)	4.8	6.5	+1.7
<b>Total</b>	<b>65.8</b>	<b>69.0</b>	<b>+3.2</b>

Numbers may not add due to rounding

# Shifts in FY2019 Overseas Contingency Operations

## (Dollars Billions)

• <b>Operation FREEDOM'S SENTINEL (Afghanistan) and Theater Posture</b>	<b>46.3</b>
– Maintains increased in-country U.S. presence to continue the President's South Asia strategy	
– Funds training and equipping of Afghan security forces, including support for the Afghan Air Force and Special Security Forces (\$5.2 billion)	
– Includes other theater-wide support requirements and costs, including the replenishment, replacement, and repair of equipment destroyed, damaged, or worn out due to prolonged use in combat operations	
• <b>Operation INHERENT RESOLVE (Iraq and Syria)</b>	<b>15.3</b>
– Supports ongoing operations against ISIS, including training and equipping of Iraqi Security Forces and vetted Syrian opposition forces (\$1.4 billion)	
– Funds the replacement of munitions, both expended and projected	
• <b>European Deterrence Initiative (EDI)</b>	<b>6.5</b>
– Enhances capability and posture resiliency to improve deterrence and U.S. warfighting effectiveness in Europe	
– Includes funding for Ukraine to build capacity to conduct internal defense operations to defend its sovereignty and territorial integrity (\$200 million)	
• <b>Security Cooperation (SC)</b>	<b>0.9</b>
– Builds partner capacity to conduct counterterrorism, crisis response, and other SC missions through training, equipping, and other activities	
<b>TOTAL OCO REQUEST</b>	<b>69.0</b>

# FY2019: Regional & FMS Related Mission Priorities

- New expedited approach to Arms Sales?
- Burdensharing
- OCO, Counter-Terrorism, MENA undergoing major re-look
- Capability enhancements in Asia
  - Investment in Air and Space Superiority
  - Procurement of one submarine Virginia Payload Module
  - Increase procurement of the P-8A by 3
  - Support for increased naval presence in the Pacific to include infrastructure investments
- Capability enhancements in Europe
  - Procurement of modernized equipment for the Army's second Armored Brigade Combat Team (ABCT) equipment set in APS-2 (e.g. Abrams Tanks, Bradley Fighting Vehicles, and Armored Multi-Purpose Vehicles)
  - Replenishment of wartime stockpiles of preferred and advanced munitions to increase lethality
  - Expansion of European airbase infrastructure and equipment to support rapid expansion of airbases for high volume air combat operations

# U.S. European Defense Initiative: FY2017-FY2019:

**(\$3.1 billion higher in FY2019 than FY2017: 91% increase)**

The 47 activities proposed within the FY 2019 EDI request:

1. Continue to enhance our deterrent and defense posture throughout the theater by positioning the right capabilities, in key locations, in order to respond to adversarial threats in a timely manner.
2. Assure our NATO Allies and partners of the United States' commitment to Article 5 and the territorial integrity of all 28 NATO nations.
3. Increase the capability and readiness of U.S. Forces, NATO Allies, and regional partners, allowing for a faster response in the event of any aggression by a regional adversary against the sovereign territory of NATO nations.

<b>European Deterrence Initiative (EDI)</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<i>(Dollars in Millions)</i>	<u><b>Enacted</b></u>	<u><b>Request</b></u>	<u><b>Request</b></u>
Increased Presence	1,049.8	1,732.7	1,874.7
Exercises and Training	163.1	217.7	290.8
Enhanced Prepositioning	1,903.9	2,221.8	3,235.4
Improved Infrastructure	217.4	337.8	828.2
Building Partnership Capacity	85.5	267.3	302.4
<b>Total:</b>	<b>3,419.7</b>	<b>4,777.3</b>	<b>6,531.4</b>

*Numbers may not add due to rounding*

# **CBO Summary of Key Issues in FY2019 Spending Trends**



# **The Three Major Categories of the Defense Budget Each Have Their Own Momentum**

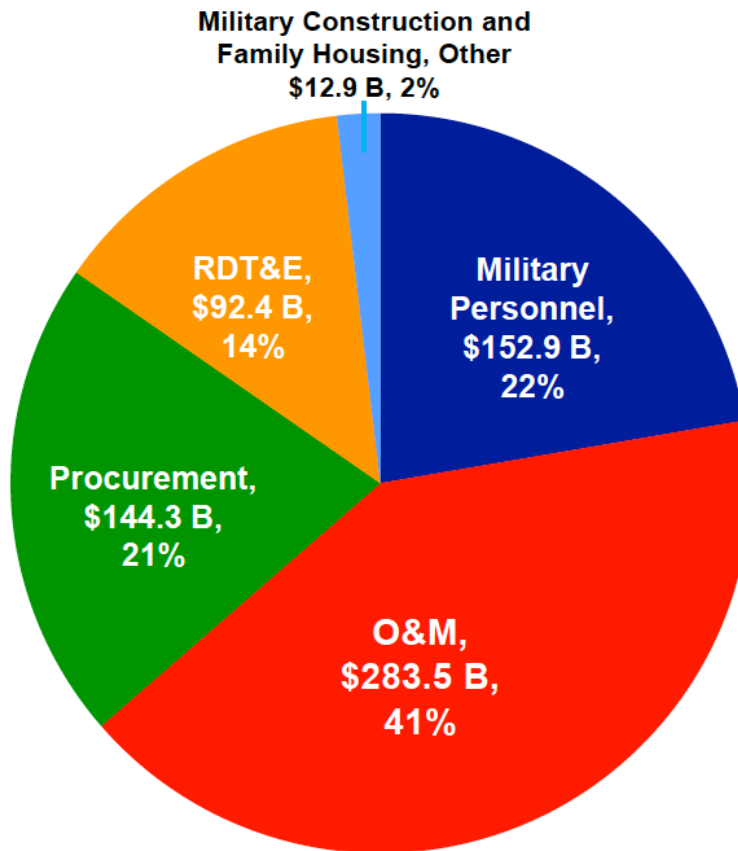
- **Costs of developing and buying weapons have been, on average, 20 percent to 30 percent higher than DoD's initial estimates**
- **Costs for compensation of military personnel—including their active and retired health care benefits—have been rapidly increasing since 2000**
- **Costs of operation and maintenance per active-duty service member have been steadily increasing since at least 1980**
- **These internal pressures in DoD's budget create mismatches between the FYDP and cost of DoD's plans**

# **Where the FY2019 Request Goes by Appropriation and Military Service**

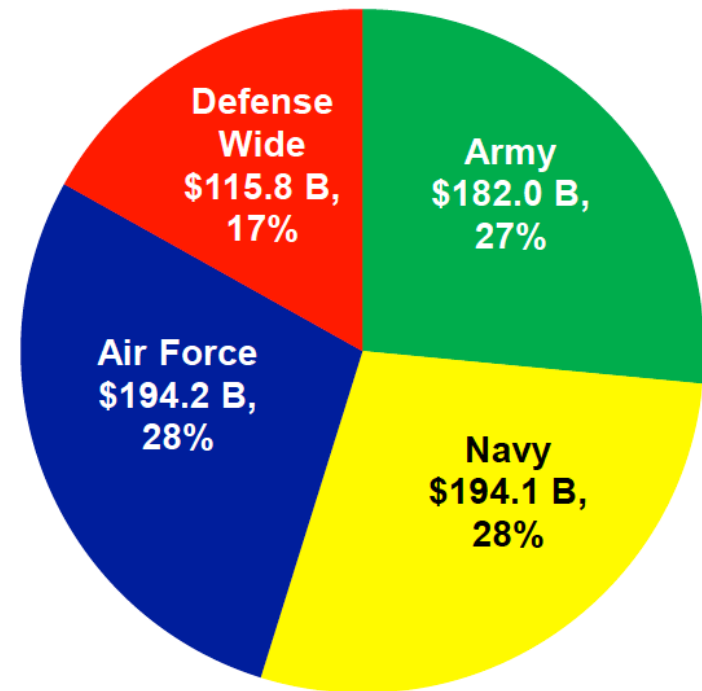
# Where the Money Goes in FY2019

(Total Base and OCO Funding)

## By Appropriation Title



## By Military Department



**FY 2019 Request: \$686.1 billion**

*Numbers may not add due to rounding*

# Funding by Service: FY2018-FY-2019

## (BA Dollars Billions)

Discretionary Budget Authority in Thousands Army Base + OCO + Emergency	FY 2018*	FY 2019 Request	Delta FY19 - FY18
Military Personnel	57,986,897	63,746,449	+5,779,552
Operation and Maintenance	67,849,660	77,491,536	+9,641,876
Procurement	22,148,297	27,820,028	+5,671,731
RDT&E	8,636,503	10,484,483	+1,847,980
Military Construction	1,028,931	1,580,855	+551,924
Family Housing	479,886	707,169	+227,283
Revolving and Management Funds	243,649	165,365	-78,284
<b>Total Department of the Army</b>	<b>158,353,823</b>	<b>181,995,885</b>	<b>+23,642,062</b>

\* Reflects the Continuing Resolution funding level and Division B of Public Law 115-96 (Department of Defense Missile Defeat and Defense Enhancements Appropriations Act, 2018).

Numbers may not add due to rounding.

Discretionary Budget Authority in Thousands Navy Base + OCO + Emergency	FY 2018*	FY 2019 Request	Delta FY19 - FY18
Military Personnel	46,229,402	50,182,295	+3,952,893
Operation and Maintenance	57,569,871	63,372,009	+5,802,138
Procurement	49,672,921	58,482,593	+8,809,672
RDT&E	17,478,513	18,649,478	+1,170,965
Military Construction	1,649,211	2,965,413	+1,316,202
Family Housing	392,244	419,117	+26,873
Revolving and Management Funds	—	—	—
<b>Total Department of the Navy</b>	<b>172,992,162</b>	<b>194,070,905</b>	<b>+21,078,743</b>

\* Reflects the Continuing Resolution funding level and Division B of Public Law 115-96 (Department of Defense Missile Defeat and Defense Enhancements Appropriations Act, 2018).

