

Analysis of the President's FY 2019 Budget Request for Federal Research, Health, and Higher Education Programs

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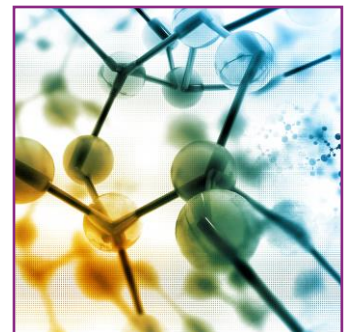
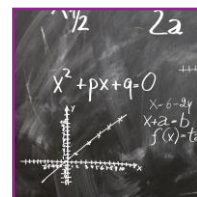


Table of Contents

Executive Summary.....	3
Department of Commerce.....	5
National Oceanic and Atmospheric Administration	5
National Institute of Standards and Technology	9
Economic Development Administration	11
Department of Defense	13
Department of Education.....	17
Department of Energy	21
Department of Health and Human Services	24
National Institutes of Health	24
Food and Drug Administration	29
Department of Health and Human Services (Other)	31
Department of Homeland Security.....	37
Department of Justice	40
Department of Transportation and White House Infrastructure Proposal.....	43
Department of State and United States Agency for International Development	45
Environmental Protection Agency	48
Institute of Museum and Library Services	51
National Aeronautics and Space Administration	52
National Endowment for the Humanities & National Endowment for the Arts.....	56
National Science Foundation	58
U.S. Department of Agriculture.....	60
U.S. Geological Survey.....	63
Corporation for National and Community Service	66

Executive Summary

On February 12, 2018, President Trump released his second budget proposal to Congress. The fiscal year (FY) 2019 budget request reflects the political priorities of the White House Administration, but it is ultimately up to Congress to decide which proposals to embrace, modify, or reject as part of the annual appropriations process.

Just last week, Congress and the White House agreed on new funding caps for both FY 2018 and FY 2019 in the Bipartisan Budget Act of 2018, which has paved the way for completing FY 2018 appropriations and establishing a FY 2019 budget framework. While Congress is hoping to wrap up negotiations in March on FY 2018 funding levels for individual federal agencies, the President's budget request seeks to set an agenda for FY 2019, accompanied by a \$200 billion infrastructure package. Ultimately, Congress will decide FY 2019 funding levels, but the budget request provides a window into activities and planning underway within the agencies and what programs will receive the most attention and focus in the year ahead. The FY 2019 budget request also includes an addendum that modifies its initial funding recommendations to reflect the new higher spending caps for total discretionary funding enacted into law last week as part of the budget agreement. In the wake of these late-breaking changes, the Administration included these modified funding levels in the individual agency requests, but many agencies released only high-level narratives without detailed information on specific programs.

Overall, President Trump's FY 2019 budget request would build on the previous year's emphasis on defense and national security at the expense of non-defense federal agencies and programs. The budget request also proposes further agency streamlining, reorganizations, and staff reductions. These changes reflect a multi-month process by the White House Office of Management and Budget (OMB) to shrink the size of the federal government and trim the number of personnel and offices required to conduct oversight or manage programs. Some of these staff reductions have already begun to occur, through accelerated "buy outs" of personnel, restructuring of offices, or staff attrition. When available, the detailed descriptions for each agency in this document point to how the agency is furthering this plan in FY 2019 and beyond.

Another stated goal of the overall budget request would be to cut burdensome regulations. The document highlights the goal of finding efficiencies in program and project management by reducing unnecessary compliance activities and cutting duplicative and burdensome federal regulations. This is especially noticeable in the infrastructure package, which includes proposals to reduce the burden of the environmental permitting process. Other cost saving proposals seek to spread available funding to more projects, for example, by lowering the salary cap threshold for National Institutes of Health (NIH) awards and reducing the amount of salary eligible for reimbursement on a grant.

With respect to proposed funding levels, the Department of Defense (DOD) would be the clear winner, including a 19 percent requested increase for the Defense Advanced Research Projects Agency (DARPA). With the higher spending caps just approved, this budget request would provide mostly flat funding (the same level as FY 2017) for many of the largest civilian research agencies, such as NIH, the National Science Foundation (NSF), and the Department of Energy's (DOE) Office of Science. This is in contrast to Congress, which is expected to use the higher caps to increase many of these agencies' budgets in the final FY 2018 appropriations bill. Not all programs fare as well in the Trump budget request. In a repeat of last year's recommendation, the request would eliminate several agencies and programs, such as the National Endowment for the Humanities (NEH), the National Endowment for the Arts (NEA), and the

Department of Energy's Advanced Research Projects Agency-Energy (ARPA-E). These recommended eliminations are expected to again be rejected by Congress.

The budget request also seeks to impact education and workforce programs, including by more than doubling the Department of Labor's (DOL) apprenticeship program. Similar to last year, the Department of Education (ED) request would decrease funding that supports college access and affordability, in part to offset proposed increases for programs that enable public and private school choice. Most notably, the request would eliminate the Federal Supplemental Educational Opportunity Grant program, GEAR UP, and Title VI International Education programs, while significantly reducing funding for Federal Work-Study.

While many federal agencies have not released detailed budget justifications explaining how the funding would be fully allocated, the overview below contains an analysis of the information currently available for relevant agencies and programs of interest to the higher education, research, and healthcare communities.

Department of Commerce

National Oceanic and Atmospheric Administration

The President's FY 2019 budget request includes \$4.6 billion in discretionary funding for the National Oceanic and Atmospheric Administration (NOAA), which would be \$1.1 billion or 19.6 percent below the FY 2017 enacted level.

- Similar to the FY 2018 budget request, the Trump Administration again proposes deep cuts to all of NOAA's line offices for FY 2019. Research and coastal resilience activities would be completely dismantled, while the National Weather Service and Fisheries would be relatively protected.
- The President's FY 2019 budget request targets nearly every extramural research program for elimination and would dramatically reduce intramural research activities within Oceanic and Atmospheric Research (OAR). This includes relatively new programs that have been elevated by Congress, such as the Joint Technology Transfer Initiative.
- Because the programmatic cuts and eliminations target signature NOAA programs that enjoy bipartisan support, they are not likely to be adopted by Congress, particularly as several congressional delegations contend with the aftermaths of catastrophic hurricanes, wildfires and mudslides. Programs like Sea Grant and the National Estuarine Research Reserves Systems (NERRS) have traditionally been protected because of the programs' wide geographic distribution.

Proposed Reductions and Terminations

The FY 2019 budget request proposes dramatic cuts and eliminations for signature NOAA extramural research programs across the agency.

Office of Oceanic and Atmospheric Research (OAR)

With OAR proposed for a 37.7 percent reduction, the largest of any line office, almost every research program would be eliminated or reduced. Proposed eliminations include:

- National Sea Grant Program totaling \$62.7 million, including \$9.4 million for the Marine Aquaculture program;
- Climate Competitive Research program totaling \$39.8 million;
- Arctic research and modeling of ecosystem and fisheries vulnerabilities within Climate Research;
- Vortex-Southeast tornado program;
- Airborne Phased Array Radar program;
- Autonomous underwater vehicle demonstration testbed, totaling \$1.9 million;
- Environmental Genomics Program;
- Unmanned Aircraft Systems Program Office;
- Airborne Phased Array Radar;
- Joint Technology Transfer Initiative; and
- Extramural funding for the global ocean observing system within Ocean Exploration Research, which overall would be cut by 45 percent.

National Ocean Service (NOS)

The budget request would terminate several coastal sustainability programs, including the **Coastal Science Assessment; Response and Restoration competitive research program; Coastal Zone Management Grants**; and the **Regional Coastal Resilience Grants Program**. The budget request would also terminate funding for the **National Estuarine Research Reserves System (NERRS)** totaling \$23.3 million, although it would continue to provide national coordination, as well as in-kind support. A decrease of \$1.9 million is proposed for the **Navigation, Observations, and Positioning account** to discontinue single-year cooperative agreements for joint ocean and coastal mapping centers: the budget request indicates that NOAA will continue this work through the Joint Hydrographic Center and other facilities. The **Regional Geospatial Modeling Grants** program is also proposed for termination.

National Weather Service (NWS)

The NWS would experience a 4.2 percent cut overall, with a \$15 million decrease proposed through operational efficiencies, including “workforce savings”. The **Observations account** would be decreased by \$15.5 million, impacting the **National Mesonet Program**, to focus on “only the highest-priority geographic areas.”¹ The **Climate Prediction Center** would be consolidated into the Weather Prediction Center (WPC) for a decrease totaling \$1.2 million. The President’s FY 2019 budget request would reduce investments in **advanced modeling research into operations** by \$5 million and would reduce funding for the **National Water Model**, which launched in 2016.

Satellites

The **National Environmental Satellite, Data, and Information Service (NESDIS)** Operations, Research, and Facilities (ORF) Big Earth Data Initiative (BEDI) would be terminated, totaling \$1.7 million. The NESDIS Procurement, Acquisition, and Construction (PAC) account would receive an overall cut of 28.8 percent compared to the FY 2017 enacted level. This cut accounts for several planned decreases and transfers to ORF for operational support including the **Geostationary Operational Environmental Satellites – R (GOES-R), DSCOVR, and Jason-3**. The budget request would also merge the **Polar Follow On** and **Joint Polar Satellite System (JPSS)** into one new account, Polar Weather Satellites, to ensure programmatic and cost efficiencies, and provide a decrease of \$230.6 million overall compared to the FY 2017 enacted level.

Similar to the FY 2018 budget requests, the NOAA Office of Education **Competitive Education Grants** and the **Educational Partnership Program with Minority Serving Institutions Grants** would both be terminated.

New and Signature Initiatives

The NOS Coastal Science Assessment, Response and Restoration account would receive an increase of \$1.7 million or 2.4 percent compared to the FY 2017 enacted level. Within this account, the request would provide \$1.2 million for the **Disaster Preparedness Program (DPP)** to expand the program. Within NESIDS PAC the budget request would provide an increase of \$5 million for the **Space Weather Follow On**, compared to the FY 2017 enacted level of \$5 million, and will support continued work with the Naval Research Laboratory (NRL).

¹ http://www.corporateservices.noaa.gov/nbo/fy19_bluebook/FY19-BlueBook.pdf, NOAA Budget Summary 2019, National Oceanic and Atmospheric Association, 2018 (pg. 42)

Ongoing Areas of Interest

Consistent with the Trump Administration's interest in commercialization, the budget request would provide an increase of \$1 million for the NESDIS **Office of Space Commerce** to facilitate commercial space marketplace, including collecting and publishing standards and requirements for providers. The budget request also proposes an additional \$1 million for NESDIS **System Architecture and Advanced Planning** to "strengthen NOAA's future satellite capabilities"² through planning and evaluations.

Sources: NOAA'S FY 2019 Blue Book can be viewed at

http://www.corporateservices.noaa.gov/nbo/fy19_bluebook/FY19-BlueBook.pdf.

² http://www.corporateservices.noaa.gov/nbo/fy19_bluebook/FY19-BlueBook.pdf, NOAA Budget Summary 2019, National Oceanic and Atmospheric Association, 2018 (pg. 56)

National Oceanic and Atmospheric Administration (NOAA)

(in thousands of \$)

	FY 2017 Enacted	FY 2019 Request	FY 2019 Request vs. FY 2017
NOAA, total	5,677,771	4,562,711	-1,115,060 (19.6%)
Operations, Research, and Facilities	3,367,875	2,937,753	-430,122 (12.8%)
Oceanic and Atmospheric Research (OAR)	474,447	295,651	-178,796 (37.7%)
Climate Research	157,225	98,643	-58,582 (37.3%)
Weather and Air Chemistry	113,313	91,730	-21,583 (19.0%)
Ocean, Coastal, and Great Lakes	30,554	28,560	-1,994 (6.5%)
Sea Grant	72,299	0	-72,299 (100%)
Ocean Exploration Research (OER)	35,901	19,561	-16,340 (45.5%)
National Weather Service (NWS)	976,282	935,196	-41,086 (4.2%)
National Ocean Service (NOS)	515,259	380,053	-135,206 (26.2%)
Coastal Science and Assessment; Competitive Research	9,960	0	-9,960 (100%)
Ocean and Coastal Management & Services: Coastal Management Grants	84,660	0	-84,660 (100%)
National Marine Fisheries Service (NMFS)	848,983	810,484	-38,499 (4.5%)
Procurement, Acquisition, and Construction	2,242,610	1,623,006	-619,604 (27.6%)
National Environmental Satellite, Data, and Information services (NESDIS)	1,967,897	1,400,711	-567,186 (28.8%)

National Institute of Standards and Technology

The President's FY 2019 budget request proposes \$629.1 million for the National Institute of Standards and Technology (NIST), which would be a decrease of \$316.5 million or 33.5 percent below the FY 2018 annualized continuing resolution (CR) level.

- The FY 2019 budget request proposes across-the-board decreases to extramural programs and would focus funding on core research programs. Priority research areas are similar to prior years, with continued focus on advanced manufacturing, cybersecurity, nanotechnology, bioscience, advanced materials, and other emerging technology areas. However, many of these programs would see a reduction in funding.
- NIST would continue to fund its Manufacturing USA Institute and the coordinating activities of the Manufacturing USA network. However, the FY 2019 budget request proposes the elimination of the Hollings Manufacturing Extension Partnership (MEP) program.
- As seen in the FY 2018 appropriations process, Congress is unlikely to support drastic cuts to longstanding and recently reauthorized programs, such as MEP, which was reauthorized through legislation in early 2017.

Proposed Reductions and Terminations

Within the Industrial Technology Services account, the most drastic cut proposed in the request is for the **Hollings Manufacturing Extension Partnership (MEP)** and would eliminate funding for centers in FY 2019 and require "a 100 percent reduction of NIST MEP federal employees who support and administer the MEP."³ The budget request would require MEP centers to be entirely self-supporting.

The **Scientific and Technical Research and Services** account, which provides funding to NIST's laboratory programs and many extramural programs, would see a 16.3 percent reduction as compared to the FY 2018 CR level. The budget request would eliminate the following initiatives: the **Greenhouse Gas and Climate Measurements** program, including **Urban Dome**; **Forensic Science Program Management**, associated committees, and the **Forensic Science Center of Excellence**; the **Fire Grants** program; and research in **disaster resilience**, including earthquake research. While university research collaborations with NIST are featured in the budget request, many of the contracts and grants to research universities are proposed to be terminated.

³ http://www.osc.doc.gov/bmi/budget/FY19CBI/NIST_and_NTIS_FY2019_President's_Budget_for_508_comp.pdf, *National Institute of Standards and Technology FY 2019 Budget Submission to Congress*, National Institute of Standards and Technology, 2018 (pg. 63)

Ongoing Areas of Interest

The budget request states that within the Scientific and Technical Research and Services account, NIST will “prioritize efforts to expand and strengthen its research efforts in the following areas:”⁴ Bioeconomy, Internet of Things, Artificial Intelligence, and Quantum Measurements.