Numbers may not add due to rounding.

Discretionary Budget Authority in Thousands Air Force Base + OCO + Emergency	FY 2018*	FY 2019 Request	Delta FY19 - FY18
Military Personnel	35,607,366	38,954,308	+3,346,942
Operation and Maintenance	58,191,005	61,407,391	+3,216,386
Procurement	45,654,160	50,541,275	+4,887,115
RDT&E	28,198,426	40,492,614	+12,294,188
Military Construction	2,191,451	2,303,699	+112,248
Family Housing	333,500	395,720	+62,220
Revolving and Management Funds	63,533	77,644	+14,111
<b>Total Department of the Air Force</b>	<b>170,239,441</b>	<b>194,172,651</b>	<b>+23,933,210</b>

\* Reflects the Continuing Resolution funding level and Division B of Public Law 115-96 (Department of Defense Missile Defeat and Defense Enhancements Appropriations Act, 2018).

Numbers may not add due to rounding.

Discretionary Budget Authority in Thousands Defense-Wide Base + OCO + Emergency	FY 2018*	FY 2019 Request	Delta FY19 - FY18
Military Personnel	—	—	—
Operation and Maintenance	78,032,701	81,273,132	+3,240,431
Procurement	8,080,141	7,497,009	-583,132
RDT&E	20,278,956	22,738,106	+2,459,150
Military Construction	2,210,066	2,951,438	+741,372
Family Housing	37,161	60,626	+23,465
Revolving and Management Funds	1,620,480	1,314,296	-306,184
<b>Total Defense-Wide</b>	<b>110,259,505</b>	<b>115,834,607</b>	<b>+5,575,102</b>

\* Reflects the Continuing Resolution funding level and Division B of Public Law 115-96 (Department of Defense Missile Defeat and Defense Enhancements Appropriations Act, 2018).

Numbers may not add due to rounding.

<b>Total Base + OCO + Emergency</b>	<b>611,844,931</b>	<b>686,074,048</b>	<b>+74,229,117</b>
-------------------------------------	--------------------	--------------------	--------------------

# Active and Reserve Strength by Service: FY2018-FY-2019

## Active Component End Strength (in Thousands)

Service	FY 2018*	FY 2019	Delta FY18 - FY19
Army	476.0	487.5	+11.5
Navy	327.9	335.4	+7.5
Marine Corps	185.0	186.1	+1.1
Air Force	325.1	329.1	+4.0
<b>TOTAL</b>	<b>1,314.0</b>	<b>1,338.1</b>	<b>+24.1</b>

\* FY 2018 reflects FY 2018 PB Request. FY 2018 NDAA increases Army and Marine Corps by +7.5K and +1.0K, respectively.

Numbers may not add due to rounding

## Reserve Component End Strength (in Thousands)

Service	FY 2018*	FY 2019	Delta FY18 - FY19
Army Reserve	199.0	199.5	+0.5
Navy Reserve	59.0	59.1	+0.1
Marine Corps Reserve	38.5	38.5	--
Air Force Reserve	69.8	70.0	+0.2
Army National Guard	343.0	343.5	+0.5
Air National Guard	106.6	107.1	+0.5
<b>TOTAL</b>	<b>815.9</b>	<b>817.7</b>	<b>+1.8</b>

\* FY 2018 reflects FY 2018 PB Request. FY 2018 NDAA increases Army Reserve and National Guard by 0.5K each.

Numbers may not add due to rounding

## DoD Total (Base + OCO + Emergency) Budget by Appropriation Title

Discretionary Budget Authority in Thousands Base + OCO + Emergency	FY 2018*	FY 2019 Request	Delta FY19 - FY18
Military Personnel	139,803,665	152,883,052	+13,079,387
Operation and Maintenance	261,643,237	283,544,068	+21,900,831
Procurement	125,555,519	144,340,905	+18,785,386
RDT&E	74,592,398	92,364,681	+17,772,283
Revolving and Management Funds	1,927,662	1,557,305	-370,357
<b>Defense Bill</b>	<b>603,522,481</b>	<b>674,690,011</b>	<b>+71,167,530</b>
Military Construction	7,079,659	9,801,405	+2,721,746
Family Housing	1,242,791	1,582,632	+339,841
<b>Military Construction Bill</b>	<b>8,322,450</b>	<b>11,384,037</b>	<b>+3,061,587</b>
<b>Total Base + OCO + Emergency</b>	<b>611,844,931</b>	<b>686,074,048</b>	<b>+74,229,117</b>

\* Reflects the Continuing Resolution funding level and Division B of Public Law 115-95 (Department of Defense Missile Defense and Defense Enhancements Appropriations Act, 2018).

Numbers may not add due to rounding.

# **Impact of FY2019 Request on DoD Military Personnel Numbers and Costs in FY2017-FY2023**



# Rises in Military End Strength: FY2018-FY023

Military Component	FY 2017 <sup>1/</sup>	FY 2018 <sup>2/</sup>	FY 2019	FY 2023	Δ FY18-19	Δ FY18-23
<b>Active Components (AC)</b>						
Army	476,245	476,000	487,500	495,500	+11,500	+19,500
Navy	323,944	327,900	335,400	344,800	+7,500	+16,900
Marine Corps	184,514	185,000	186,100	186,400	+1,100	+1,400
Air Force	322,787	325,100	329,100	338,800	+4,000	+13,700
<b>TOTAL AC</b>	<b>1,307,490</b>	<b>1,314,000</b>	<b>1,338,100</b>	<b>1,365,500</b>	<b>+24,100</b>	<b>+51,500</b>
<b>Reserve Components (RC)</b>						
Army Reserve	194,318	199,000	199,500	200,000	+500	+1,000
Navy Reserve	57,824	59,000	59,100	59,200	+100	+200
Marine Corps Reserve	38,682	38,500	38,500	38,500	--	--
Air Force Reserve	68,798	69,800	70,000	70,200	+200	+400
Army National Guard	343,603	343,000	343,500	344,500	+500	+1,500
Air National Guard	105,670	106,600	107,100	108,600	+500	+2,000
<b>TOTAL RC</b>	<b>808,895</b>	<b>815,900</b>	<b>817,700</b>	<b>821,000</b>	<b>+1,800</b>	<b>+5,100</b>
Army AC + RC	1,014,166	1,018,000	1,030,500	1,040,000	+12,500	+22,000
Navy AC + RC	381,768	386,900	394,500	404,000	+7,600	+17,100
Marine Corps AC + RC	223,196	223,500	224,600	224,900	+1,100	+1,400
Air Force AC + RC	497,255	501,500	506,200	517,600	+4,700	+16,100
<b>TOTAL AC + RC</b>	<b>2,116,385</b>	<b>2,129,900</b>	<b>2,155,800</b>	<b>2,186,500</b>	<b>+25,900</b>	<b>+56,600</b>

1/ FY 2017 Actuals

2/ FY 2018 PB Request. FY 2018 NDAA (P.L. 115-91) increases FY 2018 PB end strength by 9.5K (Army +8.5K (Active +7.5K Reserve +0.5K; Guard +0.5K); USMC +1.0K).

**Builds Capacity & Lethality – FY 2019 +25.9K and +56.6K by FY 2023**

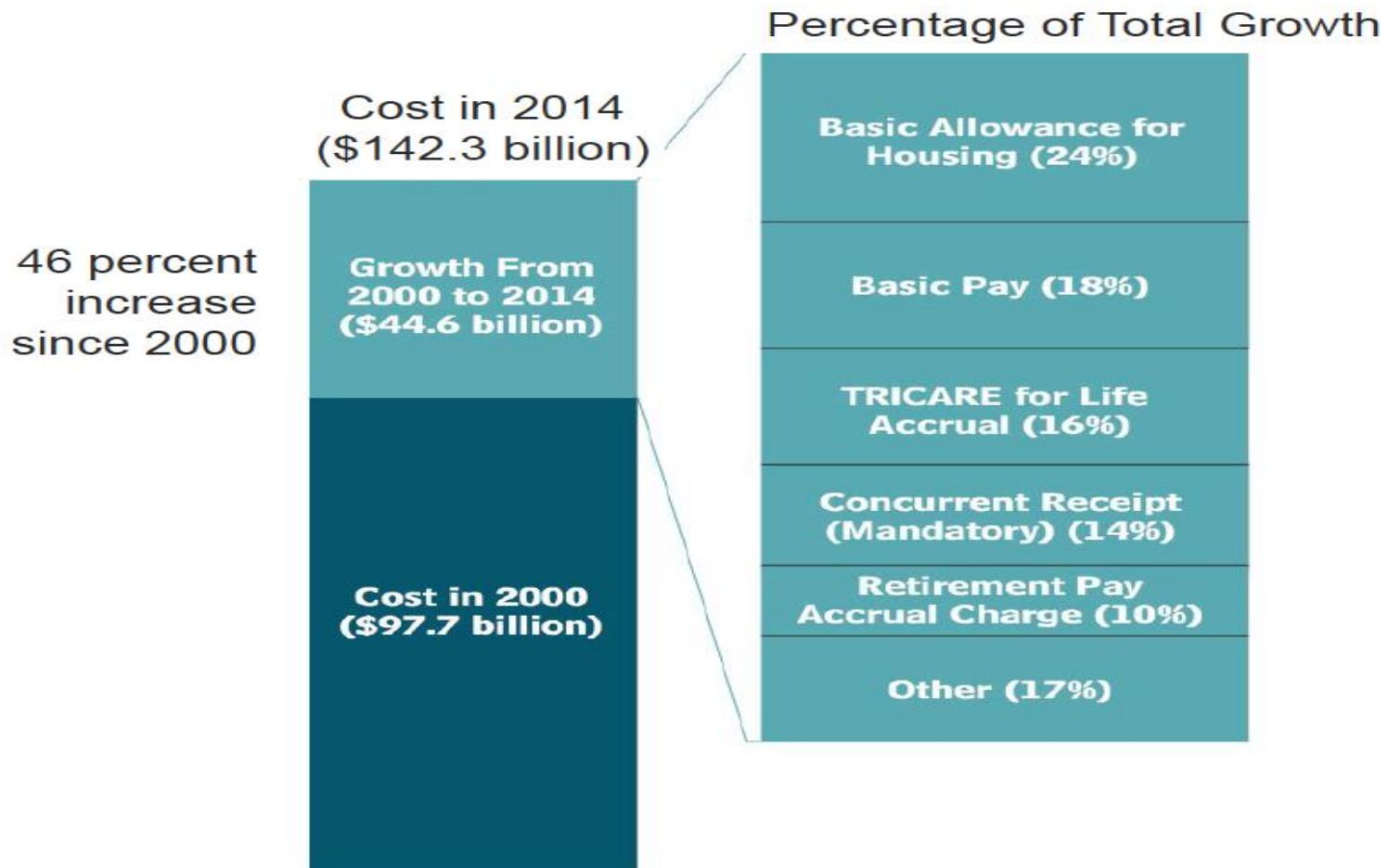
OSD Comptroller, US Department of Defense, FY2019 Budget Request, February 2018. <http://comptroller.defense.gov/Budget-Materials/Budget2019/>.