Manufacturing USA

The budget request includes \$15.1 million for Manufacturing USA, a decrease of \$10 million over the FY 2018 CR level. This level includes \$10 million to support the National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL) at the planned level of \$70 million over five years and would continue to support coordination of the network of Manufacturing USA Institutes at \$5.1 million. However, the topline reduction would prevent NIST from awarding any further institutes.

Sources: NIST’s FY 2019 Budget Request is available at

http://www.osc.doc.gov/bmi/budget/FY19CBI/NIST_and_NTIS_FY2019_President's_Budget_for_508_comp.pdf.

National Institute of Standards and Technology (in thousands of \$)

	FY 2018 Annualized CR	FY 2019 Request	FY 2019 Request vs. FY 2017
NIST, Total	945,535	629,072	-316,463 (33.5%)
Scientific and Technical Research and Services	685,314	573,429	-111,885 (16.3%)
Industrial Technology Services	151,961	15,094	-139,867 (90.1%)
Manufacturing USA	24,830	15,094	-9,736 (39.2%)
Hollings Manufacturing Extension Partnership	127,131	0	-127,131 (100%)

⁴ http://www.osc.doc.gov/bmi/budget/FY19CBI/NIST_and_NTIS_FY2019_President's_Budget_for_508_comp.pdf, National Institute of Standards and Technology FY 2019 Budget Submission to Congress, National Institute of Standards and Technology, 2018 (pg. 17)

Economic Development Administration

The President's budget request for FY 2019 once again proposes the elimination of the Economic Development Administration (EDA). The budget request would provide \$15 million for an orderly closeout of agency functions in FY 2019.

- The President's FY 2019 budget request would eliminate EDA and devote funding for the agency to offset the costs of national security priorities.
- The elimination of EDA would be a major setback to the federal government's support for programs to advance public works projects and stimulate innovation-based economic growth.
- During the FY 2018 appropriations process, Congress rejected the President's budget proposal to eliminate EDA. While Congress is unlikely to support any future attempts to eliminate the agency, the FY 2019 budget request reflects the diminished role EDA plays in the Administration's economic development priorities.

The proposed elimination of EDA is consistent with President Trump's FY 2018 budget request. The move is part of a broad effort by the Administration to eliminate economic development programs across the federal government that it considers to be duplicative. The budget request cites the expiration of EDA's authorization authority in 2008 and perceived lack of transparency in awarding grants as justifications to eliminate the agency.⁵

Last year, Congress largely rejected the cuts proposed in the president's budget request, providing support for several key programs of interest to universities. While Congress may not support EDA's elimination, the budget request illustrates that the Administration does not prioritize EDA and will continue to cut its funding. This pressure from the Administration may lead to the continued winding down of operations, decreased staff, and eventual funding delays for major initiatives in FY 2019.

Sources: The Economic Development Administration FY 2019 Congressional Budget Request is available at http://www.osec.doc.gov/bmi/budget/FY19CBI/EDA_FY2019_President's_Budget_FINAL.pdf.

⁵ <https://www.whitehouse.gov/wp-content/uploads/2018/02/msar-fy2019.pdf>, *An American Budget: Major Savings and Reforms*, Office of Management and Budget, 2018 (pg. 19)

Economic Development Administration
(in thousands of \$)

	FY 2017 Actual	FY 2019 Request	FY 2019 Request vs. FY 2017
EDA, total	266,000	14,937	-251,063 (94.4%)
Economic Development Assistance Programs	237,000	0	-237,000 (100.0%)
<i>Public Works</i>	100,000	0	-100,000 (100.0%)
<i>Economic Adjustment Assistance Program</i>	35,000	0	-35,000 (100.0%)
<i>Regional Innovation Program</i>	17,000	0	-17,000 (100.0%)
<i>Partnership Planning</i>	31,500	0	-31,500 (100.0%)
<i>Technical Assistance Program</i>	9,000	0	-9,000 (100.0%)
<i>Research and Evaluation</i>	1,500	0	-1,500 (100.0%)
Salaries and Expenses	39,000	14,937	-24,063 (61.7%)

Department of Defense

President Trump's FY 2019 budget request would provide \$92.4 billion⁶ for Research, Development, Test, and Evaluation (RDT&E) programs at the Department of Defense (DOD), including \$13.7 billion for Science and Technology (S&T) accounts. Compared to the FY 2017 enacted levels, these amounts would represent an increase of 23.5 percent for RDT&E and a 2.3 percent increase for S&T.

- As expected, the FY 2019 DOD budget request continues to reflect President Trump's commitment to restoring the nation's military superiority. The overall request for DOD is \$686 billion, a \$80 billion increase from the 2017 enacted level.
- While DOD RDT&E would receive a 23.5 percent increase, total S&T accounts (6.1-6.3) would receive a slight increase of 2.3 percent. The budget request demonstrates the DOD's emphasis on systems development and technology transition rather than basic research (6.1), applied research (6.2) and advanced technology development (6.3). However, Defense-Wide RDT&E would receive a 15.2 percent increase, including significant increases for 6.1, 6.2, and 6.3, which would support programs such as missile defense.
- This budget request is the first for Secretary James Mattis, which reflects the recently released National Defense Strategy (NDS).⁷ The NDS states that China and Russia are the United States' primary strategic competitors requiring focus, resources, and priority over the current emphasis on the defeat of ISIS and other terrorist/non-state actors. The budget request states the need for investments to modernize and accelerate the delivery of new capabilities with strategic technologies such new combat vehicles, aviation, missiles, missile defense, undersea autonomy, propulsion technologies, nuclear deterrence and directed energy. Underpinning these efforts will be emphasis on RDT&E for cyber, space, electronic warfare, and artificial intelligence.

The DOD RDT&E account, like in FY 2017, would be significantly increased through the budget request. Within the RDT&E account, the budget request increases the S&T program to \$13.7 billion with an increase to the basic research program (6.1), slight decreases to the applied research program (6.2) and increases to the advanced development program (6.3). The budget request would also use Overseas Contingency Operations (OCO) funding for some 6.2 and 6.3 programs, which it has not done in past years to address counterterrorism efforts removed from the base budget. With the NDS calling for modernization investments, each military Service and the Office of the Secretary of Defense (OSD) approached their modernization plans and S&T investments independently in their overall RDT&E budget plans as described below.

- The **Army's RDT&E** account was increased with significant reductions to its S&T accounts. The Army has stated that to enable its modernization plan, S&T funding needs to be realigned to its new six modernization priorities: long-range missiles, new armored vehicles, high-speed replacements for current helicopters, secure command networks, anti-aircraft and missile defense, and soldier equipment. The budget request illustrates the realignment with a decrease in 6.1, University Research Initiatives, as well as many 6.2 and 6.3 efforts, and the transition of funding to more advanced efforts, including advanced component development and prototypes (6.4) and system development and demonstration (6.5) funding categories. Of note, the Army

⁶ This amount represents the total FY 2019 budget request, including base funding and Overseas Contingency Operations (OCO) funding.

⁷ <https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>, *Summary of the National Defense Strategy of The United States of America*, Department of Defense, 2018

proposes establishing 6.4 funding for the modernization plan's cross-functional teams and synthetic training.

- The **Navy's RDT&E** account would also increase, but with deductions to 6.2 and 6.3 programs to allow for significant increase in System (6.5) and operational systems deployment (6.7) activities, such as system communication upgrades, missile development and demonstration, and upgrades to warfighter aircraft. Unlike the Army, the Navy proposed a slight increase to 6.1 research funding for University Research Initiatives and Defense Research Sciences programs.
- The **Air Force's RDT&E** account would increase significantly, but without substantial impacts to 6.1 and 6.2 activities, despite Secretary of the Air Force Heather Wilson's efforts to bolster connectivity with the National Science Foundation (NSF) for basic research. Further, 6.3 would increase to include propulsion and power, as well as conventional weapons. The largest increase to the Air Force RDT&E budget would be in 6.4 activities, where strategic efforts are proposed for integrated avionics planning and development, cyber resiliency of weapon systems, and ground based strategic deterrent. Additionally, the tech transition program would also significantly increase, and like the other Services, 6.4 investments would increase.
- The **Defense-Wide RDT&E** budget request, which includes programs overseen by OSD, would increase each S&T funding activity. Of note, the Defense Advanced Research Projects Agency (DARPA) and the Defense Threat Reduction Agency (DTRA) would receive large increases, as detailed below, as well as programs including Counter Weapons of Mass Destruction, Manufacturing Technology (ManTech), Defense Innovation Unit Experimental (DIUx), Advanced Aerospace Systems, Space Programs and Technology, and Common Kill Vehicle Technology (missile defense). Basic research would receive increases through DARPA's basic research program, as well as the National Defense Education Program, which is DOD's STEM initiative. For 6.3 and 6.4 programs, investments are proposed for microelectronics, hypersonics, advanced electronics, high energy lasers, and "Test & Evaluation Science & Technology." The increase to Test & Evaluation Science & Technology indicates the need for more research on how to design and develop testing for emerging complex weapon systems that the DOD seeks to field in coming years.

Ongoing Areas of Interest:

Of interest to the university and research community, the basic research account would remain relatively flat with a decrease in the Army offset by increases in the Navy and DARPA. With modernization and technology acceleration being the DOD priority, DOD leaders are showing support by maintaining this investment. Relative to modernization, researchers will find the budget request would provide additional opportunities with the **Defense Threat Reduction Agency (DTRA)**, which would be funded at \$773.5 million, an increase of \$312.5 million above the FY 2017 enacted level. The FY 2019 budget request would include \$37 million for DTRA basic research. Applied research for Counter Weapons of Mass Destruction would receive a nearly \$40 million increase.

Additionally, the **Defense Advanced Research Projects Agency (DARPA)** would receive about \$3.4 billion, a significant increase above the \$2.9 billion enacted in FY 2017. While most programs across the agency would receive increases, electronics technology, advanced aerospace systems, and space programs and technology are among the most significant increases.

Caveats:

It should be noted that Congress is currently working to increase the overall FY 2018 defense budget by raising the *Budget Control Act* caps by \$80 billion in FY 2018 and \$85 billion in FY 2019. With these increases, Lewis-Burke expects additional funding to RDT&E and S&T.

Finally, the proposed cut to Defense Health Research and Development, reflected in the chart below, is due to the President's omission of Congressionally-Directed Medical Research Program funding, which was included in the FY 2017 omnibus appropriations bill. The President's omission of the funding request is standard practice, and Congress traditionally restores the funds, which go toward diseases and conditions affecting service members, veterans, and their families.

Sources: The DOD Budget Request for FY 2019 is available at http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2019/fy2019_r1.pdf

Department of Defense
(in thousands of \$)

	FY 2017 Enacted*	FY 2019 Request	FY 2019 Request vs. FY 2017 Enacted
RDT&E, Total	74,817,436	92,364,681	17,547,245 (23.4%)
S&T, Total	13,395,172	13,700,315	305,143 (2.3%)
6.1, Total	2,198,132	2,269,206	71,074 (3.23%)
6.2, Total	5,124,968	5,100,359	-24,609 (0.5%)
6.3, Total	6,072,072	6,330,750	258,678 (4.3%)
Army RDT&E	8,852,507	10,484,483	1,631,976 (18.4%)
Army 6.1	473,216	445,895	-27,321 (5.8%)
Army 6.2	1,196,132	919,609	-276,523 (23.1%)
Army 6.3	1,351,035	1,026,698	-324,337 (24.0%)
Navy RDT&E	17,851,955	18,649,478	797,523 (4.5%)
Navy 6.1	549,384	597,378	47,994 (8.7%)
Navy 6.2	954,884	891,471	-63,413 (6.6%)
Navy 6.3	811,211	750,995	-60,216 (7.4%)
Air Force RDT&E	28,381,681	40,492,614	12,110,933 (42.7%)
Air Force 6.1	521,594	517,819	-3,775 (0.7%)
Air Force 6.2	1,314,271	1,312,342	-1,929 (0.2%)
Air Force 6.3	792,497	814,797	22,300 (2.8%)

Defense Wide RDT&E	19,542,639	22,517,097	2,974,458 (15.2%)
Defense Wide 6.1	653,938	708,114	54,176 (8.3%)
Defense Wide 6.2	1,659,681	1,976,937	317,256 (19.1%)
Defense Wide 6.3	3,117,329	3,738,260	620,931 (19.9%)
Defense Health R&D	2,101,607	710,637	-1,390,970 (66.2%)

*The amounts shown for FY 2017 Enacted and FY 2019 Request include DOD base funding and the Overseas Contingency Operations (OCO) account.

Department of Education

The President's FY 2019 budget request includes \$63.2 billion in discretionary funding for the Department of Education (ED), which is a decrease of about \$3.6 billion or five percent below the FY 2017 enacted level.

- The FY 2019 budget request would maintain the total maximum individual Pell Grant award at \$5,920, with no inflationary increases, for the 2019-2020 school year and proposes to expand Pell Grants to high-quality, short-term programs.
- Similar to last year's budget request, the FY 2019 budget request would dramatically reduce or eliminate several signature federal student aid programs and benefits, including a complete elimination of the Supplemental Educational Opportunity Grant (SEOG) program, subsidized undergraduate loans, and Public Service Loan Forgiveness (PSLF).
- The budget request proposes the elimination of numerous discretionary grant programs, including Title VI International Education and Foreign Language Studies, Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), and Graduate Assistance in Areas of National Need (GAANN) programs. To date, Congress has consistently funded these grant programs.

New and Signature Initiatives

As noted above, the budget would expand **Pell Grant** eligibility to high-quality, short-term training programs offering certificates and credentialing, such as bootcamps and coding academies. Specific details defining high-quality, short-term programs were not included in the budget request and statutory changes would be necessary to expand the Pell Grant program. The budget addendum would eliminate the cancellation of \$1.6 billion of unobligated balances in the Pell Grant program.

In line with the Administration's on-going priority to expand school choice, the budget request proposes the creation of a new \$1 billion **Opportunity Grants** program to expand elementary and secondary school choice programs within states.

The budget request would provide \$200 million in new grants in support of **STEM education**. This would include \$180 million in new Education Innovation and Research (EIR) grants in STEM education and \$20 million to support a new Career and Technical Education (CTE) program in STEM.

Several programmatic changes proposed in the budget request are aimed at supporting current congressional proposals to reauthorize the *Higher Education Act* (HEA). The budget reiterates the Administration's principles for HEA reauthorization, including ideas such as reforming student loan programs, simplifying the grant allocation process, and promoting free speech on campus.

Proposed Reductions and Terminations

The President's budget request eliminates or streamlines 39 discretionary programs that, "duplicate other programs, are ineffective; or are more appropriately supported with State, local, or private funds."⁸ As noted above, many of ED's signature student aid programs would be dramatically cut. The **Federal Supplemental Educational Opportunity Grant (SEOG)** would be eliminated and the **subsidized Stafford loan** program would be eliminated for loans originating after July 1, 2019.

After inclusion of additional funding from the budget addendum, the **Federal Work-Study (FWS)** program would be significantly cut, to a level of approximately \$500 million. The budget request also proposes to reallocate the current institutional formula for FWS funding, based on an institution's number of Pell-eligible students. The budget request recommends that FWS funds go toward supporting workforce and career-oriented opportunities for low-income undergraduates.

Like last year's budget request, the FY 2019 request proposes replacing current **income-driven repayment** plans with a single plan, which would increase the monthly payment cap for repayment to 12.5 percent of discretionary income. Borrowers with only undergraduate student debt would see any balance remaining after 15 years of repayment forgiven. For borrowers with any graduate debt, any balance remaining after 30 years of repayment would be forgiven. The budget request would also eliminate the **Public Service Loan Forgiveness program**, a program to incentivize graduates to work in public service. Loan and forgiveness changes would start for new loans originating after July 1, 2019.

Other programs proposed for elimination include the **Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP)**, the **Teacher Quality Partnership (TQP)** grant program, and the **Graduate Assistance in Areas of National Need (GAANN)** program.

The FY 2019 budget request would cut the **Institute of Education Sciences (IES)** budget overall by approximately \$80 million from the FY 2017 enacted level, eliminating funding for the Regional Educational Laboratories and statewide longitudinal data systems.

As part of the Trump Administration's executive order to reorganize executive branch departments, the budget request proposes a staffing level of 3,901 full-time employees, which is 200 fewer employees than in 2017. In addition, ED proposes to not fill 50 political appointments. This reduction in staff may lead to delays in grant and policy decisions at the agency.

Ongoing Areas of Interest

TRIO Programs

The budget addendum would provide an additional \$400 million to **TRIO Programs** for a total of \$950 million. This would be level with FY 2017 funding, but the budget request includes a proposal to restructure TRIO from a set of competitive federal grant programs into a single State formula grant program.

⁸ <https://www2.ed.gov/about/overview/budget/budget19/budget-factsheet.pdf>, *FACT SHEET: PRESIDENT TRUMP'S FY 2019 BUDGET*, Department of Education, 2018 (pg. 3)

Minority-Serving Institution Programs

The budget request would consolidate six existing minority serving institution programs under Title III and Title V, including **Developing HSIs** and **Promoting Postbaccalaureate Opportunities for Hispanic Americans (PPOHA)**, into a single consolidated Minority-Serving Institutions (MSI) grant program. The Historically Black Colleges and Universities (HBCUs) grant programs would not be consolidated in the new consolidated MSI program. However, the Title III **Strengthening Institutions** program would be eliminated.

Sources: ED's FY 2018 Budget Summary and Background Information can be viewed at <https://www2.ed.gov/about/overview/budget/budget19/summary/19summary.pdf> and <https://www2.ed.gov/about/overview/budget/budget19/index.html>.

Department of Education (in thousands of \$)

	FY 2017 Enacted	FY 2019 Request	FY 2019 Request vs. FY 2017
ED, Total*	66,775,700	63,201,058	-3,575,000 (5.4%)
Elementary and Secondary Education[†]			
Promise Neighborhoods	73,254	0	-73,254 (100.0%)
Innovation and Improvement[†]			
Education Innovation and Research	100,000	180,000	80,000 (80.0%)
Student Financial Assistance[†]			
Pell Grant [‡]	5,920	5,920	--
SEOG	733,130	0	-733,130 (100.0%)
Federal Work-Study	989,728	500,000	-489,728 (49.5%)
Higher Education[†]			
TRIO Programs	950,000	950,000	--
GEAR UP	339,754	0	-339,754 (100.0%)
GAANN	28,047	0	-28,047 (100.0%)
Teacher Quality Partnership	42,799	0	-42,799 (100.0%)
Developing HSIs	107,795	0	-107,795 (100.0%)
Promoting Post- Baccalaureate Opportunities for Hispanic Americans	9,671	0	-9,671 (100.0%)

Consolidated MSI Grant Proposal [§]	N/A	147,906	N/A
Title VI International Education and Foreign Language Studies	72,164	0	-72,164 (100.0%)
Institute of Education Sciences	605,267	521,563	-83,704 (13.8%)
Research, Development and Dissemination	187,500	187,500	--
Research in Special Education	54,000	54,000	--
Regional Education Laboratories	54,423	0	-54,423 (100.0%)
Statewide Longitudinal Data Systems	32,281	0	-32,281 (100.0%)

* Unless otherwise noted, all funding in chart is discretionary.

[†] Categories included for ease of reading the chart.

[‡] The Pell Grant is listed as the total maximum grant award an individual could receive, including mandatory and discretionary funding. It is *not* listed in thousands of dollars.

[§] Six existing Title III and Title V programs, including Strengthening Alaska Native and Native Hawaiian serving Institutions, Strengthening Predominantly Black Institutions, Strengthening Asian American and Native American Pacific Islander-serving Institutions, Strengthening Native American Nontribal-serving Institutions, Developing Hispanic-Serving Institutions, and Promoting Postbaccalaureate Opportunities for Hispanic Americans would be eliminated, and a new Title III/V Institutional Formula Grant is proposed.

Department of Energy

President Trump's FY 2019 budget request includes \$30.6 billion in discretionary funding for the Department of Energy (DOE), which would be a decrease of \$137 million or 0.4 percent below the FY 2017 omnibus appropriations level. This funding level includes an additional \$1.533 billion for basic research and applied energy programs at DOE proposed in the budget addendum.

- Similar to FY 2018, the FY 2019 budget request prioritizes defense spending over basic research and applied energy programs, consistent with President Trump's goal of boosting military spending. Defense programs, including nuclear weapons modernization and the environmental cleanup of nuclear weapons production, would see an increase of \$2.4 billion or 12 percent above the FY 2017 enacted level, while basic research and applied energy programs would see a reduction of \$1.9 billion or 20 percent below the FY 2017 enacted level.
- The FY 2019 budget request's three top priorities include nuclear weapons modernization (a proposed increase of \$1.8 billion or 20 percent above the FY 2017 enacted level), exascale computing (a proposed increase of \$278 million or 78 percent above the FY 2017 enacted level), and environmental and nuclear waste management (a proposed increase of \$302 million or 4.7 percent above the FY 2017 enacted level, which includes \$120 million to reopen Yucca mountain and establish interim storage facilities). However, the budget request would eliminate the Advanced Research Project Agency-Energy (ARPA-E), reduce funding for most basic research programs, and propose cuts of \$1.9 billion or 47 percent to renewable energy, energy efficiency, nuclear energy, fossil energy, and grid research and development projects. Most of the cuts are targeted at university grants and research and development projects, with funding prioritized for national laboratories and early-state research and development.
- Congress is unlikely to support the proposed funding reductions and elimination of major programs, like ARPA-E, which share broad bipartisan support.

Proposed Reductions and Terminations

With the exception of **Advanced Scientific Computing Research (ASCR)**, the FY 2019 budget request proposes reductions in research funding for the five other **Office of Science** programs, with the single biggest reduction for **Biological and Environmental Research**, which would be cut by \$112 million, or 18 percent. Funding for the other Office of Science programs was diverted to accommodate a \$252 million increase to ASCR, primarily to accelerate the deployment of the first exascale computing system by 2021. Without the last-minute addition of \$1.2 billion in funding for the Office of Science as part of higher discretionary spending caps set by Congress, the cuts to the Office of Science programs would have been much more severe.

Consistent with FY 2018, the FY 2019 budget request proposes terminating **ARPA-E**. The FY 2019 budget request also proposes significant cuts to all of the applied energy programs—renewable energy, energy efficiency, fossil energy, nuclear energy, and grid modernization research and development. The most significant decrease is to energy efficiency and renewable energy programs, which are proposed to be cut by \$1.3 billion or 65 percent. The cuts to those two programs would have been much more severe without the addition of \$200 million for fossil energy research and development and \$120 million for energy efficiency and renewable energy programs in the budget addendum. Similar to the FY 2018 budget request, the FY 2019 budget request would fund only early-stage research and development, which is defined as investments that would take five to 15 years before transformational technologies,

materials, and processes would enter the marketplace. Another major shift in funding priorities would be to broaden support for the national laboratories, which would come at the expense of universities. Historically, DOE has maintained a balance in research funding between the national laboratories and universities under the Office of Science, and about 20 percent has typically been provided to universities for applied energy research and development.

New and Signature Initiatives

The FY 2019 budget request proposes a major reorganization to the Office of Electricity Delivery and Energy Reliability that would split its responsibilities into two different offices. The proposed Office of Electricity would focus on grid reliability issues while the proposed Office of Cybersecurity, Energy Security, and Emergency Response would focus on cybersecurity of the grid and DOE's statutory responsibilities for helping energy utilities recover from natural or man-made disasters.

Ongoing Areas of Interest

Exascale and Next Generation Computing

The highest research priority in the budget request is exascale computing. The budget request would provide \$636 million for the exascale initiative, an increase of \$278 million or 78 percent above the FY 2017 enacted level. This would include \$473 million within the Office of Science and \$163 million within the National Nuclear Security Administration (NNSA). The goal is to deploy the first exascale system at Argonne National Lab in 2021 and a second exascale system at Oak Ridge National Lab in 2022. This would still be two years ahead of the FY 2017 schedule.

The budget request also proposes continued investments and emphasis on quantum computing as the most promising post-Moore's law technology for DOE applications. The FY 2019 budget request proposes \$105 million to advance quantum information science, which includes quantum computing and quantum sensors.

Sources: DOE's FY 2019 Budget Summary can be viewed at <https://energy.gov/articles/president-trump-releases-fy-2019-budget-request>.

Department of Energy
(in millions of \$)

	FY 2017 Enacted*	FY 2019 Request	FY 2019 Request vs. FY 2017
DOE, Total	30,746	30,609	-137 (0.4%)
Science	5,392	5,392	0
Advanced Scientific Computing Research	647	899	252 (38.9%)
Basic Energy Sciences	1,872	1,850	-22 (1.1%)
Biological and Environmental Research	612	500	-112 (18.3%)
Fusion Energy Sciences	380	340	-40 (10.5%)
High Energy Physics	825	770	-55 (6.6%)
Nuclear Physics	622	600	-22 (3.5%)
Workforce Development for Teachers and Scientists	20	19	-1 (5%)
Science Laboratories Infrastructure	130	127	-3 (2.3%)
ARPA-E	306	0	-306 (100%)
EERE	2,090	696	-1,394 (66.6%)
Electricity Delivery and Energy Reliability†	230	157	-73 (31.7%)
Nuclear Energy	1,017	757	-260 (25.5%)
Fossil Energy	668	502	-166 (24.8%)
National Nuclear Security Administration	12,938	15,091	2,153 (16.6%)
Weapons Activities	9,246	11,017	1,771 (19.1%)
Defense Nuclear Non-proliferation	1,883	1,863	-20 (1%)

*The amounts shown for FY 2017 Enacted are taken from the Consolidated Appropriations Act, 2017 (P.L. 115-31), which reflect the most current spending levels for FY 2017.

†The FY 2019 budget request proposes splitting this office into the Office of Electricity and the Office of Cybersecurity, Energy Security, and Emergency Response.

Department of Health and Human Services

National Institutes of Health

The President's FY 2019 budget request includes \$35.517 billion for the National Institutes of Health (NIH), which is a \$1.288 billion (3.8 percent) increase above the FY 2017 level.

- In a departure from the FY 2018 budget request, the FY 2019 request does not propose capping facilities and administrative (F&A), or indirect, cost rates. The Department of Health and Human Services (HHS) budget document notes that Congress prohibited NIH from implementing the proposed reforms and from further study or reform of indirect costs rate reforms at NIH.
- The total proposed funding for NIH includes \$730 million for three new institutes, which are agencies transferred from elsewhere within HHS, and \$750 million for opioid research. Included in the opioid research funding is \$400 million for a new public-private partnership with pharmaceutical companies and \$350 million for dedicated research at NIH on opioids, serious mental illness, and pain-related research.
- The budget request would lower the salary cap from \$187,000 to \$152,000, which was proposed in the previous year's budget request and rejected by Congress. In addition, the budget request proposes capping the percentage of an investigator's salary that can be paid with grant funds at 90 percent of total salary.
- The budget request highlights the need to support early- and mid-career investigators, particularly those at risk of losing all NIH funding, and would create a dedicated fund of \$100 million in the Office of the Director from which institutes and centers (ICs) could draw to supplement their Next Generation Research Initiative efforts.

Proposed Reductions and Terminations

While the NIH program level in the budget request reflects a 3.7 percent increase above FY 2017, this includes funding for three new institutes, and Congress is unlikely to support these proposals. The budget request moves the Agency for Healthcare Research and Quality (AHRQ) into NIH and renames it the National Institute for Research and Quality to be funded at \$380 million. The Administration made this same proposal last year, but it was not considered by Congress and was dismissed by appropriators as an action that the authorizing committees that oversee NIH structure would have to undertake. In addition to AHRQ, the Administration also proposes adding the National Institute for Occupational Safety and Health (NIOSH) and the National Institute of Disability, Independent Living, and Rehabilitation Research (NIDILRR) to NIH at \$255 million and \$95 million, respectively. Pulling out these funds and \$750 million for opioid research funding would leave approximately \$34 billion for other NIH research, which is level funding with FY 2017.

Of note, following the enactment of the budget agreement on February 9 that provided additional discretionary funding for FY 2019, the Administration restored \$9.2 billion to the NIH FY 2019 budget request that was slated to be cut. While language in the budget request directs the additional \$9.2 billion to the NIH Office of the Director and gives the director the authority to "support high priority research areas," the table accompanying the NIH and reproduced below, provides an "illustrative

allocation of those resources” among the ICs.⁹ Congress is not likely to accept this suggested distribution of funding, but rather will provide similar increases for each IC with larger increases for institutes supporting opioid research, such as the National Institute on Drug Abuse, and for the National Institute on Aging, which administers Alzheimer’s disease research funding.

Other Areas of Interest

Of significance for the NIH grantee community, the FY 2019 budget request does not propose capping F&A costs on NIH awards. The budget request notes that Congress prohibited NIH and HHS from making any changes to F&A cost rates as part of the FY 2018 appropriations process. Like last year, the budget request does propose limiting the amount of grant dollars that can be used to support investigator salaries. With the goal of “stretching the grant dollar further,” the budget request proposes to lower the salary cap on NIH awards to \$152,000 from \$187,000 and would cap the percentage of an investigator’s salary that can be paid with grant funds at 90 percent.¹⁰ During the FY 2018 appropriations process, Congress rejected the Administration’s proposal to lower the salary cap on NIH awards.

Within the \$750 million directed for opioid research at NIH, which would be part of the HHS-wide \$10 billion investment to combat the opioid epidemic, the budget request highlights the public-private partnership between NIH, the Food and Drug Administration (FDA), and ten pharmaceutical companies that would be funded at \$400 million. This partnership is managed by the Foundation for NIH and seeks to develop new medications to treat opioid misuse and accelerate the development of non-addictive pain therapies. It is anticipated that Congress will direct considerable funding to this effort in the final FY 2018 omnibus to officially launch the partnership.