# Budgetary Momentum: Pay and Benefits of Military Personnel

- Annual increases in military basic pay exceeded the percentage increase in the Employment Cost Index (ECI) by at least 0.5 percent for each of the years between 2001 and 2010
  - Basic pay raises then equaled the ECI from 2011 through 2013
  - From 2014 through 2016, the capped basic pay raise was below the ECI
- DoD estimates that cash compensation for enlisted military personnel exceeds that for 90 percent of workers with similar education and years of experience
  - Noncash compensation (health care and others) amplifies that gap

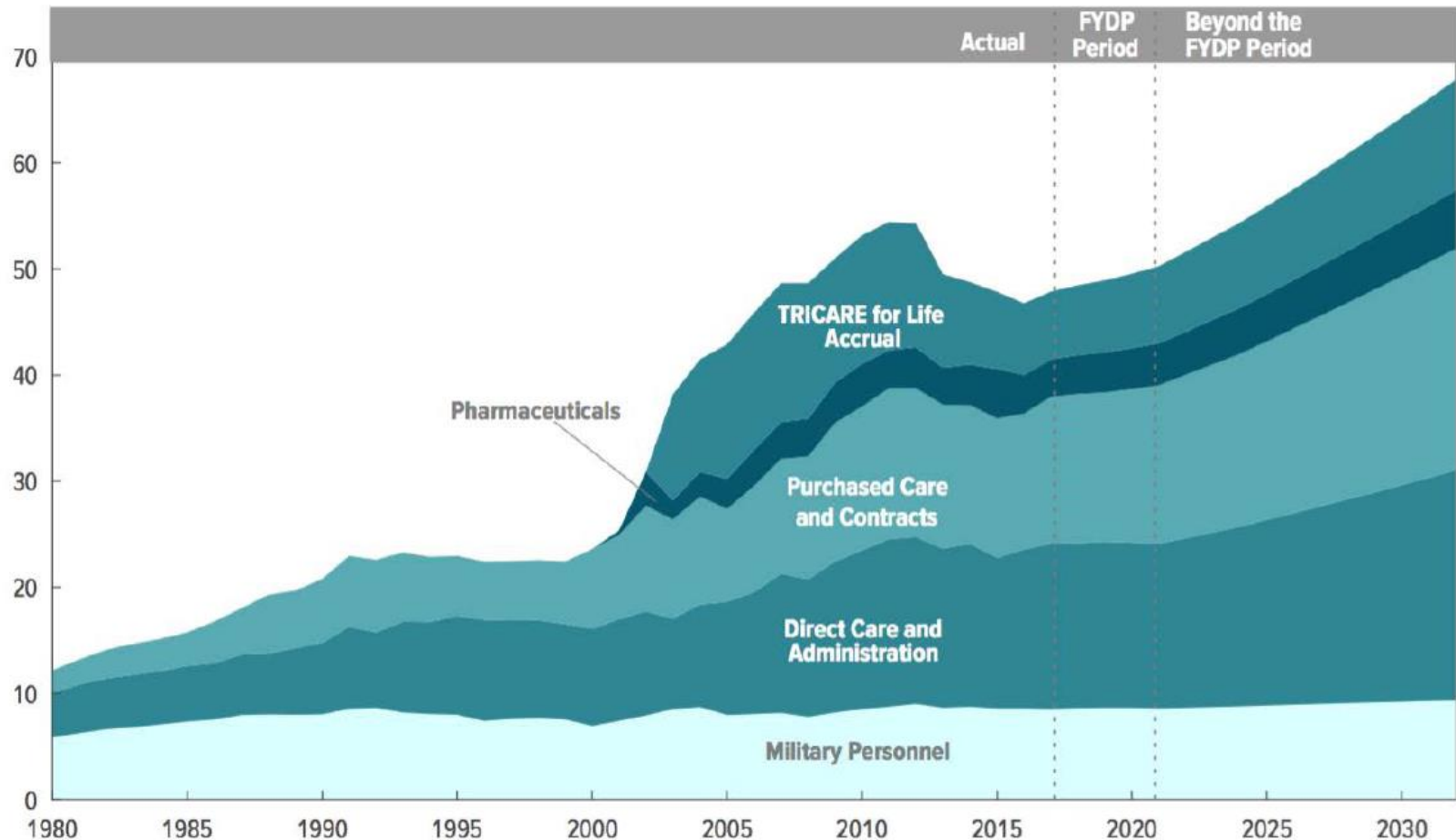
# **Impact of FY2019 Request on DoD Military Entitlement Priorities**

# Entitlements Made Up 42% of Rise in Military Personnel Costs



# Projected Costs for the Military Health System

Billions of FY 2017 Dollars



Source: Congressional Budget Office, *An Analysis of the Obama Administration's Final Future Years Defense Program* (April 2017), [www.cbo.gov/publication/52450](http://www.cbo.gov/publication/52450).

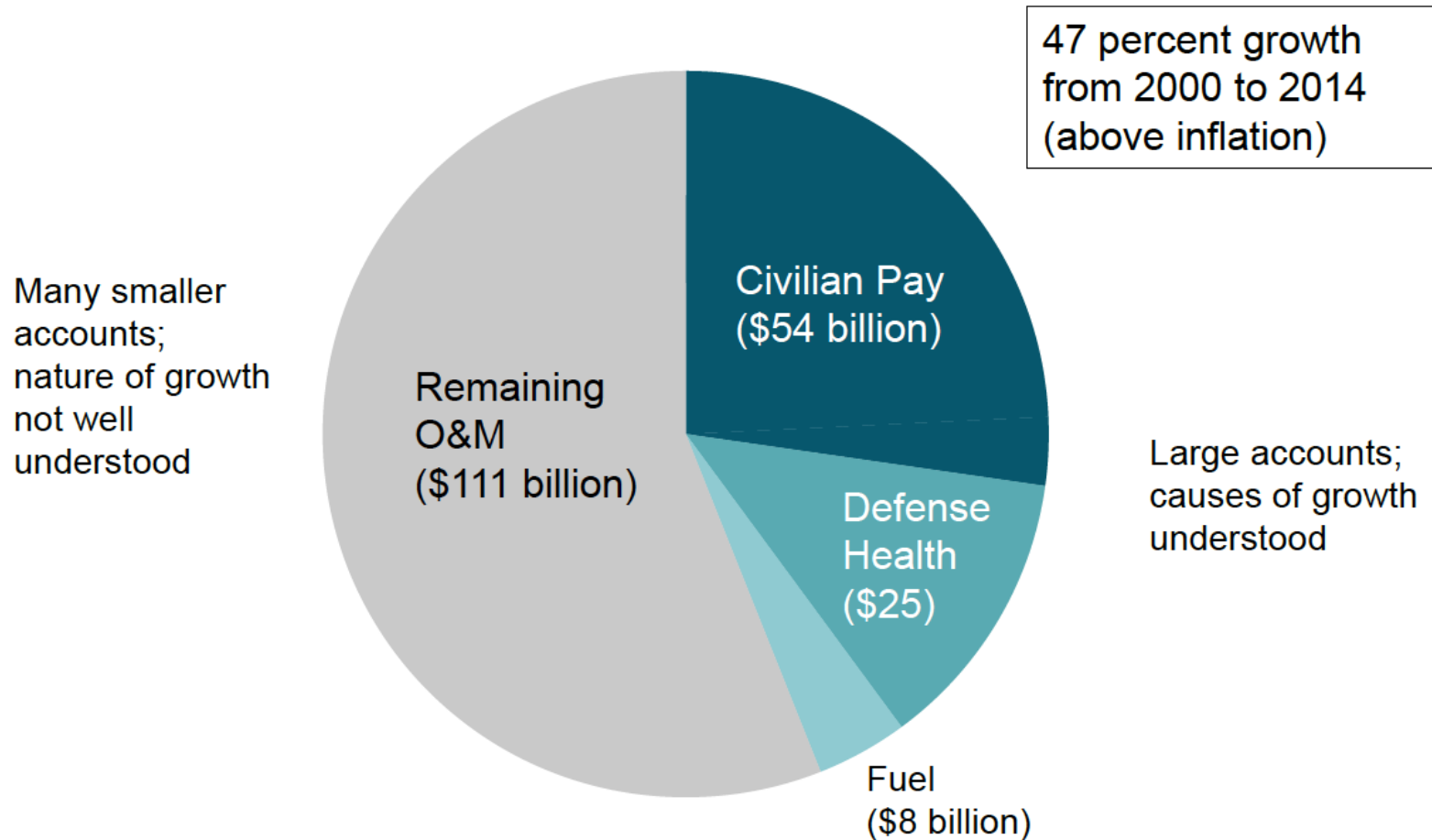
# **Impact of FY2019 Request on Readiness and Operations and Maintenance (O&M) Priorities**