The budget request cites this initiative and the Accelerating Medicine Partnership (AMP), which is focused on treatment of Alzheimer’s, type 2 diabetes, and autoimmune disorders, as ways that public-private partnerships “can create efficiencies of scale and facilitate development of innovative technologies or treatments, thereby increasing the base of biomedical research.”¹¹ It notes that these types of partnerships also “ensure NIH’s careful stewardship of public funds and increase the pace of research to benefit patients more quickly.”¹²

Additionally, the budget request allocates \$50 million for prize competitions, including the EUREKA Prize competition, which was created in the 21st Century Cures Act. NIH has begun implementing this new program by seeking public input on prizes in specific research areas related to Alzheimer’s disease and related dementias. The budget request also directs \$30 million toward the next phase of its data science activities. This would build upon the Big Data to Knowledge (BD2K) activities that included extramural Centers of Excellence, the data commons pilot, and enhanced training of data scientists and bioinformaticians.

⁹ <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>, HHS Budget in Brief, U.S. Department of Health and Human Services, 2018, (pg. 41)

¹⁰ <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>, HHS Budget in Brief, U.S. Department of Health and Human Services, 2018, (pg. 44)

¹¹ <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>, HHS Budget in Brief, U.S. Department of Health and Human Services, 2018, (pg. 42)

¹² <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>, HHS Budget in Brief, U.S. Department of Health and Human Services, 2018, (pg. 42)

Of note, the budget request states support for “the continued execution of the largest change management initiative in the history of NIH. These activities will harmonize the agency’s internal functions and better ensure administrative operations effective and efficient.”¹³ No further specific details are provided in the budget request; however, additional details may be forthcoming from OMB.

Sources:

The HHS Budget in Brief section on NIH can be found on pages 40-46 at

<https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>.

The section regarding NIH in the Addendum to the President’s FY19 Budget to Account for the Bipartisan Budget Act of 2018 can be found on page 2 and 6 at <https://www.whitehouse.gov/wp-content/uploads/2018/02/Addendum-to-the-FY-2019-Budget.pdf>.

¹³ <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>, HHS Budget in Brief, U.S. Department of Health and Human Services, 2018, (pg. 44)

National Institutes of Health
(in thousands of \$)

	FY 2017 Actual	FY 2019 Request	FY 2019 Request vs. FY 2017
NIH, Total	34,229,000	35,517,000	1,288,000 (3.8%)
National Cancer Institute (NCI)	5,660,000	5,626,000	-34,000 (0.6%)
National Heart, Lung, and Blood Institute (NHLBI)	3,210,000	3,112,000	-98,000 (3.1%)
National Institute of Dental and Craniofacial Research (NIDCR)	425,000	413,000	-12,000 (2.8%)
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)	2,010,000	1,965,000	-45,000 (2.2%)
National Institute of Neurological Disorders and Stroke (NINDS)	1,779,000	1,839,000	60,000 (3.4%)
National Institute of Allergy and Infectious Diseases (NIAID)	4,906,000	4,762,000	-144,000 (2.9%)
National Institute of General Medical Sciences (NIGMS)	2,646,000	2,573,000	-73,000 (2.8%)
Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)	1,377,000	1,340,000	-37,000 (2.7%)
National Eye Institute	731,000	711,000	-20,000 (2.7%)
National Institute of Environmental Health Sciences (NIEHS)	790,000	747,000	-43,000 (5.4%)
National Institute on Aging (NIA)	2,049,000	1,988,000	-61,000 (3.0%)
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)	557,000	545,000	-12,000 (2.2%)
National Institute on Deafness and Other Communications Disorders (NIDCD)	436,000	424,000	-12,000 (2.8%)
National Institute of Mental Health (NIMH)	1,605,000	1,612,000	7,000 (0.4%)
National Institute on Drug Abuse (NIDA)	1,071,000	1,137,000	66,000 (6.2%)
National Institute on Alcohol Abuse and Alcoholism (NIAAA)	482,000	469,000	-13,000 (2.7%)
National Institute on Nursing Research (NINR)	150,000	146,000	-4,000 (2.7%)
National Human Genome Research Institute (NHGRI)	528,000	513,000	-15,000 (2.8%)

National Institute of Biomedical Imaging and Bioengineering (NIBIB)	357,000	347,000	-10,000 (2.8%)
National Institute on Minority Health and Health Disparities (NIMHD)	288,000	281,000	-7,000 (2.4%)
National Center for Complementary and Integrative Health (NCCIH)	134,000	131,000	-3,000 (2.2%)
National Center for Advancing Translational Sciences (NCATS)	704,000	685,000	-19,000 (2.7%)
John E. Fogarty International Center (FIC)	72,000	70,000	-2,000 (2.8%)
National Library of Medicine (NLM)	407,000	395,000	-12,000 (2.9%)
Office of the Director (OD)	1,729,000	2,004,000	275,000 (15.9%)
Building Facilities	129,000	200,000	71,000 (55.0%)
Additional Opioids Allocation	N/A	750,000	750,000 (N/A)
National Institute for Research on Safety and Quality*	N/A	380,000	380,000 (N/A)
National Institute for Occupational Safety and Health†	N/A	255,000	255,000 (N/A)
National Institute on Disability, Independent Living, and Rehabilitation Research†	N/A	95,000	95,000 (N/A)

* The President's Budget Request proposes that the Agency for Healthcare Research and Quality (AHRQ) be consolidated into the National Institutes of Health and renamed the National Institute for Research on Safety and Quality.

† The President's Budget Request proposes that the National Institute for Occupational Safety and Health (including the Energy Employee Occupational Injury Compensation Act program), formerly under the Centers for Disease Control and Prevention, and the National Institute on Disability, Independent Living, and Rehabilitation Research, formerly under the Administration for Community Living, be consolidated into the National Institutes of Health.

Food and Drug Administration

The president's FY 2019 budget request would provide \$3.25 billion in discretionary funding for the Food and Drug Administration (FDA), an increase of \$454 million (16.2 percent) above the FY 2017 level.

- The budget request would provide \$10 million for the FDA's efforts to combat the opioid epidemic by developing new tools to prevent misuse and abuse of these prescription drugs as well as new clinical studies on medication-assisted treatments.
- Proposed changes in the budget request would create new exclusivity rules for generic drugs, consistent with President Trump's messaging about trying to bring down the cost of drugs for consumers.
- The budget request's support for FDA programs is likely a reflection of the Administration's prioritization of addressing high drug prices.

Proposed Reductions and Changes

The President's budget request proposes only one reduction in the topline funding levels, an elimination of the \$10 million which currently supports Emerging Health Threats. No explanation was specifically provided for this reduction, but as the FDA has a Medical Countermeasures Initiative (MCMi) that has been highlighted by FDA Commissioner Scott Gottlieb, advancing medical countermeasures appears to still be a priority overall. However, following the enactment of the budget agreement on February 9 that provided additional discretionary funding for FY 2019, the Administration recommended a \$500 million plus up to the overall discretionary FY 2019 FDA budget request, which otherwise would have had roughly level funding across the programs.

The other notable change proposed in the FDA budget proposal is a modification to the exclusivity rule for generic drugs. This rule change is intended to create competition among pharmaceutical manufacturers by giving first-to-file generic drug applicants a 180-day exclusivity period whereby if they fail to get clear FDA approval, other generics seeking approval for the same market would not be blocked by that pending first-filed generic. This proposed regulatory change is intended to help accelerate the rate at which generic drugs are approved and brought to market, which is one of many changes in the budget request that seek to address high drug prices. However, many other groups are already expressing concern at unintended consequences of such a policy change.

New and Signature Initiatives

The only funding dedicated to a new priority is \$10 million for the FDA to leverage its capabilities in regulatory science and clinical trial evaluation to focus on medication-assisted treatments and other interventions to reduce the misuse and abuse of opioids. This is part of the \$10 billion initiative across multiple agencies to combat the opioid epidemic.

The budget request would provide \$20 million for the new Oncology Center of Excellence, which was established by the *21st Century Cures Act*. This center uses an integrated approach to bring together regulatory scientists and reviewers to accelerate the development and regulation of oncology products for patients with cancer. Other priorities highlighted are an ongoing commitment to tobacco cessation,

medical countermeasures, food safety, and other supports for research infrastructure and salary support needed to grow FDA's workforce.

Sources: FDA FY 2019 budget materials can be found at <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>.

Food and Drug Administration
(in thousands of \$)

	FY 2017 Actual	FY 2019 Request	FY 2019 Request vs. FY 2017
FDA, Total	4,754,000	5,799,000	1,045,000 (22.0%)
FDA, Discretionary	2,800,000	3,254,000	454,000 (16.2%)

Department of Health and Human Services (Other)

The President's FY 2019 budget request for the Department of Health and Human Services (HHS) includes \$95.4 billion in discretionary budget authority and \$1.1 trillion in mandatory funding.

- The President's budget request would consolidate spending on Medicare graduate medical education (GME), Medicaid GME, and Children's Hospitals Graduate Medical Education (CHGME) into a single program starting in FY 2019.
- As part of its streamlining efforts, the President's budget request would consolidate the Agency for Healthcare Research and Quality (AHRQ), the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), and the National Institute for Occupational Safety and Health (NIOSH) into NIH.
- The President's budget request proposes \$10 billion to support the "Opioid Crisis and Serious Mental Illness Initiative," a new department-wide program which would build on HHS activities under the *21st Century Cures Act* and the *Comprehensive Addiction and Recovery Act*, as well as invest in innovative research on pain and addiction.
- The President's budget request would again significantly reduce funding for Title VII health professions programs and Title VIII Nursing Workforce Development Programs at the Health Resources and Services Administration (HRSA). Most of the programs would be eliminated, except for NURSE Corps and the National Health Service Corps.

Proposed Reductions and Terminations

Title VII Health Professions and Title VIII Nursing Workforce Development at HRSA

As it proposed in FY 2018, the President's FY 2019 budget request would significantly reduce funding for Title VII health professions programs and Title VIII Nursing Workforce Development Programs at HRSA, eliminating most of the programs except for NURSE Corps and National Health Service Corps. In its justification for eliminating funding for the programs, the Administration stressed that "these programs have been in existence for decades and most operate under expired authorizations. There is little evidence that these programs significantly improve the Nation's health workforce."¹⁴ Congress has demonstrated little appetite for eliminating the Title VII and VIII programs in FY 2018 and given that bipartisan efforts are underway to reauthorize them, it is unlikely to eliminate the programs' funding in FY 2019.

Graduate Medical Education

The President's budget request would consolidate spending on Medicare GME, Medicaid GME, and Children's Hospitals Graduate Medical Education (CHGME) into a single program starting FY 2019. According to HHS, the single grant program would be administered jointly through the Centers for Medicare and Medicaid Services (CMS) and HRSA. Funding would equal the GME payments for all three programs in 2016 (adjusted for inflation) and then grow at the Consumer Price Index (CPI) for all Urban

¹⁴ <https://www.govinfo.gov/content/pkg/BUDGET-2019-MSV/pdf/BUDGET-2019-MSV.pdf>, Fiscal Year 2019 Efficient, Effective, Accountable An American Budget Major Savings and Reforms, Office of Management and Budget, 2018 (Pg. 42)

Consumers minus one percentage point each year.¹⁵ This consolidation does not include Teaching Health Center Graduate Medical Education. The new program would be capped. According to the budget request, funding would go to hospitals that are committed to building a strong medical workforce and would be targeted to address medically underserved communities and health professional shortages.¹⁶

AHRQ, NIDILRR, and NIOSH Consolidation to NIH

Noting the importance of funding the “highest priority scientific discoveries while also maintaining fiscal responsibility” the President’s FY 2019 budget request would consolidate activities of the Agency for Healthcare Research and Quality (AHRQ), National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), and the National Institute for Occupational Safety and Health (NIOSH) into NIH. The proposed move for NIDILRR comes less than four years after it was transferred from the Department of Education to the Administration for Community Living (ACL) at HHS.

While the President’s budget proposal would essentially move activities at NIOSH to NIH, not all activities would be included in this transition. The budget request proposes eliminating activities at NIOSH that the Administration considers having less of a direct public health impact, while continuing to support “the highest priority” occupational safety and health research through NIH. Slated for elimination under NIOSH would be the Education and Research Centers (ERCs) and “other activities where NIOSH does not have enforcement action, or where the private sector or other Federal partners could more effectively conduct these activities.” Relating to ERCs, the budget request indicates that it would also end direct federal funding to support academic salaries, stipends, and tuition and fee reimbursements for occupational health professionals at universities. This was also included in the FY 2018 budget request.

Prevention and Public Health Programs at the Centers for Disease Control and Prevention (CDC)

Similar to FY 2018, the President’s budget request again proposes a new \$500 million block grant to states entitled *America’s Health Block Grant* to address public health challenges specific to their state. To date, Congress has not supported this proposal. This proposal was criticized by some, such as former CDC Director Tom Frieden, as stymieing CDC efforts to respond to public health challenges. In addition, the budget request proposes \$939 million for Chronic Disease Prevention and Health Promotion, which is \$175 million (15.7 percent) below the FY 2017 level. The budget would also reduce funding for injury prevention and control to \$266 million in FY 2019, which is \$20 million (7.0 percent) below FY 2017 and funding for Environmental Health to \$157 million, which is \$58 million (27.0 percent) below FY 2017.

New and Signature Initiatives

Prescription Drug Costs

One of the key themes of the President’s FY 2019 budget request is the focus on reducing the cost of prescription drugs. The request offers several proposals focused on addressing drug pricing. This was also a key theme during Senate confirmation hearings for the newly appointed HHS Secretary Alex Azar. Notably, one of the proposals in the budget request is preventing first-to-file generic drug applicants from blocking other generics from entering the market beyond the 180-day exclusivity period. The

¹⁵ <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>, HHS Budget in Brief, Department of Health and Human Services, 2018 (pg. 55)

¹⁶ <https://www.whitehouse.gov/wp-content/uploads/2018/02/budget-fy2019.pdf>, Fiscal Year 2019 Efficient, Effective Accountable an American Budget, Office of Management 2018 (pg. 55)

budget request also proposes eliminating cost-sharing for generic drugs for low-income beneficiaries, requires all Part B drug manufacturers to report Average Sales Price (ASP) data and would penalize drug manufacturers that do not report. The budget request would also place a limit on increases in Medicare's payment rate for a Part B drug based on inflation as measured by the consumer price index.¹⁷ Not included in the budget request are controversial proposals such as prescription drug reimportation.

In addition, the President's budget request proposes a new Medicaid demonstration allowing up to five states to negotiate prices with manufacturers. Specifically, "participating States would determine their own drug formularies, coupled with an appeals process to protect beneficiary access to non-covered drugs based on medical need, and negotiate drug prices directly with manufacturers."¹⁸ According to a blog in *Health Affairs*, many state Medicaid programs are worried that pharmaceutical spending has become an unsustainable part of their budget and are seeking ways to control their costs in this area. However, they also point out that at present, pharmaceutical coverage is an optional benefit under the Medicaid program, and therefore are not required to participate in the Medicaid Drug Rebate Program, although all have chosen to do so, and choosing to do so comes with a set of requirements.¹⁹

Ongoing Areas of Interest

Hospital Outpatient Site Neutral Payment Policy

Of interest to academic medical centers, the President's FY 2019 budget request proposes eliminating all exemptions for off-campus hospitals departments. This includes exemptions in the *Bipartisan Budget Act of 2015*, which grandfathered hospital outpatient departments (HOPDs) that were billing or under construction as of November 2, 2015, emergency departments, and cancer hospitals.

Combating the Opioid Epidemic

The budget request would build on initiatives under the *21st Century Cures Act* and the *Comprehensive Addiction and Recovery Act* by providing an additional \$10 billion across HHS to combat the opioid crisis and address serious mental illness. Under the "Opioid Crisis and Serious Mental Illness Initiative," the Office of the Secretary would facilitate and coordinate collaboration across the initiative, using the Department's five-point strategy as a framework, which includes: "Improving access to prevention, treatment, and recovery services, including medication assisted therapies (MAT); Targeting availability and distribution of overdose-reversing drugs; Strengthening our understanding of the epidemic through better public health data and reporting; Supporting cutting edge research on pain and addiction; and Advancing better practices for pain management."²⁰

Under the proposed initiative, the budget request would provide \$750 million to the NIH "to support and supplement existing efforts with a public-private collaborative research initiative on opioid abuse, and to advance opioid-, serious mental illness, and pain-related research." The budget request would

¹⁷ https://www.whitehouse.gov/wp-content/uploads/2018/02/FY19-Budget-Fact-Sheet_Reforming-Drug-Pricing-Payment.pdf 2019 Budget Fact Sheet Lower the Price of Drugs by Reforming Payments, White House, 2018

¹⁸ https://www.whitehouse.gov/wp-content/uploads/2018/02/FY19-Budget-Fact-Sheet_Reforming-Drug-Pricing-Payment.pdf,2019 Budget Fact Sheet Lower the Price of Drugs by Reforming Payments, White House, 2018 (pg.2)

¹⁹ <https://www.healthaffairs.org/doi/10.1377/hblog20180212.852840/full/>, Budget, White Paper Provide Insight Into Trump Administration's Strategy On Drug Pricing, 2018

²⁰ <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>, HHS Budget in Brief, Department of Health and Human Services, 2018 (pg. 2)

also provide \$1.2 billion in funding to SAMHSA to support efforts to improve access to prevention, treatment, and recovery services, as well as initiatives to equip first responders with the proper training of overdose-reversal drugs. Additionally, the budget request would include: \$550 million to support HRSA's activities to expand substance and opioid addiction treatment in high-risk communities; \$175 million to enhance the CDC's surveillance and data reporting activities; \$10 million to accelerate development of abuse-deterrent opioid products at the FDA; and \$150 million to support efforts to prevent and treat opioid abuse in Indian country at the Indian Health Services.

The remaining \$7 billion under the new opioid initiative would be available for the Secretary to transfer across HHS to support other efforts to combat the opioid crisis and address serious mental illness. (Note: additional information on support for opioid response law enforcement activities can be found in the Department of Justice section of this analysis.)

Proposing Work Requirements in Safety-Net Programs

The President's budget request continues the Administration's focus on requirements to move beneficiaries of federal programs into work, such as proposed waivers for work requirements in the Medicaid program that were announced in January. Specifically, the President's budget request would propose new reforms such as requirements that states spend at least 30 percent of federal Temporary Assistance for Needy Families (TANF) and state maintenance-of-effort funds on: work, education, and training activities; work support, including child care; and assessment/service provisions for TANF eligible families. It also proposes a new "welfare to work" demonstration projects partnership between states, localities, and other federal agencies focused on fostering employment, reducing welfare dependency, and promoting child well-being.²¹ Speaker of the House Paul Ryan (R-WI) has been supportive of reforms to entitlements such as TANF, but acknowledges the difficulty of passing such reforms with only a one vote majority in the Senate.

340B Drug Pricing Program Proposals

The budget request would provide \$26 million for the 340B Drug Pricing Program, which would include \$10 million in discretionary funds and \$16 million from a new user fee on drugs purchased by participating 340B entities. This user fee would be focused on program integrity and ensure the program is implemented as intended. The budget request would also broaden regulatory authority over the 340B program and would set "enforceable standards of program participation" and require covered entities to report on the utilization of program savings.

Additionally, the budget request modifies its current regulation that went into effect on January 1. Under this rule, hospital payments for 340B drugs are reduced from ASP +6 percent to the ASP minus 22.5 percent. The Administration has estimated that savings would be about \$1.6 billion. Under the rule, these savings would be redistributed to hospitals, *including non-340B entities*. Under the budget request, CMS would modify payment reductions made to 340B hospitals that meet a minimum level of charity care. More specifically, to receive program payment adjustments related to uncompensated care, hospitals must provide charity care equaling at least one percent of patient care costs. Hospitals that fail to meet this threshold would be ineligible for the redistribution of savings under the program; instead such savings would be put into the Medicare trust fund.

²¹ <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>, HHS Budget in Brief, Department of Health and Human Services, 2018 (pg. 105-106)

Repealing Elements of the Patient Protection and Affordable Care Act

The budget request also reflects the Trump Administration's desire to continue to chip away at the *Patient Protection and Affordable Care Act (ACA)*. The *HHS Budget in Brief* notes that the budget request supports a "market-based health care grant program" focused on stabilizing insurance markets and moving away from the ACA. The budget request proposes replacing Medicaid expansion funding with per-capita cap block grants to states for healthcare coverage. Notably, the budget request specifically supports Congressional passage of the Graham-Cassidy-Heller-Johnson healthcare reform bill, which would have repealed Medicaid expansion.²²

Additionally, the budget request proposes allowing states more flexibility and encourages CMS to refocus Medicaid efforts on "Americans that [the program] was intended to serve – the elderly, people with disabilities, children, and pregnant women."

Assistant Secretary for Preparedness and Response

The Assistant Secretary for Preparedness and Response (ASPR) leads HHS's efforts to prevent and respond to public health emergencies, including natural disasters, emerging infectious diseases, and other public health emergencies. ASPR would receive \$2.2 billion in the FY 2019 budget request, which is an increase of \$722 million above the FY 2018 CR. The FY 2019 budget request explains the Administration's intention to transfer the Strategic National Stockpile (SNS) from CDC to ASPR, which accounts for most of the \$722 million increase.

ASPR's budget also includes the Biomedical Advanced Research and Development Authority (BARDA). For FY 2019, the President requests \$512 million for BARDA to support advanced development of medical countermeasures (MCMs), "including candidates to address threat agents, pharmaceutical based agents, agents to address viral hemorrhagic fever virus threats for Sudan and Marburg, smallpox antivirals, Ebola vaccines and therapeutics, and point-of-care and laboratory diagnostics."²³ Additionally, the budget request would provide an additional \$1 million for BARDA's broad spectrum antimicrobial program, which includes efforts such as the Combating Antibiotic Resistant Bacteria Biopharmaceutical Accelerator (CARB-X), and \$250 million, a \$138 million increase, for efforts to prevent and treat pandemic influenza through BARDA and the HHS Office of Global Affairs. Further, the budget request would provide \$510 for Project Bioshield, which would support advanced development and procurement of MCMs for the SNS.

Sources: <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>, https://www.whitehouse.gov/wp-content/uploads/2018/02/FY19-Budget-Fact-Sheet_Reforming-Drug-Pricing-Payment.pdf, and <https://www.whitehouse.gov/wp-content/uploads/2018/02/budget-fy2019.pdf>.

²² <https://www.cassidy.senate.gov/imo/media/doc/Section%20by%20Section%20Final.pdf>, Graham-Cassidy Section by Section, Senator Bill Cassidy, 2017 (pg. 6-7)

²³ <https://www.hhs.gov/sites/default/files/fy-2019-budget-in-brief.pdf>, HHS Budget in Brief, Department of Health and Human Services, 2018 (pg. 129)

Department of Health and Human Services (Other)
(in millions of \$)

	FY 2017 Enacted*	FY 2019 Request	FY 2019 Request vs. FY 2017
Health Resources and Services Administration (HRSA)	10,458	9,604	-854 (8.2%)
Substance Abuse and Mental Health Services Administration (SAMHSA)	4,258	3,548	-710 (16.7%)
Mental Health Services	1,178	1,065	-113 (9.6%)
Substance Abuse Treatment	2,709	2,113	-596 (22.0%)
Substance Abuse Prevention	222	221	-1 (0.5%)
Agency for Healthcare Research and Quality (AHRQ) †	323	N/A	N/A
Food and Drug Administration (FDA)	4,754	5,799	1,045 (22.0%)
Centers for Disease Control and Prevention (CDC)	12,100	10,921	-1,179 (9.7%)
Chronic Disease Prevention and Health Promotion	1,114	939	-175 (15.7%)
National Institute for Occupational Safety and Health (NIOSH) †	334	N/A	N/A
Environmental Health	215	157	-58 (27.0%)
Indian Health Service (IHS)	6,389	6,626	237 (3.7%)
Administration on Community Living (ACL)	2,040	1,837	-203 (10.0%)
Office for the National Coordinator for Health IT	60	38	-22 (36.7%)
Administration for Children and Families (ACF)	54,789	47,246	-7,543 (13.8%)
Funding to Combat the Opioid Epidemic	N/A	10,000	N/A

*The chart reflects the total program level funding, combining discretionary, mandatory, and pass-through funding.

† AHRQ and NIOSH's funding would be consolidated within NIH.

Department of Homeland Security

President Trump's FY 2019 budget request includes \$47.5 billion in net discretionary funding for the Department of Homeland Security (DHS), which would be an increase of \$5.1 billion or 12 percent over the FY 2017 enacted level.

- As with the President's FY 2018 budget request, the FY 2019 DHS budget request would shift significant funding and resources toward addressing the Trump Administration's priorities of border security and enforcement of immigration laws.
- The DHS Science and Technology (S&T) Directorate, including the Office of University Programs (OUP), would face significant reductions, whereas U.S. Customs and Border Protection (CBP), Immigration and Customs Enforcement (ICE), and U.S. Citizenship and Immigration Services (USCIS) would receive major increases. Reflecting a significant decrease to the S&T Directorate's cyber capabilities and influence, the budget would also shift most of DHS's cybersecurity research from S&T to the National Protection and Programs Directorate (NPPD), the operational arm of DHS responsible for cyber-physical infrastructure protection and information sharing. Within DHS S&T, the Trump Administration would also cut the Office of University Programs by about \$18.8 million and eliminate two existing university-based Centers of Excellence.
- Of the Administration's proposed funding for border security, a large portion is devoted to the construction of a wall on the nation's southern border, which has been strongly opposed by congressional Democrats. This would be accomplished by diverting funds from several other directorates to offset the costs. The Administration has demanded that funding for the wall be included in negotiations with Democrats in exchange for ensuring protections for immigrants affected by the expiring Deferred Action for Childhood Arrivals (DACA) program.

New and Signature Initiatives

The agency's primary research and development (R&D) office, the Science and Technology (S&T) Directorate, would have its role severely curtailed under the proposed reforms in the budget request, which include shifting a sizable portion of S&T's cybersecurity portfolio to the National Protection and Programs Directorate (NPPD). NPPD is the agency's chief operations office, which the Administration has long viewed as the primary DHS entity for civilian cybersecurity and infrastructure protection. NPPD's purview includes the Federal Protective Service, the Office of Cybersecurity and Communications, the Office of Biometric Identity Management (formerly US-VISIT), and the Office of Infrastructure Protection. At this time, it is unclear what this reorganization would mean for existing cybersecurity research programs being administered by the agency, as NPPD traditionally has had a limited role in the agency's R&D capabilities.

In addition, the budget request proposes the transfer of the National Bio and Agro-defense Facility (NBAF) from S&T to the US Department of Agriculture (USDA). The budget request would continue to cover the construction costs of NBAF, which was planned to be DHS's foremost animal disease research facility. Upon completion, USDA would take complete control over the center's operations and research priorities.

These shifts, along with steep spending cuts, are further evidence of the de-prioritization of the DHS S&T Directorate under the Trump Administration.

Proposed Reductions and Terminations

Science and Technology Directorate

Funding for research programs at the S&T Directorate would be reduced nearly 25.4 percent compared to the FY 2017 enacted level. About \$96 million of this reduction would come as a result of shifting NBAF and most of the cyber portfolio from the directorate. As with the FY 2018 request, sizable cuts are proposed for the Research, Development, and Innovation (RD&I) account, which funds activities to develop technologies for the various needs of DHS components. Specific research priorities outlined in the budget request are directed toward the Trump Administration's goals to further advance border security. Proposed projects include R&D on systems to detect opioids and fentanyl at air and land ports of entry (POE) and international mail handling facilities, as well as POE-based upgrades for scanning and detecting illegal cargo and hazardous materials.

Office of University Programs

The Administration has proposed steep cuts to the Office of University Programs (OUP), which funds the Centers of Excellence (COE) and Minority-Serving Institutions program. To accomplish this, OUP would eliminate two current COEs -- the Coastal Resilience Center and the Center for Awareness and Localization of Explosives-Related Threats (ALERT). While previous Administrations' budget proposals have also proposed cuts to the S&T Directorate, particularly OUP, Congress has recognized the importance of these programs and rejected many of the proposed cuts.

Ongoing Areas of Interest

Funding for cybersecurity at DHS would remain roughly flat at about \$1.72 billion, but as with last year, the Administration would largely prioritize investments in internal cybersecurity operations and improvements, while deprioritizing cybersecurity research, development, and education programs at the agency. However, the Administration does recognize the need to educate and train cyber professionals and the agency will continue to fund the Scholarship for Service program, which provides scholarships to students at over 60 universities across the country for up to three years to study cybersecurity.

Late last year, DHS announced the creation of the Countering Weapons of Mass Destruction (CWMD) Office to consolidate the agency's longstanding efforts to detect and combat chemical, biological, radiological, and nuclear threats. Most of the proposed CWMD budget request provides funding for internal materials and services for DHS operational components, but the request also designates about \$80.4 million for CWMD R&D. The R&D would focus on the development of detection technologies and their translation to the field. It is unclear whether this funding is new or if it reflects the consolidation of existing funds from other accounts. This is another instance of the Administration's goal to restructure existing DHS components by issue area.

Sources: The DHS FY 2019 Budget in Brief can be viewed at:

<https://www.dhs.gov/sites/default/files/publications/DHS%20FY19%20BIB.pdf>.

The DHS Congressional Budget Justification for FY 2019 can be viewed at:

<https://www.dhs.gov/publication/congressional-budget-justification-fy-2019>.

Department of Homeland Security
(in thousands of \$)

	FY 2017 Enacted*	FY 2019 Request	FY 2019 Request vs. FY 2017
DHS, Total*	42,420,610	47,522,467	5,101,857 (12%)
Science and Technology Directorate	781,746	583,283	-198,463 (25.4%)
University Programs	40,500	21,746	-18,755 (45.3%)

* Reflects Adjusted Net Discretionary Budget Authority in the DHS FY 2019 Budget in Brief

Department of Justice

The President's FY 2019 budget request would provide \$28.0 billion in discretionary funding for the Department of Justice (DOJ), \$70.3 million or 4.2 percent below the FY 2018 continuing resolution (CR) level.²⁴

- The budget request would again leverage DOJ to address perceived threats to American security identified by the Trump Administration, as significant resources would be shifted toward combatting illegal immigration, violent crime, and the opioid epidemic.
- The budget request would provide substantial funding increases for the hiring of federal attorneys and border security forces to carry out the President's enhanced immigration proposals, as well as significant support for federal law enforcement operations, including the Federal Bureau of Investigation (FBI), the U.S. Marshals Service, and the Drug Enforcement Administration (DEA). The budget request proposes significant savings through merging administrative support and grant management for several DOJ programs. As part of this effort, the Department would consolidate the Office of Community Oriented Policing Services (COPS Office) into the Office of Justice Programs (OJP).
- The FY 2019 DOJ budget request would provide support for immigration priorities embraced by the Republican-controlled Congress without funding for the construction of a border wall. Democrats will likely object to the Department's proposed shuttering of the Community Relations Service, a longtime civil rights office focused on easing community tensions over race, gender, religion, etc.