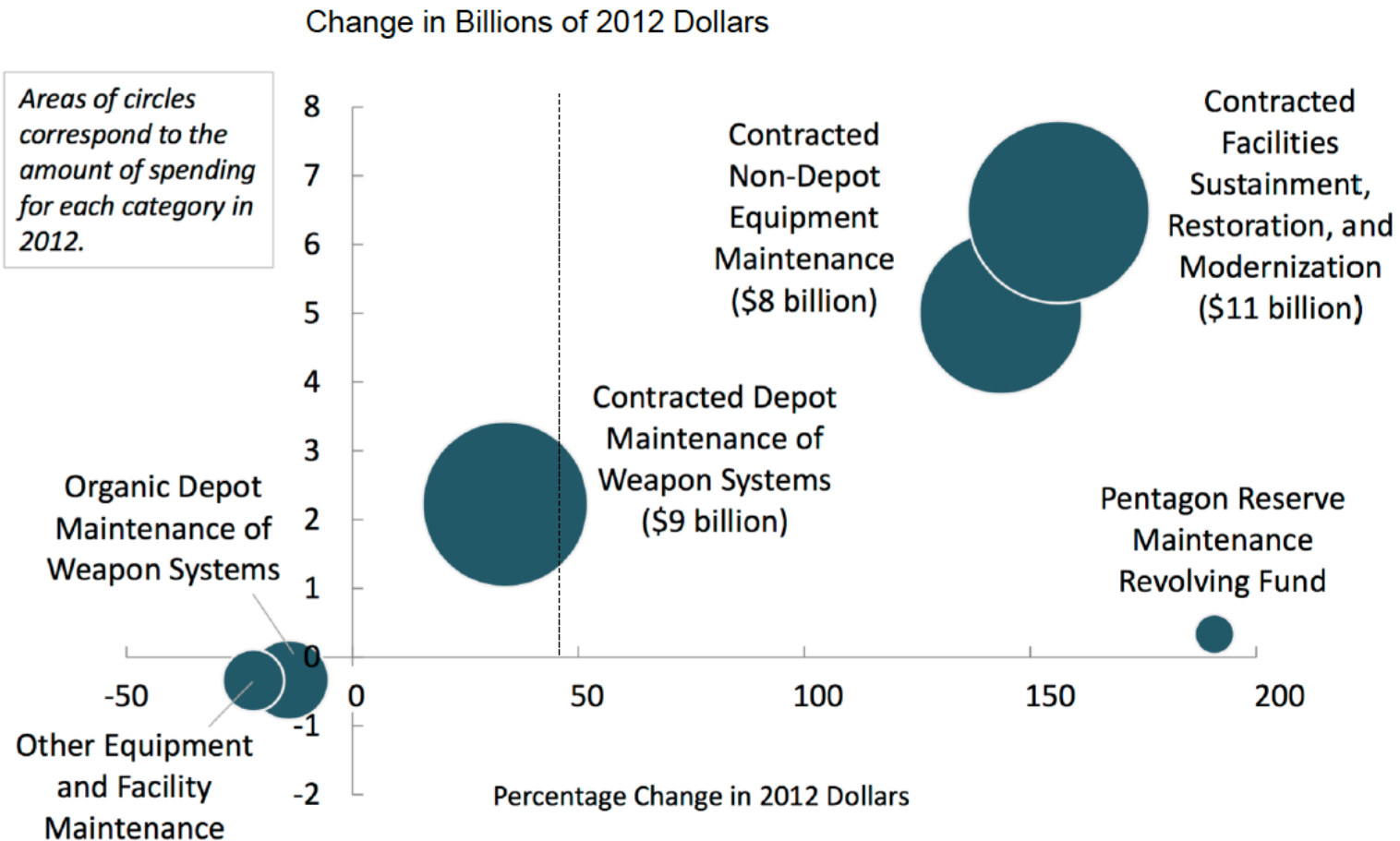
# FY2019: Major Increases in Readiness

- **Army:**
  - Supports increased home station training and additional high-end collective training exercises, resulting in 20 combat training center rotations in 2019
  - Total Army end strength grows from 1,018K to 1,030.5K to fill critical personnel gaps and grow force structure
- **Navy:**
  - Ship Depot Maintenance and Aviation Readiness remain the top two readiness recovering priorities; conducting schedule maintenance and reducing backlog
  - Ship maintenance efforts include improvements in the planning process and continuing to build workforce capacity in the Naval Shipyards
  - Aviation Readiness accounts include increases in engineering and program-related logistics to speed the repair process and also increases in the workforce at Aviation Depots
- **Marine Corps**
  - Grows an additional 1,100 Marines and fully funds Marine Corps operating forces and associated maintenance
  - Invests in information warfare, long-range precision fires, air defense, and enhanced maneuver capabilities
- **Air Force:**
  - Invests in additional military end strength to fill critical gaps in pilot, cyber, maintainer, and Intelligence, Surveillance, and Reconnaissance (ISR) career fields
  - Builds on the progress made in PB 2018 to restore the readiness of the force, increase lethality, and cost-effectively modernize while also moving to multi-domain warfare
- **USSOCOM:**
  - Funds efforts to mitigate capacity readiness challenges in command and control, cyber, Intelligence, Surveillance, and Reconnaissance (ISR), precision strike munitions, and air and maritime mobility
  - Specific investments made to increase contracted ISR orbits and improve capability, enhance aircraft contractor logistical support, and accelerate transition to an all A/MC-130J model fleet

# Key Elements of Operation and Maintenance Costs, 2012



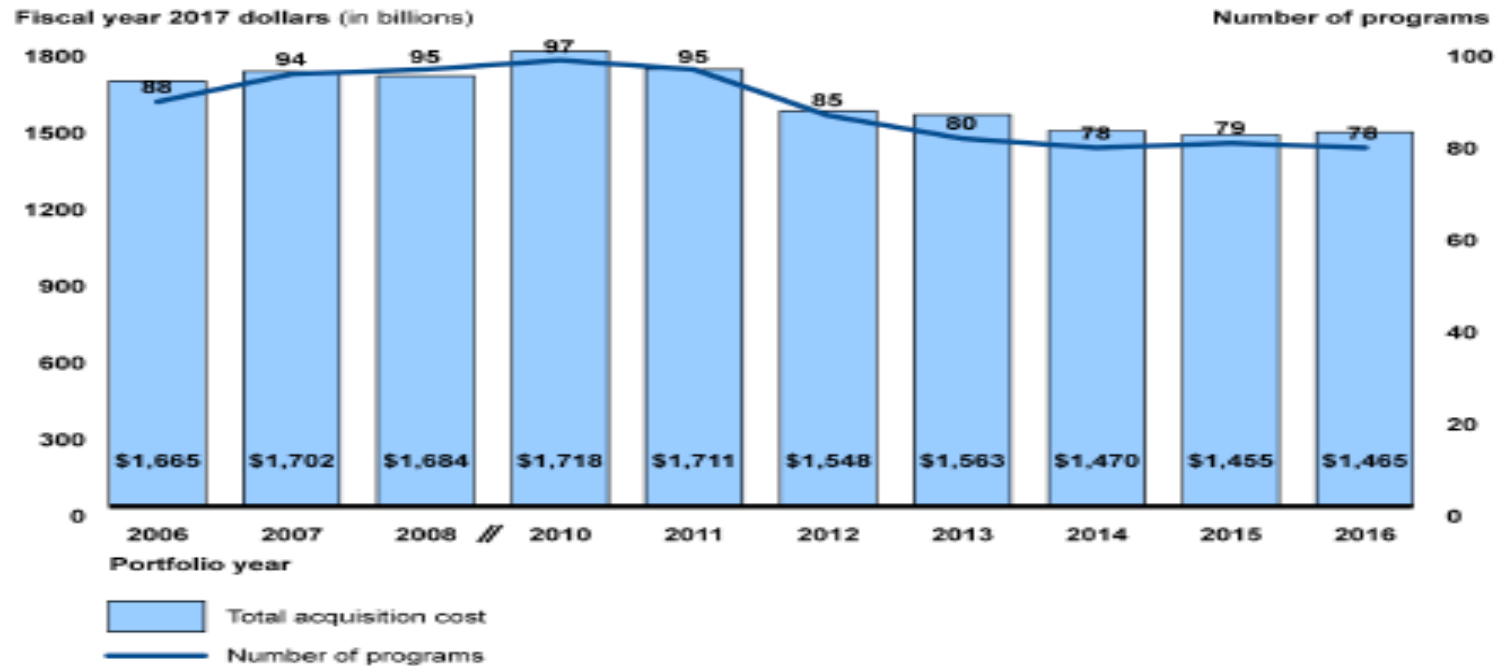
# Growth in Base-Budget O&M for Equipment Maintenance and Property Maintenance, 2000 to 2012



Source: Congressional Budget Office, *Trends in Spending by the Department of Defense for Operation and Maintenance* (January 2017), [www.cbo.gov/publication/52156](http://www.cbo.gov/publication/52156).

# **Impact of FY2019 Request on Key DoD Investment/Procurement Priorities**

# Procurement Portfolio: FY2006-2016



Source: GAO analysis of Department of Defense data. | GAO-17-333SP

Since our last report in 2016, our analysis shows that DOD's total planned investment in major defense acquisition programs increased by about \$9.4 billion from \$1.45 trillion to \$1.46 trillion, whereas the number of programs decreased from 79 to 78. The cost increase represents a flattening to a trend of total acquisition cost decreases we observed each year from 2010 to 2015. We attribute this aggregate cost increase to cost growth affecting a majority of individual DOD programs over the past year, and, in particular, significant cost increases in a few large shipbuilding programs. Our analysis also shows that the portfolio has experienced cost growth totaling over \$484 billion since programs established their first full estimates; 60 percent of the cost growth occurred after programs started production. These significant post-production cost increases—particularly within development funds—may indicate that programs start production without having demonstrated that a fully integrated, capable, production-representative prototype will work as intended. Notably, \$476 billion of this cost growth occurred in programs 5 or more years ago. Since 2011, the portfolio's cost has only grown by \$8.6 billion. Based on our review of DOD estimates, the amount of future funding needed to complete the 2016 portfolio totals \$573.6 billion, which is a decrease from the 2015 portfolio and is the lowest amount in over a decade. The decreased amount of future funding required indicates that more of the total cost of the portfolio has been spent.<sup>12</sup> Of the \$573.6 billion, \$546 billion is planned for procurement and \$27.6 billion, or 5 percent of the total, is planned for development. Over the past 2 years, the portfolio has experienced a buying power gain. Further, the current portfolio's average delay in delivering capability increased by almost 2 months over the past year, yet 49 percent of programs in the 2016 portfolio intend to declare, or have declared, initial operational capability on the basis of limited or, in a few cases, no operational testing.

# FY2019: Investments - I

	FY 2018 Request		FY 2019 Request	
	Qty	\$B	Qty	\$B
<b>Aircraft</b>				
F-35 Joint Strike Fighter (Air Force, Marine Corps, Navy)	70	10.8	77	10.7
KC-46 Tanker Replacement (Air Force)	15	3.1	15	3.0
F/A-18E/F Super Hornet (Navy)	14	1.3	24	2.0
AH-64E Apache Attack Helicopter (Army)	63	1.4	60	1.3
VH-92 Presidential Helicopter (Marine Corps)	-	0.5	6	0.9
P-8A Poseidon (Navy)	7	1.6	10	2.2
CH-53K King Stallion (Marine Corps)	4	1.1	8	1.6
<b>Space</b>				
Evolved Expendable Launch Vehicle (Air Force)	3	1.9	5	2.0
Global Positioning System (GPS) (Air Force)	-	1.1	-	1.5
Space Based Infrared System (Air Force)	-	1.5	-	0.8

*Includes Procurement and Research, Development, Test and Evaluation (RDT&E) funding*

*Numbers may not add due to rounding*

Weapon Systems		FY 2018*		FY 2019	
		Qty	PB Request	Qty	PB Request
<b>Aircraft</b>					
F-35	Joint Strike Fighter	70	10.8	77	10.7
KC-46A	Tanker	15	3.1	15	3.0
P-8A	Poseidon	7	1.6	10	2.2
F/A-18E/F	Super Hornet	14	1.3	24	2.0
CH-53K	King Stallion Helicopter	4	1.1	8	1.6
E-2D AHE	Advanced Hawkeye	5	1.1	4	1.2
AH-64E	Apache Helicopter	63	1.4	60	1.3
UH-60	Black Hawk Helicopter	48	1.1	68	1.4
V-22	Osprey	6	0.9	7	1.3
MQ-4	Triton Unmanned Aerial Vehicle	3	0.9	3	0.9



# FY2019: Investments - II

Ships					
SSN 774	VIRGINIA Class Submarine	2	5.5	2	7.4
DDG 51	ARLEIGH BURKE Destroyer	2	4.0	3	6.0
CVN 78	FORD Aircraft Carrier	1	4.6	--	1.8
LCS	Littoral Combat Ship	2	1.7	1	1.3
T-AO	Fleet Replenishment Oiler	1	0.5	2	1.1
ESB	Expeditionary Sea Base	--	--	1	0.7
T-ATS	Towing, Salvage, and Rescue Ship	1	0.1	1	0.1

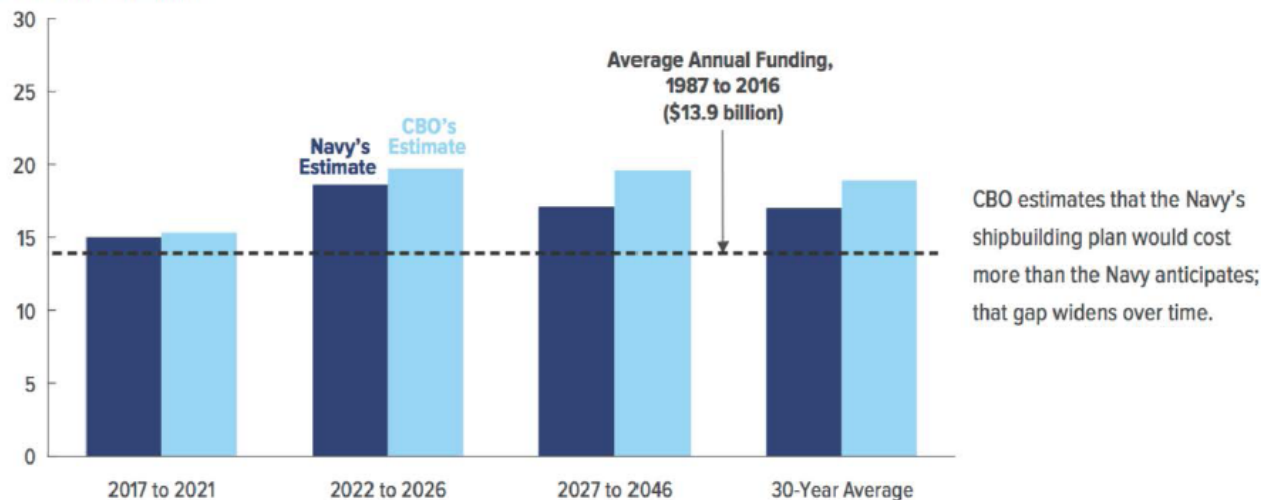
Shipbuilding					
Virginia Class Submarine		2	5.5	2	7.4
DDG-51 Arleigh Burke Class Destroyers		2	4.0	3	6.0
Littoral Combat ships (LCS)		2	1.7	1	1.3
CVN-78 Class Aircraft Carrier		1	4.6	-	1.8
Fleet Replenishment Oiler (T-AO)		1	0.5	2	1.1
Towing, Salvage, and Rescue Ship (T-ATS)		1	0.1	1	0.1
Expeditionary Sea Base		-	-	1	0.7

# Budgetary Momentum: The Navy's Shipbuilding Program

- CBO estimates that the 2017 shipbuilding plan will cost more than the Navy estimates
- The plan would fall short of meeting the service's inventory goal for some types of ships
- Historical average funding would be insufficient to cover the shipbuilding contained in the plan

**Average Annual Costs of New-Ship Construction Under the Navy's 2017 Plan**

Billions of 2016 Dollars



Source: Congressional Budget Office, using data from the Department of the Navy.

# FY2019: Investments - III

	FY 2018 Request		FY2019 Request	
	Qty	\$B	Qty	\$B
<b>Preferred Munitions</b>				
Joint Direct Attack Munition (JDAM) (Navy, Air Force)	34,529	0.9	43,594	1.2
Guided Multiple Launch Rocket System (GMLRS) (Army and Marine Corp)	6,474	0.9	9,733	1.2
Small Diameter Bomb I (SDB I) (Navy, Air Force)	6,852	0.3	6,826	0.3
Small Diameter Bomb II (SDB II) (Navy, Air Force)	550	0.3	1,260	0.4
Hellfire Missile (Army, Navy, Air Force)	7,664	0.7	7,045	0.6
Joint Air-to-Surface Standoff Missile-Extended Range (Air Force)	360	0.5	360	0.6
Joint Air-to-Ground Missile (JAGM) (Army, Navy)	824	0.2	1,121	0.3
<b>Ground Systems</b>				
Joint Light Tactical Vehicle (Army, Marine Corps, Air Force)	2,777	1.1	5,113	2.0
M-1 Abrams Tank Modifications/Upgrades (Army)	56	1.2	135	2.7
Amphibious Combat Vehicle (Marine Corps)	26	0.3	30	0.3
Armored Multi-Purpose Vehicle (Army)	107	0.6	197	0.8

*includes Procurement and Research, Development, Test and Evaluation (RDT&E) funding*

*Numbers may not add due to rounding*

# FY2019: Investments - IV

	FY 2018 Request		FY 2019 Request	
	Qty	\$B	Qty	\$B
<b>Nuclear Deterrence</b>				
B-21 Long Range Strike Bomber (Air Force)	-	2.0	-	2.3
Columbia Class Submarine - (Advance Procurement + RDT&E) (Navy)	-	1.9	-	3.7
Long-Range Stand-Off (LRSO) Missile (Air Force)	-	0.5	-	0.6
Ground Based Strategic Deterrent (GBSD) (Air Force)	-	0.2	-	0.3
<b>Missile Defense Programs</b>				
AEGIS Ballistic Missile Defense (SM-3)	54	2.1	43	1.7
Ground Based Midcourse Defense (Interceptors/Silos)	-/10	1.9	4/10	2.1
Terminal High Altitude Area Defense (THAAD) Ballistic Missile Defense	84	1.3	82	1.1
Patriot Advanced Capability (PAC-3) Missile Segment Enhancement	240	1.1	240	1.1

*Includes Procurement and Research, Development, Test and Evaluation (RDT&E) funding*

*Numbers may not add due to rounding*

Weapon System	FY 2017 Actual	FY 2018 Request*	FY 2019 Request	FY17 – FY19 Change
Ground Based Strategic Deterrent	\$0.1	\$0.2	\$0.3	\$0.2
Long Range Stand Off cruise missile	\$0.1	\$0.5	\$0.6	\$0.5
COLUMBIA-class	\$1.8	\$1.9	\$3.7	\$1.9
Trident II Life Extension	\$1.2	\$1.3	\$1.2	\$0.0
B-21 Bomber	\$1.3	\$2.0	\$2.3	\$1.0
F-35 Dual Capable Aircraft	\$0.03	\$0.04	\$0.07	\$0.04
B61 Tailkit	\$0.1	\$0.2	\$0.3	\$0.2

\*FY 2018 reflects the President's Budget request and OCO

# **Impact of FY2019 Request on DoD Science and Technology**

# FY2019: Science and Technology Spending

Highlights of the FY 2019 budget request for S&T:

- Maintains a robust Basic Research program of \$2.3 billion
- Funds the Defense Advanced Research Projects Agency budget of \$3.4 billion to develop technologies for revolutionary, high-payoff military capabilities
- Continues to leverage commercial Research and Development (R&D) to provide leading edge capabilities to the Department, while encouraging emerging non-traditional technology companies to focus on DoD-specific problems