New and Signature Initiatives

The budget priorities outlined in the FY 2019 request largely mirror those included in the Administration's FY 2018 request. While overall funding for DOJ would decrease, the budget request proposes significant funding increases for the prosecution, transfer, and detention of undocumented immigrants, as well as staffing and equipment for federal law enforcement agencies and programs to combat the opioid epidemic. This includes \$103 million for programs authorized by the *Comprehensive Addiction Recovery Act* (CARA), which among other provisions, would provide support to state, local, and tribal governments to provide training for the administration of opioid treatments, enhance collaborations between criminal justice and substance abuse agencies, and explore treatment alternatives to incarceration.

The budget request would also prioritize programs to reduce violent crime and illegal drug distribution. To this end, the request would, once again, provide \$70 million for Project Safe Neighborhoods (PSN), a block grant program through the U.S. Attorneys' Offices in each federal district to promote partnerships between law enforcement and community leaders to implement gang violence and gun crime enforcement; violence prevention and intervention initiatives; and community outreach at the local level.

Although the budget request, once again, proposes significant cuts to the federal prison system, there is a renewed interest in providing support for prisoner reentry programs, including a new initiative to

²⁴ Funding levels in the DOJ budget request charts and supplemental materials are based on "FY 2018 continuing resolution" figures, rather than FY 2017 enacted levels.

promote apprenticeships among incarcerated individuals and expand career and technical training capacity.

Proposed Reductions and Terminations

Research, Evaluation, and Statistics

The budget request would provide \$77 million for Research, Evaluation, and Statistics (RES) in DOJ's Office of Justice Programs (OJP), which is a 37.5 percent decrease below the FY 2018 CR. Within the RES portfolio is the National Institute of Justice (NIJ), the program that provides support for several of the agency's key research initiatives. It's uncertain how much the budget would allocate for the Institute, as the proposal states that up to \$40.86 million would be provided to support OJP's research and statistical programs, including NIJ. By comparison, NIJ received \$39.5 million in the FY 2017 omnibus. Unlike budget requests released by the previous Administration, the proposal offers very little detail on research priorities, aside from proposing the elimination of specific programs examining comprehensive school safety strategies, innovative prosecution solutions, and the forensic sciences, among other initiatives.

Community Policing Restructuring

As with other federal agencies, the Administration has sought cost savings at DOJ by merging administrative support and certain grant management staff, including the COPS Office, which would be merged with OJP. Among other investments, the COPS Office supports state and local programs to strengthen the relationship between the police and communities they serve, as well as the development of innovative law enforcement practices and procedures. Criminal justice researchers often collaborate with the COPS Office. In addition to consolidating the COPS Office, the budget request would reduce funding for several of the Office's key initiatives. However, the COPS Office has strong support from Members of Congress, who are unlikely to support any proposed cuts or changes that could hinder its operations.

Sources: The DOJ FY 2019 Budget and Performance Summary can be found at <https://www.justice.gov/doj/fy-2019-budget-and-performance-summary>.

Department of Justice
(in thousands of \$)

	FY 2018 Continuing Resolution	FY 2019 Request	FY 2019 Request vs. FY 2018 CR
DOJ, total	28,091,349	28,021,004	70,345 (4.2%)
Research, Evaluation, and Statistics	123,189	77,000	46,189 (37.5%)
National Institute of Justice	N/A	N/A	N/A
Juvenile Justice Programs	245,375	229,500	15,875 (7.1%)
Community Oriented Policing Services	175,403	0	175,403 (100%)
Office of Violence Against Women	475,318	485,500	10,182 (2.1%)

Department of Transportation and White House Infrastructure Proposal

President Trump's FY 2019 budget request proposes \$76.8 billion in mandatory and discretionary funding for the Department of Transportation (DOT), a decrease of \$548.9 million or less than one percent below the FY 2017 level. This figure reflects the addendum to the FY 2019 request which accounts for the additional funds made available via the *Bipartisan Budget Act of 2018*.

The request for DOT is separate from the Administration's *Rebuilding Infrastructure in America* proposal, which was released in conjunction with the budget request.

- The *Rebuilding Infrastructure in America* proposal is one of President Trump's signature campaign promises and is consistent with the Administration's emphasis on increasing the non-federal share of infrastructure spending. The plan calls for \$200 billion in federal funding over 10 years to spur \$1.3 trillion in non-federal investment.
- For DOT, the requested funding levels for FY 2019 are consistent with the FY 2018 request, with some modal agencies slated for significant increases while major surface transportation agencies would see minor increases.
- Infrastructure modernization in general has received bipartisan support in Congress, though major disagreements remain over the extent of federal involvement and modal focus. The *Rebuilding Infrastructure in America* outline provides few details on how federal dollars will be spent and offers no budgetary offsets. Additionally, Congress is likely to oppose the drastic cuts to the Federal Railroad Administration (FRA) proposed in DOT's request in the wake of several high-profile derailments in recent months.

New and Signature Initiatives

As part of the budget request, the White House released a full legislative outline of President Trump's much-anticipated infrastructure modernization plan, *Rebuilding Infrastructure in America*. While the outline would not establish any new extramural research programs, several items were included that will be of interest to universities and the broader infrastructure research community.

The infrastructure proposal would create the Transformative Projects Program, a competitive grant program that would fund projects aimed at significantly improving performance, safety, service, and reliability while reducing costs for infrastructure projects. This \$20 billion program would distribute funding under three tracks: demonstration, project planning, and capital construction. While infrastructure research is not explicitly mentioned, the opportunity to test and integrate advanced technologies through the demonstration track may serve as an entry point for researchers in partnership with state, local, or private entities.

Workforce development is also a key focus area for this Administration, including in the skilled trades. In an effort to promote apprenticeships and work-based learning, the Administration proposes the expansion of the Pell Grant program to allow its use in short-term education programs, such as credential or certification programs. The proposal would also restructure the Federal Work-Study (FWS) program to better support workforce development by redistributing the allocation of FWS funds to those institutions serving high levels of Pell Grant students, limiting FWS eligibility to undergraduates, and funding apprenticeship and career-pathway programs.

Ongoing Areas of Interest

Funding for key surface transportation research programs within FHWA would be flat, as they receive mandatory funding from the Highway Trust Fund established by the *FAST Act*. The Research, Engineering and Development (RE&D) program at FAA would be funded at a level of \$74 million, approximately \$102 million or 58.1 percent below the FY 2017 level.

The FY 2019 request would provide \$19.6 million for the FRA research and development program, which is approximately \$20.5 million or 51.1 percent below the FY 2017 level.

Sources: The DOT Budget Highlights for FY 2019 are available at <https://www.transportation.gov/sites/dot.gov/files/docs/mission/budget/304476/508-dot-bh2019.pdf>. The full legislative outline for the Administration's infrastructure modernization plan is available at http://www.lewis-burke.com/sites/default/files/fy_2019_infrastructure_proposal.pdf.

Department of Transportation (in thousands of \$)

	FY 2017 Actual	FY 2019 Request	FY 2019 Request vs. FY 2017
DOT, Total	77,048,900	76,500,000	-548,900 (0.7%)
Federal Highway Administration	43,097,100	47,790,600	4,693,500 (10.9%)
National Highway Traffic Safety Administration	911,300	914,700	3,400 (0.4%)
Federal Transit Administration	12,414,500	11,118,600	-1,295,900 (10.4%)
Federal Railroad Administration	1,851,398	854,000	-997,398 (53.9%)
Federal Motor Carrier Safety Administration	644,200	665,800	21,600 (3.4%)
Federal Aviation Administration	16,407,400	16,122,300	-285,100 (1.7%)
Pipeline and Hazardous Material Safety Administration	260,400	254,300	-6,100 (2.3%)
Maritime Administration	522,600	396,400	-126,200 (24.1%)

Department of State and United States Agency for International Development

The President's FY 2019 budget request proposes \$37.8 billion for the Department of State and United States Agency for International Development (USAID), including \$12 billion in Overseas Contingency Operations (OCO) funding. This would be a \$17.8 billion or 32.1 percent reduction in base funding below the FY 2017 level.

The addendum to the FY 2019 request would adjust the total funding for the Department of State and USAID to \$39.3 billion, which is a \$16.3 billion or 29.4 percent reduction in base funding below the FY 2017 level.

- The President's FY 2019 budget request for the Department of State and USAID aligns with the Administration priorities outlined in the National Security Strategy²⁵ and the new State Department / USAID Joint Strategic Plan. Strategic priorities in the request include: "protecting America's security at home and abroad; renewing America's competitive advantage for sustained economic growth and job creation; promoting American leadership through balanced engagement; and ensuring effectiveness and accountability to the American tax payer."²⁶
- Of interest to the higher education community, the request supports Department of State and USAID activities in global health and food security. However, the request would reduce funding for the Department of State's Educational and Cultural Exchange (ECE) programs.
- As demonstrated in the omnibus appropriations bill for FY 2017, Congress is strongly supportive of the role that the Department of State and USAID play in terms of national security, and the proposed cuts for these agencies are unlikely to be enacted.

Proposed Reductions and Terminations

The budget request would reduce the **Educational and Cultural Exchange Programs (ECE)** by \$475.1 million or 74.9 percent below the FY 2017 level. ECE would streamline programs that benefit American citizens, American national security, and the American economy. The **Bureau of Educational and Cultural Affairs (ECA)**, within the Department of State, would focus support on core programs, including the **Fulbright Program** and the **International Visitor Leadership Program (IVLP)**.

The **Development Assistance (DA) Program** would be terminated along with the **Economic Support Fund (ESF)** account, and new consolidated "Economic Support and Development Fund (ESDF)" would be created; ESDF would enable USAID and the Department of State to focus on U.S strategic objectives and partnerships. The DA and ESF programs were supported at a combined level of \$7.67 billion in the FY 2017 omnibus appropriations bill. The new consolidated ESDF account would be funded at \$5.06 billion, a total reduction of \$2.6 billion or 34 percent.

²⁵ <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf>, *National Security Strategy of the United States of America*, The White House, 2017

²⁶ <https://www.state.gov/documents/organization/277156.pdf>, *Joint Strategic Plan FY 2018 – 2022*, Department of State and USAID, 2018 (pg. 3)

The budget request does not mention the **Global Climate Change Initiative (GCCII)**. However, designing solutions to the threat of climate change is included in the National Security Strategy and Joint Strategic Plan.

Ongoing Areas of Interest

The President's budget request for FY 2019 largely reflects the request for FY 2018. While many of the flagship programs created by President Obama and of interest to the higher education community are not featured in the request, funding for those issues continues.

The **U.S. Global Development Lab (USGDL)** would be supported at \$12.6 million, but there are no details on USGDL priorities.

Food Security would be supported at \$518 million to support the implementation of the Global Food Security Strategy. Priorities include economic growth in the agriculture sector; a well-nourished population; and resilience to vulnerabilities. A total of \$40 million is included in the request to support a Resilience Challenge Fund to leverage private-partner investment.

The President's budget request would fund **Global Health Programs (GHP)** at a total of \$6.3 billion, down from \$8.8 billion in FY 2017. The GHP request supports programs focused on HIV/AIDS; prevention of child and maternal deaths; and combatting infectious disease. The FY 2019 addendum includes total proposed funding of \$6.7 billion, which is still \$2.1 billion or 23.5 percent below the FY 2017 level.

The request includes funding for a new \$20 million State Department initiative entitled the **Global Engagement Center Disinformation Programs**. The Global Engagement Center would manage the State Department's Countering States Disinformation (CSD) program and would include the coordination of U.S. government efforts to build resilience against disinformation.

Sources: The Congressional Budget Justification for the Department of State, Foreign Operations, and Related Programs is available at <https://www.state.gov/documents/organization/277155.pdf>. The Addendum to the FY 2019 President's Budget to Account for the Bipartisan Budget Act of 2018: Department of State, Foreign Operations, and Related Programs Congressional Budget Justification is available at <https://www.state.gov/documents/organization/278401.pdf>.

International Affairs
(in thousands of \$)

	FY 2017 Actual	FY 2019 Request	FY 2019 Request vs. FY 2017
Total - State Department and USAID	55,632,517	37,801,488	-17,831,029 (32.1%)
Title I (Dept. of State and Related Agencies)	10,304,918	8,616,098	-1,688,820 (16.4%)
Educational and Cultural Exchange Programs	634,143	159,000	-475,143 (74.9%)
USAID Operating Expenses	1,363,189	1,114,920	-248,269 (18.2%)
Development Assistance	2,995,465	0*	-2,995,465 (100%)
Global Health Programs, Total	8,757,450	6,302,601	-2,454,849 (28.0%)

*As for the FY 2018 request, the Development Assistance program would be terminated along with the Economic Support Fund (ESF) account; a new consolidated "Economic Support and Development Fund (ESDF)" would be created as described in the commentary above.

Environmental Protection Agency

President Trump's FY 2019 budget request includes \$6.15 billion for the U.S. Environmental Protection Agency (EPA), which constitutes a \$1.9 billion or 23.7 percent cut from the FY 2017 level as laid out in FY 2017 consolidated appropriations. This figure reflects the addendum to the FY 2019 budget request.

- In keeping with last year's budget request, the Trump Administration's FY 2019 proposal calls for sharp decreases and eliminations that would shrink EPA's budget and maintain limited core functions articulated by congressional statute. This is consistent with the Administration's ongoing efforts to reduce the size and breadth of the agency.
- Proposed agency investments would be guided by three specific themes outlined in the *FY 2018 – FY 2022 EPA Strategic Plan*: Core Mission, which emphasizes the fundamental goal of providing for clean air, land, and water and safe chemicals; Cooperative Federalism, which stresses the importance of partnerships with state and local entities; and Rule of Law and Process, which emphasizes a strict adherence to congressional intent.²⁷
- The FY 2017 and FY 2018 appropriations processes have demonstrated that while Republicans in Congress may favor efforts to reduce federal environmental regulation, they are likely to prefer a more measured approach that preserves funding for programs with bipartisan support.

Proposed Reductions and Terminations

The FY 2019 budget proposal represents a continuation of the Administration's ongoing effort to redefine EPA's role in national environmental policy while shifting the responsibility of supporting environmental protection activities to state and local authorities. In line with the strategic plan mentioned above, EPA's investments would be guided by water infrastructure needs, improvements to air and water quality, land revitalization, chemical safety, transparency and accountability, efficiency, and compliance with congressional statute. Programs and initiatives that the Administration deemed as outside the purview of the agency's "Back-to-Basics" approach would be slated for modest-to-severe cuts, if not total elimination.