**Science & Technology Program Base and OCO budget**

*(\$ in billions)*

Program	FY 2017 Enacted	FY 2018 Request*	FY 2019 Request**	FY18–FY19 Change
Basic Research (6.1)	2.2	2.2	2.3	0.1
Applied Research (6.2)	5.1	5.0	5.1	0.1
Adv Tech Dev (6.3)	6.1	6.0	6.3	0.3
<b>Total S&amp;T</b>	<b>13.4</b>	<b>13.2</b>	<b>13.7</b>	<b>0.5</b>

\*FY 2018 reflects the President's Budget request +\$17.0 million Emergency Amendment: Missile Defeat and Defense Enhancements Appropriations Act of 2018 (Division B, Public Law 115-96); and includes \$25.0 million OCO funds within the Defense-Wide S&T

\*\*FY 2019 reflects the President's Budget request, includes \$38.6 million of OCO funds within the Defense-Wide S&T



# FY2019: Science and Technology Spending

Highlights of the FY 2019 budget request for S&T:

- Maintains a robust Basic Research program of \$2.3 billion
- Funds the Defense Advanced Research Projects Agency budget of \$3.4 billion to develop technologies for revolutionary, high-payoff military capabilities
- Continues to leverage commercial Research and Development (R&D) to provide leading edge capabilities to the Department, while encouraging emerging non-traditional technology companies to focus on DoD-specific problems

**Science & Technology Program Base and OCO budget**

*(\$ in billions)*

Program	FY 2017 Enacted	FY 2018 Request*	FY 2019 Request**	FY18–FY19 Change
Basic Research (6.1)	2.2	2.2	2.3	0.1
Applied Research (6.2)	5.1	5.0	5.1	0.1
Adv Tech Dev (6.3)	6.1	6.0	6.3	0.3
<b>Total S&amp;T</b>	<b>13.4</b>	<b>13.2</b>	<b>13.7</b>	<b>0.5</b>

\*FY 2018 reflects the President's Budget request +\$17.0 million Emergency Amendment: Missile Defeat and Defense Enhancements Appropriations Act of 2018 (Division B, Public Law 115-96); and includes \$25.0 million OCO funds within the Defense-Wide S&T

\*\*FY 2019 reflects the President's Budget request, includes \$38.6 million of OCO funds within the Defense-Wide S&T

# **FY2019 Request for Department of Energy Nuclear Weapons Programs**

# National Nuclear Security Administration

The National Nuclear Security Administration (NNSA) is responsible for maintaining a safe, secure, and effective nuclear weapons stockpile; for preventing, countering, and responding to evolving and emerging nuclear proliferation and terrorism threats; for providing safe, reliable and long-term nuclear propulsion to the Nation's Navy as it protects American and Allied interests around the world; and for supporting the federal workforce that carries out these critical responsibilities.

To support these activities, the FY 2019 Budget Request proposes \$15.1B for the NNSA, \$2.2B over FY 2017 Enacted.

The Request makes necessary investments consistent with the NPR to: modernize and rebuild a nuclear force and nuclear security enterprise; prevent, counter and respond to nuclear proliferation and terrorism threats; and provide safe, reliable, and long-term nuclear propulsion to the Nation's Navy. The Nuclear Weapons Council (NWC) will

translate the NPR's policy initiatives into requirements. This request positions NNSA to support those initiatives while working within the NWC to define the military requirements and strategic direction provided by the NPR. As military requirements are refined, the Administration will work with Congress to ensure that the program of work is properly authorized and funded.

## NATIONAL NUCLEAR SECURITY ADMINISTRATION

NNSA Programs	FY19 (\$M)
• Weapons Activities	11,017
• Defense Nuclear Nonproliferation	1,863
• Naval Reactors	1,789
• Federal Salaries and Expenses	423
NNSA Total	15,091

# FY2019 Nuclear Weapons Budget - I

DEPARTMENT OF ENERGY	
DOE Programs	FY19 (\$M)
• National Nuclear Security Administration	15,091
• Science	5,391
• Energy	2,515
• Environmental Management	6,601
• Other Defense Activities	853
• Administration and Oversight	293
• Savings and Receipts	-137
<b>DOE Total</b>	<b>30,609</b>

	(\$K)				
	FY 2017 Enacted	FY 2018 Annualized CR*	FY 2019 Request	FY 2019 Request vs FY 2017 Enacted	
				\$	%
<b>Atomic Energy Defense Activities</b>					
<b>National Nuclear Security Administration</b>					
Federal Salaries and Expenses	387,366	384,736	422,529	+35,163	+9.1%
Weapons Activities	9,240,739	9,241,675	11,017,078	+1,776,339	+19.2%
Defense Nuclear Nonproliferation	1,879,738	1,885,970	1,862,825	-16,913	-0.9%
Naval Reactors	1,419,792	1,410,455	1,788,618	+368,826	+26.0%
<b>Total, National Nuclear Security Administration</b>	<b>12,927,635</b>	<b>12,922,836</b>	<b>15,091,050</b>	<b>+2,163,415</b>	<b>+16.7%</b>
<b>Environmental and Other Defense Activities</b>					
Defense Environmental Cleanup	5,404,217	5,368,298	5,630,217	+226,000	+4.2%
Other Defense Activities	781,703	778,676	853,300	+71,597	+9.2%
Defense Nuclear Waste Disposal (90M in 270 Energy)	0	0	30,000	+30,000	N/A
<b>Total, Environmental and Other Defense Activities</b>	<b>6,185,920</b>	<b>6,146,974</b>	<b>6,513,517</b>	<b>+327,597</b>	<b>+5.3%</b>
<b>Total, Atomic Energy Defense Activities</b>	<b>19,113,555</b>	<b>19,069,810</b>	<b>21,604,567</b>	<b>+2,491,012</b>	<b>+13.0%</b>

## FY2019 Nuclear Weapons Budget - II

- \$11B for Weapons Activities, \$1.8B above FY 2017 Enacted, to maintain the safety, security, and effectiveness of the nuclear stockpile, to continue the nuclear modernization program, and to modernize NNSA's nuclear security infrastructure portfolio in alignment with the NPR.
  - \$1.9B for Life Extension Programs (LEPs), \$580M above FY 2017 Enacted, to support the nuclear weapons program. The FY 2019 Budget Request supports the LEP and Major Alterations (Alt) including the W80-4 LEP, the W88 Alt 370, completion of the W76-1 LEP, transition from design to production for the B61-12 LEP, and restart of the Feasibility Study & Design Options for Interoperable Warhead-1 (IW-1) to remain aligned with the Department of Defense (DOD) current nuclear modernization plans.
  - \$3.0B for Infrastructure and Operations, \$194M above FY 2017, to continue the long-term effort to reverse the declining state of NNSA infrastructure, improve working conditions of NNSA's deteriorating facilities and equipment, and address safety and programmatic risks. The Request funds construction of the Uranium Processing Facility (UPF) and associated buildings; continued construction of the Chemistry and Metallurgical Research Replacement (CMRR) project to sustain plutonium science activities; and construction of the Albuquerque Complex Project to replace aging and degrading facilities.
  - \$163M for activities and research leading to deployment of exascale capability for national security applications. Of this \$47M is designated for two construction projects: 1) \$24M for the Exascale Class Computer Cooling Equipment (EC3E) project at the Los Alamos National Laboratory (LANL), and 2) \$23M for the Exascale Computing Facility Modernization (ECFM) project at the Lawrence Livermore National Laboratory (LLNL).

# FY2019 Nuclear Weapons Budget - III

- \$1.9B for Defense Nuclear Nonproliferation, \$17M below FY 2017 Enacted, to address the entire nuclear threat spectrum by preventing the acquisition of nuclear weapons or weapons-usable materials, countering efforts to acquire such weapons or materials, and responding to nuclear or radiological incidents. The Budget Request also includes \$220M to continue the orderly and safe closure of the Mixed Oxide (MOX) Fuel Fabrication Facility and \$59M for the Surplus Plutonium Disposition (SPD) project to support the dilute and dispose strategy. The Budget Request will support the continuation of preliminary design and the initiation of long-lead procurements in FY 2019.
  - \$1.8B for Naval Reactors (NR), an increase of \$369M from the FY 2017 level (excluding the transfer of \$75M to the Office of Nuclear Energy to support the Advanced Test Reactor), to support the current and future fleet. The request funds continued research, development and design for the Columbia-class submarine, recapitalizing the capability to handle naval spent nuclear fuel, and continued work to ensure the fleet remains the most advanced, well-maintained, and capable nuclear fleet in the world.
- 
- \$423M for NNSA Federal Salaries and Expenses, \$35M above FY 2017, to support 1,715 federal full-time equivalent (FTE) employees who provide federal oversight of the nuclear security enterprise. This workforce is responsible for managing and executing NNSA's weapons activities and nonproliferation missions.

# **FY2019 Request for Homeland Security**



# Department of Homeland Security

## Highlights:

- The mission of the Department of Homeland Security (DHS) is to secure the Nation from the many threats it faces. DHS safeguards the American people, the homeland, and America's values by: preventing terrorism and enhancing security; managing the borders; administering immigration laws; securing cyberspace; and ensuring disaster resilience.
- The Budget requests \$46 billion in discretionary appropriations for DHS, a \$3.4 billion or 8-percent increase from the 2017 enacted level (excluding updated 2017 receipts). In addition, \$6.7 billion is available to help communities overwhelmed by major disasters.
- Critical investments include \$1.6 billion for construction of the border wall and \$782 million to hire and support 2,750 additional law enforcement officers and agents at U.S. Customs and Border Protection (CBP) and U.S. Immigration and Customs Enforcement (ICE). The Budget also requests \$2.5 billion for detaining up to 47,000 illegal aliens on a daily basis.
- The Budget ensures the appropriate use of taxpayer dollars by reducing Federal programs that support activities that are primarily the responsibility of State and local governments.

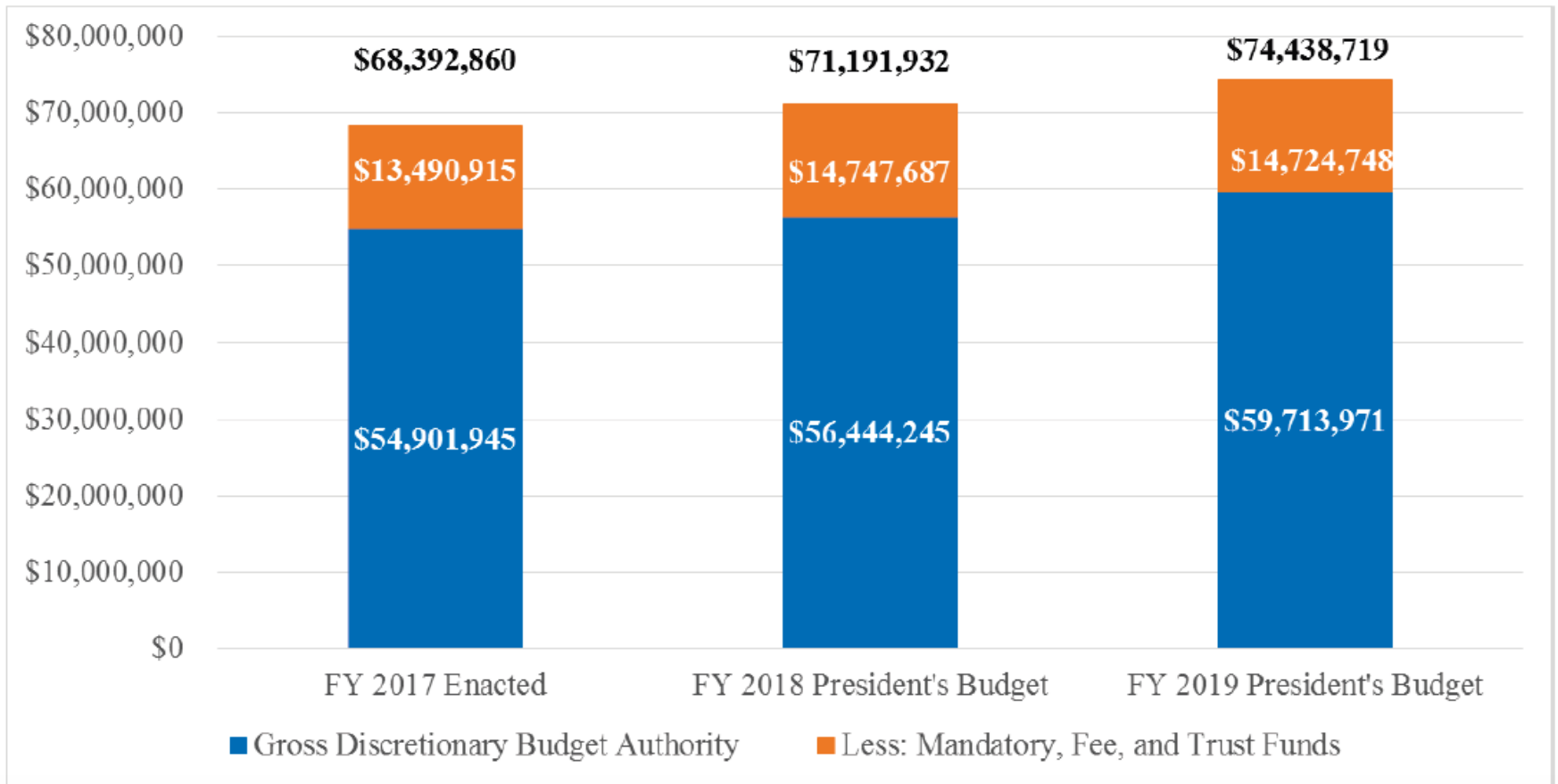
# FY2019 DHS Overview

<b>Organization</b>	<b>FY 2017 Enacted</b>	<b>FY 2018 President's Budget</b>	<b>FY 2019 President's Budget</b>	<b>FY 2018 to FY 2019 Total Changes</b>	<b>FY 2019 +/- FY 2018 %</b>
<b>Total Budget Authority</b>	\$68,393,475	\$71,191,932	\$74,438,719	\$3,246,787	+4.4%
<b>Less: Mandatory, Fee, and Trust Funds</b>	\$13,491,530	\$14,747,687	\$14,724,748	(\$22,939)	-0.2%
<b>Gross Discretionary Budget Authority<sup>1</sup></b>	\$54,901,945	\$56,444,245	\$59,713,971	\$3,269,726	+5.5%
<b>Less: Discretionary Offsetting Fees</b>	\$4,117,976	\$4,988,963	\$5,235,504	\$246,541	+4.7%
<b>Discretionary Budget Authority</b>	\$50,783,969	\$51,455,282	\$54,478,467	\$3,023,185	+5.6%
<b>Less: FEMA Disaster Relief - Major Disasters</b>	\$6,713,000	\$6,793,000	\$6,652,000	(\$141,000)	-2.1%
<b>Less: USCIS - CHIMP Funding</b>	\$4,000	\$4,000	\$4,000	-	-
<b>Less: USCG – OCO Funding</b>	\$162,692	-	-	-	-
<b>Less: Rescissions to Prior Years Balances</b>	(\$1,483,667)	(\$593,400)	(\$300,000)	\$293,400	-97.8%
<b>Adjusted Net Discretionary Budget Authority</b>	\$42,420,610	\$44,064,882	\$47,522,467	\$3,457,585	+7.3%

<sup>1</sup>FY 2017 Gross Discretionary includes USCG – OCO Funding.

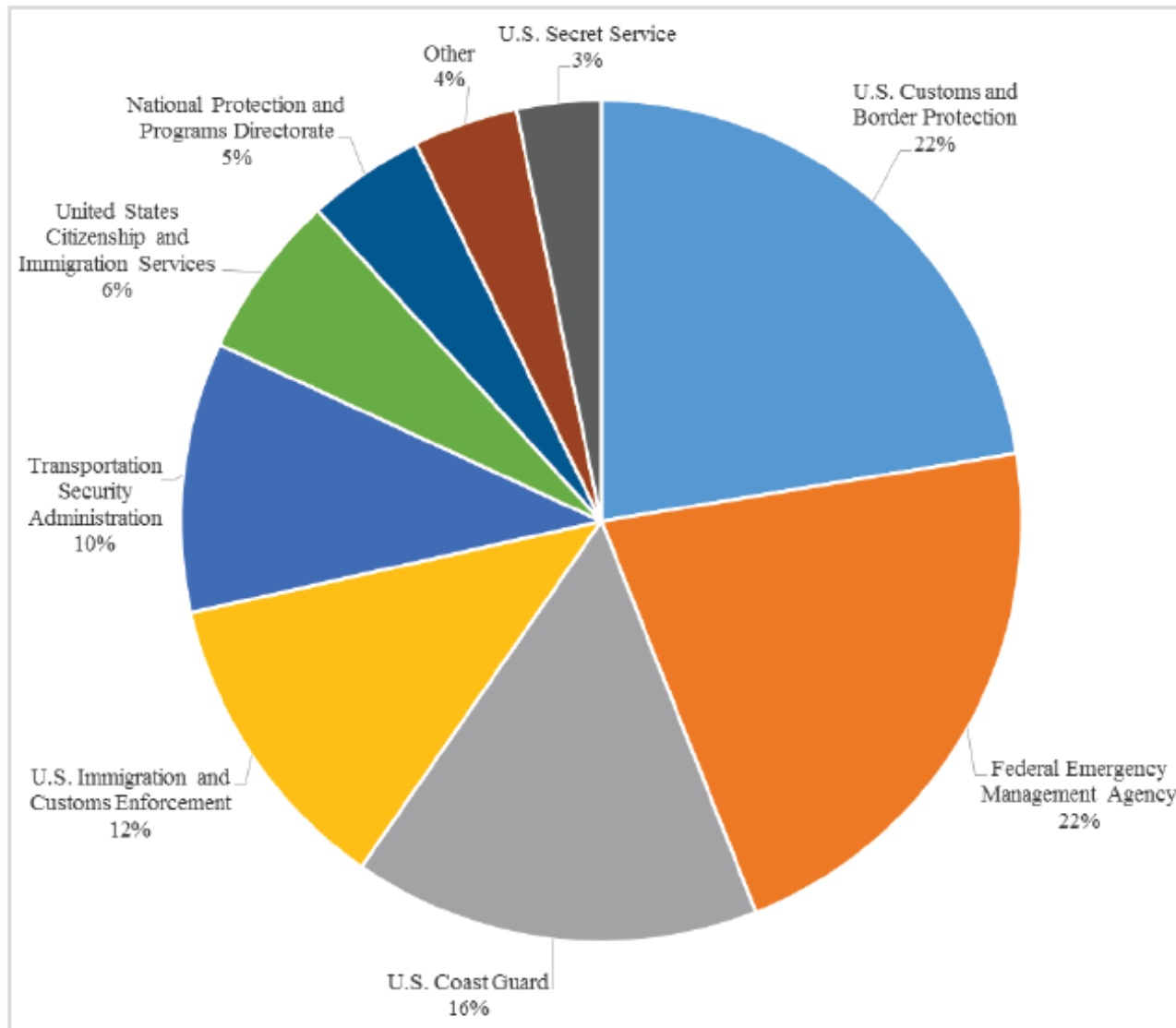
# Total DHS Budget Authority

*Dollars in Thousands*



# FY 2019 Percent of Total Budget Authority by Organization

## *\$74,438,719*



# Homeland Security Spending by Agency: FY 2015-FY2017

(Budget Authority in millions of dollars)