Many of the key **Science & Technology (S&T)** programs are proposed for reductions or terminations in FY 2019, and the account would receive a 37.1 percent cut overall.

As with last year's request, the FY 2019 proposal would eliminate the extramural **Science to Achieve Results (STAR) program**. The request instead would refocus EPA S&T on intramural research activities, specifically those that align with the priorities stated above. Research in support of the Hazardous Substance Superfund and Brownfields programs would also be prioritized.

The **Air and Energy (AE) program**, formerly the Air, Climate, and Energy program, would receive \$30.7 million in FY 2019, a reduction of \$59.4 million from the FY 2017 level. In FY 2019 and consistent with the previous year's budget request, funding for air quality research would be reduced and funding for global climate change research would be eliminated entirely. Instead, AE would prioritize the analysis of

²⁷ <https://www.epa.gov/sites/production/files/2018-02/documents/fy-2018-2022-epa-strategic-plan.pdf>, *FY 2018 – FY 2022 EPA Strategic Plan*: Core Mission, Environmental Protection Agency, 2017 (pg. 2)

existing data and the translation of research findings to inform communities on methods for reducing the impact of air pollution.

The **Safe and Sustainable Water Resources (SSWR) program** would likewise see a significant reduction of \$37.4 million from the FY 2017 level for a total of \$67.3 million in FY 2019. SSWR research in FY 2019 would focus on six priority areas: assistance to state and local authorities on stormwater and wastewater infrastructure needs; ensuring safe drinking water; monitoring the proliferation of pathogens in recreational waters; understanding, mitigating, and predicting the health impacts of algal and cyanobacteria toxins; assisting state and local entities in watershed nutrient management; and providing research support for the reuse of both potable and non-potable water. SSWR research related to technical support, site-specific assistance, and nutrient recovery would be streamlined.

The **Sustainable and Healthy Communities (SHC) program** would receive \$52.6 million in FY 2019, a reduction of \$89.9 million compared to the FY 2017 level. In FY 2019, SHC research would align with the needs articulated in the *National Oil and Hazardous Substances Pollution Contingency Plan* and focus on technical and emergency assistance to state and local entities.²⁸ Research support for numerous SHC programs such as the Health Impact Assessment (HIA) among others would be significantly reduced. Funding for the Ecotox database, EPA's Report on the Environment, life cycle research on materials in commerce, and the People, Prosperity, and the Planet (P3) program would be eliminated entirely.

EPA's **Chemical Safety for Sustainability (CSS) program** would receive \$61.7 million in FY 2019, a decrease of \$27.5 million compared to FY 2017 levels. CSS priorities in FY 2019 would include: computational toxicology; endocrine disrupting chemicals, emerging materials, and nanotechnology; and characterization of human exposure to environmental chemicals. Funding for high-throughput toxicity testing and tissue modeling would be cut. Funding for endocrine disruptor research would also be reduced, despite being a priority in FY 2019.

The request would eliminate the **Water Quality Research and Support Grants**, a \$4.1 million program established by Congress via the appropriations process. The program is intended to be separate from the STAR program and provides funding to nonprofit organizations conducting water quality research that is "national in scope." The Administration is proposing to terminate the program on the basis that it does not support "core environmental work."

New and Signature Initiatives

In accordance with the Executive Order 13781: *Comprehensive Plan for Reorganizing the Executive Branch*, the FY 2019 request includes a proposal for major agency reform. All of the plan's elements would be underpinned by the development and deployment of a Lean Management System (LMS). The LMS would be, "designed to routinely monitor, evaluate, and assess [EPA's] general operations and ensure progress in meeting [EPA's] reform agenda objectives."²⁹ These objectives include but are not limited to: streamlining environmental permitting; reducing reporting requirements on industry;

²⁸ <https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview>, *National Oil and Hazardous Substances Pollution Contingency Plan*, Environmental Protection Agency, 2017

²⁹ <https://www.epa.gov/sites/production/files/2018-02/documents/fy-2019-congressional-justification-all-tabs.pdf>, *The United States Environmental Protection Agency FY 2019 Justification of Appropriation Estimates for the Committee on Appropriations*, Environmental Protection Agency, 2018, (pg. 841)

maximizing investment in infrastructure; reducing EPA's field presence where necessary; reducing state oversight; improving EPA laboratory management; clearing backlogs; and reforming EPA's acquisition process.

Ongoing Areas of Interest

The budget request would support several programs consistent with the Administration's interest in infrastructure. Following the previous year's budget request, the FY 2019 proposal would allocate \$20 million for the **Water Infrastructure Finance and Innovation Fund**, which provides federal credit assistance to finance eligible water and wastewater projects.

Sources: *The United States Environmental Protection Agency FY 2019 Justification of Appropriation Estimates for the Committee on Appropriations* is available at

<https://www.epa.gov/planandbudget/fy-2019-justification-appropriation-estimates-committee-appropriations>.

EPA's FY 2019 Budget in Brief is available at <https://www.epa.gov/planandbudget/fy-2019-epa-budget-brief>.

Environmental Protection Agency

(In thousands of \$)

	FY 2017 Actual	FY 2019 Request	FY 2018 Request vs. FY 2017
EPA, total	8,058,488	6,145,887	-1,912,601 (23.7%)
Science and Technology	713,823	448,965	-264,858 (37.1%)
Environmental Programs and Management (EPM)	2,619,799	1,738,852	-880,947 (33.6%)

Institute of Museum and Library Services

The President's FY 2019 budget request includes \$23.0 million in discretionary funding for wind-down activities for the Institute of Museum and Library Services (IMLS), which is a decrease of about \$208 million and 90 percent below the FY 2017 enacted level.

- As in the FY 2018 budget request, the FY 2019 budget request would eliminate funding for the majority of IMLS program accounts.
- The budget request includes \$23 million for the orderly closure of IMLS.
- The budget requests only enough funding to cover IMLS administrative expenses for an orderly shutdown of the agency beginning in FY 2019.

Proposed Reductions and Terminations

The President's budget request proposes wind-down funding for IMLS and a number of other independent federal agencies. The proposal language used for the FY 2019 budget request is identical to the language used in FY 2018 budget request. Given the consistent funding IMLS has received in recent years, IMLS is unlikely to be fully eliminated.

Ongoing Areas of Interest

IMLS would continue normal grantmaking opportunities with allocated FY 2018 funds. As the primary source of federal funding for museums and libraries, IMLS enjoys regular congressional support. IMLS will likely continue its work to help children with "STEM skills," assist "visually impaired people... to read public library materials through new technology and training," and ensure that "veterans are getting the help they need to receive critical services."³⁰

Sources: *An American Budget Major Savings and Reforms*

<https://www.whitehouse.gov/wp-content/uploads/2018/02/msar-fy2019.pdf>.

Additional information can be found at

<https://www.imls.gov/about-us/legislation-budget/faqs-fy-2018-imls-operations-and-presidents-fy-2019-budget-request>.

Institute of Museum and Library Services

(in thousands of \$)

	FY 2017 Enacted	FY 2019 Request	FY 2019 Request vs. FY 2017
IMLS, total*	231,000	23,000	-208,000 (90%)

³⁰ <https://www.imls.gov/node/62164>, "IMLS Director Dr. Kathryn K. Matthew's Statement on the President's Proposed FY 2019 Budget", Institute of Museum and Library Services, 2018

National Aeronautics and Space Administration

The President's FY 2019 budget request includes \$19.892 billion for the National Aeronautics and Space Administration (NASA). The total request would increase NASA's budget by \$238.9 million, a 1.2 percent increase, compared to the FY 2017 enacted level.

- Consistent with last year's proposal, NASA and space exploration are generally supported by the Trump Administration, reflected both by the increased funding and specific vision and ambitions for the agency, including an emphasis on increasing commercialization of space. Shifting to lunar exploration and orienting much of the agency's resources towards that goal is an attempt to recapture the United States' preeminence in space and the national prestige associated with the Apollo program.
- NASA's science budget would see a slight increase under the proposal, although continued proposed cuts to the Earth science research and a flagship astrophysics mission will antagonize the scientific community and congressional champions. In addition, the White House is proposing a restructuring of the agency's mission directorates, including an elimination of the Space Technology Mission Directorate, which funds science and engineering research and was created during the Obama Administration to support investments in cutting edge innovations not ascribed to a specific mission mandate.
- While high-profile champions in Congress may not embrace the restructuring or the proposed mission reductions, they are likely to embrace the broad strokes and direction of the Administration's proposed NASA budget.

New and Signature Initiatives

In line with President Trump's Space Policy Directive signed in December 2017, the request signals a major reorientation of NASA resources and programs towards sustained exploration of the Moon. This shift would be executed in part by subsuming NASA's existing Space Technology Mission Directorate (STMD) and Human Exploration and Operations Mission Directorate (HEOMD) into the newly created **Exploration Research and Technology Directorate** and **Deep Space Exploration Systems Directorate**, respectively. Each would perform several of the same functions as the previous accounts, although only in support of the human spaceflight program and not to advance cross-agency technologies (e.g. in support of science or aeronautics) as is the case with STMD.

The request outlines an overall **Lunar Exploration Campaign** comprised of four complementary components: The Early Science and Technology Initiative; Small Commercial Lander Initiative; Mid-to-Large Commercial Lander Initiative; and Lunar Orbital Platform – Gateway. The Science Mission Directorate (SMD) would have a role in several of these activities, especially the Early Science and Technology Initiative. Additionally, the preliminary request documents suggest the Administration plans on launching CubeSat Missions of Opportunity to the Moon in FY 2019, FY 2021, and FY 2023, as well as an Apollo Sample Virtual Institute.

Within SMD, several new areas of emphasis are outlined in the request. These include \$150 million for NASA's planetary defense program, an increase of \$90 million above FY 2017, and funding for a Mars Sample Return mission study that would involve commercial participation.

Proposed Reductions and Terminations

Within SMD's Astrophysics Division (APD), the Administration request would terminate the **Wide-Field Infrared Survey Telescope (WFIRST)**. The successor to the Hubble Space Telescope and James Webb Space Telescope, WFIRST is currently in development and the top-recommended space-based observatory in the 2010 Astronomy and Astrophysics Decadal Survey. It recently came under scrutiny due to cost and schedule overruns, and an independent review team recommended a de-scope of several key instruments to avoid further cost growth. NASA planned to identify specific scope reductions this year, but in a call with reporters on February 12, NASA's Acting CFO Andrew Hunter indicated the funding wedge occupied by WFIRST was necessary for the agency's human exploration objectives. In its place, the preliminary request mentions increased funding for future competed Explorer and probe-class missions.

As reported widely ahead of the release, the Administration would sunset the **International Space Station** in 2025 and transfer operations to a commercial entity or consortia. NASA would spend \$150 million in FY 2019 - and \$900 million over the next five years - to stimulate commercial activity in Low Earth Orbit (LEO) aboard the ISS and to prepare for the transition to a commercial platform. This proposal has already met sharp bipartisan opposition from Senators Ted Cruz (R-TX) and Bill Nelson (D-FL).

The budget request includes \$1.784 billion for the **Earth Science Division (ESD)**, which would be a reduction of \$124 million below the FY 2017 enacted level. As with the FY 2018 request, the budget proposes elimination of four Earth science missions: Pre-Aerosol, Cloud, and ocean Ecosystem (PACE); CLARREO Pathfinder; Deep Space Climate Observatory (DSCOVR) Earth-facing instruments; and the Orbiting Carbon Observatory-3 (OCO-3).

As with the prior year's request, the **Office of Education (OE)** would be eliminated; funding to closeout ongoing Space Grant and EPSCoR program activities is not identified. In previous attempts to eliminate OE, Congress has pushed back and restored funding.

Ongoing Areas of Interest

In keeping with the FY 2018 request and in-line with recommendations from the 2015 National Academies report *Achieving Science with CubeSats*, SMD would continue to emphasize the utilization of **CubeSats and SmallSats** across all four divisions for low-cost, high-return science missions. A specific amount is not specified, however the Administration sought to invest \$70 million in FY 2018.

The request would fund the **Planetary Sciences Division** at \$2.235 billion, an increase of \$389 million or 21 percent above FY 2017. Except for the increase to planetary defense, specific funding allocations are not broken down in the Administration's preliminary budget documents. A new Lunar Discovery and Exploration activity would be created within the Division to support early-stage research in support of NASA Lunar Exploration Campaign. The request would include continued development of Mars 2020 and Discovery missions Lucy and Psyche, and the selection of a New Frontiers mission from the competition down-select held in FY 2018. Europa Clipper would receive funding for a launch in 2025, and the initial request documents do not mention Europa Lander.

Aside from the cancellation of WFIRST, the **Astrophysics Division** would receive \$1.185 billion in FY 2019, an increase of \$435 million above FY 2017 enacted. The large increase is due primarily to the re-

integration of the James Webb Space Telescope (JWST) after its launch in FY 2019. The Administration's FY 2018 request included a notional \$304.6 million for JWST in FY 2019 indicating that, adjusting for the inclusion of the telescope, the Division would see as much as an \$80 million increase in FY 2019.

Separate from the proposed cuts to the Earth Science Division's topline and cancellation of the aforementioned Earth science missions, the request would fully fund ESD's **Earth Venture** program. The budget would allow for a selection of the Earth Venture Suborbital-3 competition and release Announcements of Opportunity for Earth Venture Mission-3 and Earth Venture Mission-6. Other **major Earth science missions**, including Landsat-9, NISAR, SWOT, TEMPO, OMPS-L, Sentinel-6, and TSIS-2 would continue formulation and development.

The **Heliophysics Division** within SMD would receive \$690.7 million in FY 2019, an increase of \$16 million or 2.4 percent over the FY 2017 level. This amount would accommodate continued development of both the Parker Solar Probe (PSP) and the Ionospheric Connection Explorer (ICON) missions as they are readied for anticipated launch dates this year, while also supporting the operation of 17 ongoing missions. The request would also include an additional \$3 million to support interagency collaboration on space weather observation and forecasting, an area of increasing interest for the Administration because of its potential economic and national security ramifications.

NASA's **Aeronautics Research Mission Directorate (ARMD)** would receive \$633.9 million, a decrease of \$22.16 million or 3.4 percent. The requested amount would support the completion of the Low Boom Flight Demonstrator X-Plane and provide for additional fundamental research in hypersonics, specifically focusing on methods for improving the efficient design of future hypersonic vehicles. Other research priorities would include: support for the development of more efficient fuel systems and noise and emission reduction technologies for subsonic aircraft; advanced electric propulsion systems; the integration of unmanned aerial systems (UAS) into the National Air Space; and new air traffic management systems, likely as a component of the Federal Aviation Administration-led Next Generation Air Transportation System (NextGen).

The amount requested for ARMD would include \$123.3 million for the **Transformative Aeronautics Concepts Program (TACP)**, which supports multidisciplinary research aimed at developing groundbreaking aeronautical concepts. The program specifically emphasizes research at the convergence of aeronautics and non-aeronautics technologies. Of particular relevance to the university community, ARMD plans to implement a third round of **University Leadership Initiative (ULI)** teams. Established in 2015, ULI supports universities or university-led teams conducting research to overcome specific technical challenges while contributing to the aeronautics workforce development pipeline.