	FY2015 Actual	FY2015 Supplemental	FY2016 Enacted	FY2017 Request
Department of Agriculture .....	452.2	0.0	577.4	544.6
Department of Commerce* .....	5,389.4	9.8	1,373.9	579.8
Department of Defense—Military Programs** .....	12,363.0	181.8	13,708.3	13,541.9
Department of Health and Human Services .....	4,753.2	804.3	5,327.8	5,064.7
Department of the Interior .....	54.2	0.0	58.1	57.8
Department of Justice .....	4,080.8	0.0	4,148.5	4,340.4
Department of Labor .....	29.1	0.0	28.9	29.1
Department of State .....	3,641.8	0.0	4,344.7	4,503.4
Department of the Treasury .....	121.8	0.0	122.3	168.3
Social Security Administration .....	231.1	0.0	256.4	274.2
Department of Education .....	35.8	0.0	51.5	59.4
Department of Energy .....	1,930.9	0.0	2,047.5	2,157.0
Environmental Protection Agency .....	90.7	0.0	90.7	89.5
Department of Transportation .....	307.6	0.0	342.5	356.4
General Services Administration .....	370.5	0.0	320.8	371.5
Department of Homeland Security .....	36,634.5	92.2	37,601.0	36,837.5
Department of Housing and Urban Development .....	1.1	0.0	1.3	1.3
National Aeronautics and Space Administration .....	230.8	0.0	251.1	226.2
Department of Veterans Affairs .....	367.8	0.0	334.8	534.5
Executive Office of the President .....	9.1	0.0	9.5	13.2
Corps of Engineers—Civil Works .....	11.3	0.0	11.0	12.0
District of Columbia .....	13.0	0.0	13.0	15.0
Federal Communications Commission .....	2.0	0.0	2.0	2.0
National Archives and Records Administration .....	26.3	0.0	25.2	25.1
National Science Foundation .....	431.3	0.0	438.9	457.1
Nuclear Regulatory Commission .....	60.5	0.0	64.3	65.1
Securities and Exchange Commission .....	7.0	0.0	9.0	9.0
Smithsonian Institution .....	101.9	0.0	107.1	120.5
United States Holocaust Memorial Museum .....	11.0	0.0	12.0	12.0
<b>Total, Homeland Security Budget Authority .....</b>	<b>71,759.8</b>	<b>1,088.1</b>	<b>71,679.3</b>	<b>70,468.3</b>
Less Department of Defense .....	-12,363.0	-181.8	-13,708.3	-13,541.9
<b>Non-Defense Homeland Security BA .....</b>	<b>59,396.8</b>	<b>906.3</b>	<b>57,971.1</b>	<b>56,926.5</b>
Less Discretionary Fee-Funded Homeland Security Programs .....	-7,764.5	-9.8	-8,605.2	-5,209.1
Less Mandatory Homeland Security Programs .....	-8,087.4	0.0	-4,152.8	-1,325.2
<b>Net Non-Defense Discretionary Homeland Security BA .....</b>	<b>43,544.9</b>	<b>896.5</b>	<b>45,213.1</b>	<b>50,392.1</b>

\* Funding decreases in the Department of Commerce from FY 2015 to FY 2017 reflect the non-recurrence of authority to build a nationwide interoperable public safety broadband network for first responders and related programs.

\*\* DOD homeland security funding for all years prior to 2017 reflects a revised calculation methodology (see Data Collection Methodology and Adjustments, Including the Department of Defense).

# **FY2019 Request for Veteran's Administration Programs**

# Veteran's Administration

The 2019 Budget and 2020 Advance Appropriations (AA) requests for the Department of Veterans Affairs (VA) fulfill the President's promise to provide America's Veterans, their families, and survivors the care and benefits they have earned through their service. The 2019 budget request for discretionary funding totals \$88.9 billion, of which \$76.5 billion (including medical care collections) is requested for VA Medical Care. The 2019 mandatory funding request totals \$109.7 billion. The 2019 request will support 366,358 Full-time Equivalent (FTE) employees. The 2020 AA request includes:

- \$79.1 billion in discretionary funding for Medical Care including collections;
- \$121.3 billion in mandatory funding for Veterans benefits programs (Compensation and Pensions, Readjustment Benefits, and Veterans Insurance and Indemnities accounts).

The 2019 Budget will provide the necessary resources to meet VA's obligation to provide timely, quality health care, services, and benefits to Veterans. This is a strong budget that reflects the Administration's commitment to Veterans. The 2019 Budget includes significant reforms, internal offsets, and improved efficiencies to provide Veterans the care they deserve and improve the management of resources. The Budget will fully enable VA to operate the largest integrated health care system in the country, delivering health care to over 9.3 million enrolled Veterans. The 2019 Budget will also provide for:

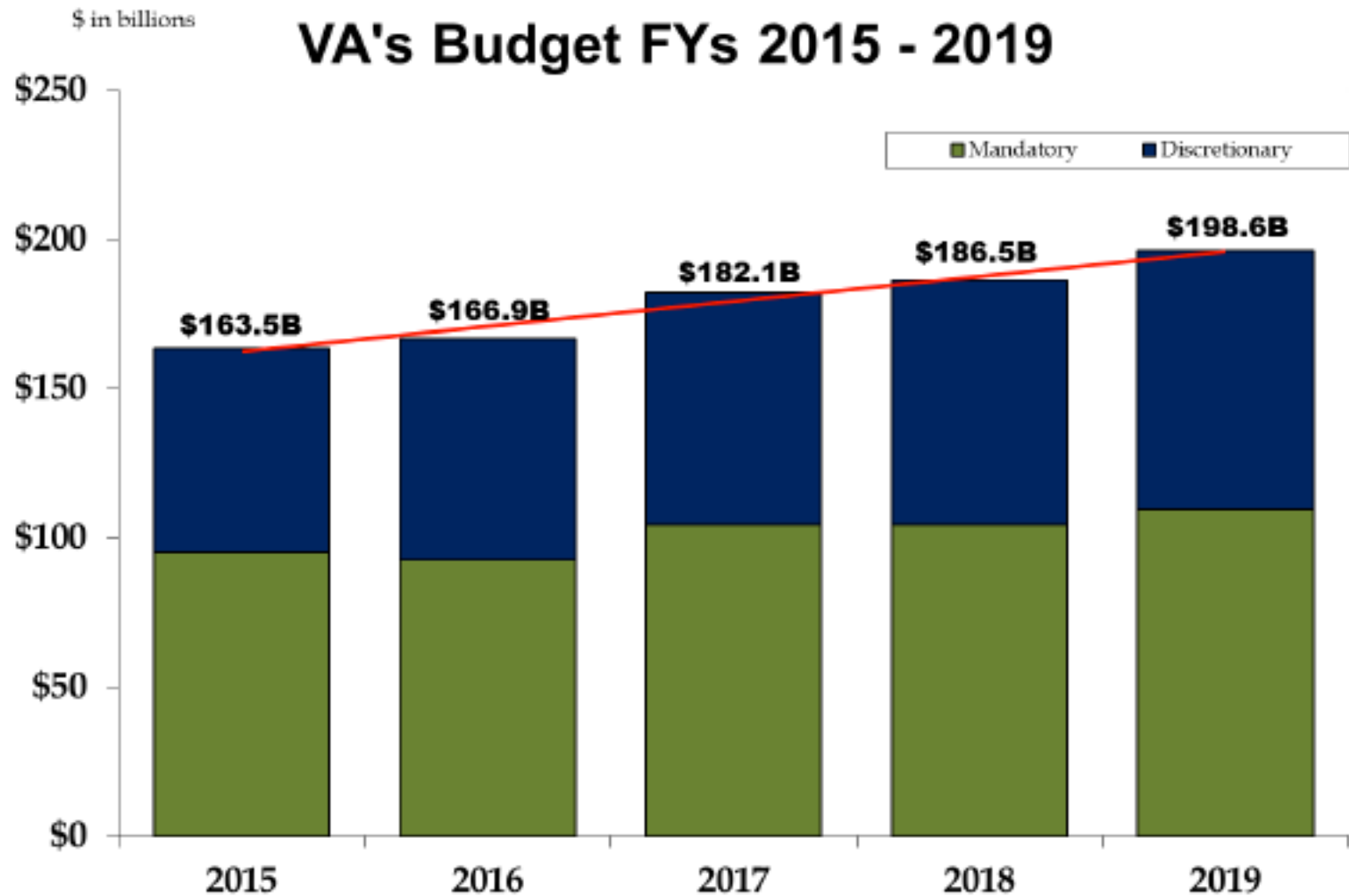


# Veteran's Administration Budget Request - I

The 2019 Budget will also provide for:

- 7.0 million patients treated by VA, an increase of 1.3 percent above 2018;
- Modernization of VA's electronic health record system to improve quality of care;
- Expansion of mental health services by providing more than 15.2 million outpatient visits, an increase of nearly 162,000 visits above 2018;
- Over 118 million outpatient visits, an increase of 8.8 percent above 2018;
- Disability compensation benefits for 4.9 million Veterans and 432,000 Survivors;
- Pension benefits for 269,000 Veterans and 200,000 Survivors;
- Hiring an additional 225 fiduciary employees to ensure protection for VA's most vulnerable Veterans who are unable to manage their VA benefits;
- Strengthening VA's infrastructure through \$1.1 billion in Major Construction and \$706.9 million in Minor Construction for priority infrastructure projects, and \$1.4 billion in Non-Recurring Maintenance (NRM);
- Education assistance programs serving nearly one million students;
- Vocational rehabilitation and employment benefits for over 149,000 Veterans;
- A home mortgage program with a portfolio of nearly three million active loans; and
- The largest and highest performing national cemetery system, projected to inter more than 134,000 Veterans and eligible family members in 2019.

# Veteran's Administration Budget Request - II



# Veteran's Administration Budget Request - III

	Actual									Budget	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Mandatory <sup>1/</sup>	47.09	71.3	66.4	65.5	74.8	102.4	95.1	92.5	104.3	104.3	109.7
Discretionary	47.83	53.1	56.3	58.5	61.4	63.4	65.1	70.9	74.3	78.8	85.5
MCCF	2.8	2.8	2.8	2.8	2.9	3.1	3.2	3.5	3.5	3.3	3.4
Total VA <sup>2/</sup>	97.7	127.2	125.5	126.8	139.1	168.9	163.5	166.9	182.1	186.5	198.6

<sup>1/</sup> 2014 Mandatory includes \$15 billion provided by the Veterans Choice Act, and an additional \$2.1 billion in 2017 & 2018

<sup>2/</sup> Totals may not add due to rounding

## Department of Veterans Affairs 2019 Discretionary and Mandatory Funding