Sources: NASA's FY 2019 budget materials can be viewed at:
<https://www.nasa.gov/news/budget/index.html>.

National Aeronautics and Space Administration
(in millions of \$)

	FY 2017 Enacted	FY 2019 Request	FY 2019 Request vs. FY 2017
NASA, total	19,653.3	19,892.2	238.9 (1.2%)
Science	5,762.2	5,895.0	132.8 (2.3%)
Earth Science	1,907.7	1,784.2	-123.5 (6.5%)
Planetary Science	1,827.5	2,234.7	407.2 (22.3%)
Astrophysics	1,352.3	1,185.4	-166.9 (12.3%)
James Webb Space Telescope	TBD	TBD	TBD
Heliophysics	674.7	690.7	16.0 (2.4%)
Aeronautics	656.0	633.9	-22.1 (3.4%)
Space Technology	686.5	0.0	-686.5 (100.0%)
Deep Space Exploration Systems	4,184.0	4,558.8	374.8 (9.0%)
Exploration Systems Development	3,929.0	3,669.8	-259.2 (6.6%)
Advanced Exploration Systems	97.8	889.0	791.2 (809.0%)
Exploration Research and Development	157.2	0.0	-157.2 (100.0%)
Exploration Research and Technology	826.5	1,002.7	176.2 (21.3%)
LEO and Spaceflight Operations	4,942.5	4,624.6	-317.9 (6.4%)
Education	100.0	0	-100.0 (100.0%)
Safety, Security, & Mission Services	2,768.6	2,749.7	-18.9 (0.7%)
Construction and Environmental Compliance and Restoration	375.6	388.2	12.6 (3.4%)
Office of Inspector General	37.9	39.3	1.4 (3.7%)

National Endowment for the Humanities & National Endowment for the Arts

The President's FY 2019 budget request proposes the elimination of the National Endowment for the Humanities (NEH) and the National Endowment for the Arts (NEA). This mirrors the President's FY 2018 Budget Request, which also proposed elimination of both agencies.

- The request would provide \$42 million to NEH, and \$29 million to NEA to begin shutting down each agency in 2019. The funding for NEH represents a decrease of \$108 million from the FY 2017 enacted level, a 72 percent cut. For NEA, this is a decrease of \$121 million from the FY 2017 enacted level, an 80 percent cut.
- NEH and NEA are supported by Members of Congress and complete elimination of the agencies is highly unlikely. NEH and NEA will likely be at least maintained at levels similar to recent fiscal years.

Proposed Reductions and Terminations

The President's FY 2019 budget request would propose eliminating NEH and NEA. However, it would provide a small amount of funding for FY 2018 to both agencies in order to wind down their respective activities.

The budget request implies that NEH and NEA contribute to government waste, citing a 2016 *Open the Books* Oversight Report that concluded NEA, NEH, and the Institute for Museum and Library Services distributed grants to "over 70 nonprofit organizations that have assets larger than \$1 billion."³¹ In addition, the request states that private sector support should be sufficient for funding arts and humanities research in the United States.

In a statement, NEH noted that the \$42 million will allow it to "meet matching grant offers in effect as of October 1, 2018, as well as funds to cover administrative expenses and salaries associated with the closure."³² Similarly, NEA Chairwoman Jane Chu released a statement that expressed disappointment in the elimination of the agency, but stated that NEA "stands ready to assist in [the budget process] as [NEA continues] to operate as usual."³³

Sources: NEH and NEA's FY 2019 budget request details are available at <https://www.whitehouse.gov/wp-content/uploads/2018/02/msar-fy2019.pdf>.

³¹ <https://www.whitehouse.gov/wp-content/uploads/2018/02/msar-fy2019.pdf>, *An American Budget: Major Savings and Reforms*, Office of Management and Budget, 2018 (pg. 101-102)

³² <https://www.neh.gov/news/press-release/2018-02-12-0>, *NEH Statement on Proposed FY 2019 Budget*, National Endowment for the Humanities, 2018

³³ <https://www.arts.gov/news/2018/statement-national-endowment-arts-chairman-jane-chu>, *Statement from National Endowment for the Arts Chairman Jane Chu*, National Endowment for the Arts, 2018

**National Endowment for the Humanities &
National Endowment for the Arts**
(in thousands of \$)

	FY 2017 Enacted	FY 2019 Request	FY 2019 Request vs. FY 2017
NEH, total	150,000	42,000	-108,000 (72.0%)
NEA, total	150,000	29,000	-121,000 (80.7%)

National Science Foundation

President Trump's FY 2019 budget request includes \$7.472 billion for the National Science Foundation (NSF), the same as the FY 2017 level.

- The Administration had planned to propose extremely deep cuts to NSF of almost 30 percent below FY 2017 levels. However, due to the new budget agreement for FY 2018 and FY 2019, the Administration would add \$2.2 billion back into the NSF budget request, enabling flat funding overall and a 2.4 percent increase for the Research and Related Activities (R&RA) account that funds all NSF research directorates.
- NSF released very limited detail about its budget request, but notes that it would prioritize the Big Ideas for Future Investment and needed infrastructure upgrades under the increases within R&RA.
- NSF has been held flat for several years and this request would continue that trend. NSF has several congressional champions, but they have mostly sought to protect the agency rather than grow it. It remains to be seen whether the community and champions can shift focus under this new budget paradigm to enable funding growth.

New and Signature Initiatives

NSF notes in its very short budget request summary that it plans to use the 2.4 percent proposed increase to R&RA to support increased investments in the **Big Ideas for Future Investment**. These themes were first introduced by Director France Córdova in May 2016 and have been the subject of several initial funding opportunities in FY 2017, with more expected in FY 2018 and FY 2019. The Big Ideas include:

- Research Ideas
 - Harnessing the Data Revolution
 - The Future of Work at the Human-Technology Frontier
 - Windows on the Universe: The Era of Multi-Messenger Astrophysics
 - The Quantum Leap: Leading the Next Quantum Revolution
 - Understanding the Rules of Life: Predicting Phenotype
 - Navigating the New Arctic
- Process Ideas
 - Mid-Scale Research Infrastructure
 - NSF 2026: Seeding Innovation
 - NSF INCLUDES (Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science): Enhancing Science and Engineering Through Diversity
 - Growing Convergent Research at NSF

In addition to the overall focus on the Big Ideas, NSF notes that it would specifically implement agency reforms to enable focused investment in Harnessing the Data Revolution and the Future of Work at the Human-Technology Frontier. It is not clear from the limited information provided what sort of agency reforms will be proposed or whether other Big Ideas would also see growth outside of the planned reforms.

NSF would also fund needed upgrades to its Antarctic research infrastructure through the **Antarctic Infrastructure Modernization for Science** project.

Proposed Reductions and Terminations

No program reductions or terminations are mentioned in the limited documentation NSF has released. Proposed reductions in the Major Research Equipment and Facilities Construction (MREFC) and Agency Operations and Award Management (AOAM) accounts are largely due to completion or expected completion of planned projects, including construction of two Research Class Research Vessels and NSF's headquarters relocation to Alexandria, VA. It is expected that some program reductions and terminations will be proposed once NSF releases full budget request documentation.

Ongoing Areas of Interest

No detail is available at this time about proposals for any ongoing areas of interest.

Sources: The NSF FY 2019 summary table can be viewed at <https://www.nsf.gov/about/budget/fy2019/index.jsp>. NSF's full budget request will also be posted to this link once it is available.

National Science Foundation

(in millions of \$)

	FY 2017 Current Plan	FY 2019 Request	FY 2019 Request vs. FY 2017
NSF, total	7,472	7,472	--
Research and Related Activities	6,006	6,151	145 (2.4%)
Education and Human Resources	873	873	--
Major Research Equipment and Facilities Construction	215	95	-120 (55.8%)
Agency Operation and Award Management	359	334	-25 (7.0%)
National Science Board	4	4	--
Office of Inspector General	15	15	--

U.S. Department of Agriculture

President Trump's FY 2019 budget request proposes significant decreases to both discretionary and mandatory funding for the U.S. Department of Agriculture (USDA). USDA's Agricultural Research Service (ARS) would be supported at \$1.047 billion in discretionary funding, a 19.3 percent reduction compared to the FY 2017 actual level, and the National Institute of Food and Agriculture (NIFA) would be supported at \$1.369 billion, a decrease of 10.7 percent below the FY 2017 actual level.

- Consistent with the President's FY 2018 budget request, the Trump Administration would impose significant reductions for USDA intramural research at the Agricultural Research Service (ARS). Steep cuts are proposed for human nutrition and crop protection research, along with the elimination of 20 laboratories and facilities across the country.
- Extramural research would also experience cuts to popular NIFA programs, including the termination of capacity building for non-land grants and aquaculture research, while the flagship competitive program would receive flat funding compared to FY 2017 actual levels.
- Bipartisan congressional support for agricultural research continues to grow, likely resulting in the rejection of proposed cuts for ARS facilities and laboratories, as well as key NIFA programs.

Proposed Reductions and Terminations

Agricultural Research Service (ARS)

The budget request would provide a 19 percent topline reduction for the Agricultural Research Service (ARS) compared to the FY 2017 actual level. The Research Programs account would receive \$925 million overall, compared to \$1.12 billion in FY 2017. This includes almost a 50 percent reduction to the **Human Nutrition Research program**, which would be funded at \$45 million compared to the FY 2017 actual level of \$87 million. Likewise, the **Crop Protection program** would receive a \$43 million decrease, while the **Crop Production program** would receive a \$21 million decrease compared to FY 2017 actual level. The Trump Administration has also proposed the elimination of **20 ARS laboratories and facilities**, compared to the 17 proposed in the FY 2018 budget request. In addition, the president's budget request would provide zero funding for the **Buildings and Facilities account**, which received \$99.6 million in FY 2017, despite being proposed for elimination in the FY 2018 budget request. As a result of the budget addendum, \$192 million is restored for this account to continue "highest priority (existing) research labs" modernization plans.³⁴

National Institute of Food and Agriculture (NIFA)

The president's FY 2019 request proposed a reduction of 10.7 percent for NIFA, the primary extramural research arm of USDA. The budget request would provide \$749 million for formula grants account, which would include a \$1 million decrease for **Smith-Lever (b) and (c) and Hatch Act**, while the **McIntire-Stennis Cooperative Forestry** grant program would receive a \$5 million decrease or 15 percent reduction, compared to the FY 2017 actual levels.

The FY 2019 budget request also proposes significant reductions and eliminations to signature NIFA programs. The **Sustainable Agriculture Research Education and Extension (SARE)** program would

³⁴ <https://www.whitehouse.gov/wp-content/uploads/2018/02/Addendum-to-the-FY-2019-Budget.pdf>, Addendum to the FY 2019 Budget Request, Office of Management and Budget, 2018 (pg. 6)

receive an \$8 million decrease and the **Crop Protection and Pest Management activities** account would receive a reduction of \$9 million compared to the FY 2017 actual levels.

Many popular NIFA programs were proposed for elimination, including:

- Capacity Building for Non-Land Grant Colleges of Agriculture (NLGCA);
- Aquaculture Centers;
- Renewable Resources Extension Act (RREA) Capacity Grant Program;
- Animal Health and Disease Research Program;
- Section 406 Organic Transition Integrated Activities program;
- Food and Agriculture Defense Initiative (FADI);
- Biomass Research and Development Initiative;
- Organic Agriculture Research and Education Initiative;
- Beginning Farmer and Rancher Development Program;
- Emergency Citrus Research and Extension Program;
- Food Insecurity Nutrition Incentive Program; and,
- Biodiesel Fuel Education Program.

International Food Aid

Consistent with the Trump Administration's focus on domestic priorities, the FY 2019 budget request would eliminate the **McGovern-Dole International Food for Education and Child Nutrition Program** and funding provided for international food aid. Congress has typically ensured funding for this popular program.

Animal and Plant Health Inspection Service (APHIS)

Overall, APHIS would receive approximately \$1 billion for FY 2019, approximately 24 percent below the FY 2017 actual level. This includes significant reduction to wildlife services and pest management programs.

Ongoing Areas of Interest

The president's FY 2019 budget request would provide \$42 million for the ARS **National Bio and Agro-Defense Facility** (NBAF) operations and maintenance, which will replace the Plum Island Animal Disease Center.

Agriculture and Food Research Initiative (AFRI)

As part of the federal government's initiative to strengthen global independence and promote agricultural innovation, AFRI is directed to focus investments in three areas: sustainable agricultural systems; foundational and applied science; and education and workforce development. This is consistent with the priorities outlined in the FY 2018 request and is intended to facilitate system-wide innovation and secure the nation's role as a global leader in food and agricultural production.

Sources: USDA's FY 2019 Budget Summary and Background Information is available at <https://www.obpa.usda.gov/budsum/fy19budsum.pdf> and USDA budget explanatory notes can be found at https://www.obpa.usda.gov/FY19explan_notes.html.

U.S Department of Agriculture
(in thousands of \$)

	FY 2017 Actual	FY 2019 Request	FY 2019 Request vs. FY 2017
Agricultural Research Service (ARS)	1,297,000	1,047,000	-250,000 (19.3%)
National Institute of Food and Agriculture	1,533,000	1,369,000	-164,000 (10.7%)
AFRI	375,000	375,000	--
Hatch Act	244,000	243,000	-1,000 (0.4%)
Smith-Lever Act 3(b) and 3(c)	300,000	299,000	-1,000 (0.3%)
McIntire-Stennis	34,000	29,000	-5,000 (14.7%)
Food Safety and Inspection Service (FSIS)	1,279,000	1,272,000	-7,000 (0.5%)

U.S. Geological Survey

The President's FY 2019 budget request includes \$859 million in discretionary funding for the U.S. Geological Survey (USGS), which would be \$225.4 million or 20.8 percent below the FY 2017 level.

- Despite the Trump Administration's interest in critical minerals and a recent executive order that directed the Department of Interior (DOI) to develop a federal strategy on the topic, the budget request proposes a decrease for the USGS Minerals programs compared to the FY 2017 level.
- As expected, the budget request proposes eliminating or reducing funding to programs that provide external funding such as the Water Resources Research Act program which supports the Water Resources Research Institutes. The request also proposes renaming and reorganizing climate change research programs, including the Climate Science Centers.
- The proposed programmatic cuts and eliminations to signature USGS programs that enjoy bipartisan support are not likely to be adopted by Congress. Programs like the Cooperative Research Units have traditionally enjoyed bipartisan support because of the program's wide geographic distribution. In a year marked by hurricanes, catastrophic mudslides, and wildfires, the USGS Hazards programs is expected to receive increased support.

Proposed Reductions and Terminations

The FY 2019 budget request proposes the same reductions and terminations to USGS signature programs as proposed in the FY 2018 budget request. These programs typically receive bipartisan support because of the geographic distribution of the activities.

The **Climate Science Centers** would be renamed the Regional Climate Adaptation Science Centers and the request proposes a reduction of \$12.34 million or 48.7 percent, a funding level that would support only three of the eight existing centers. No further details or specifics are provided on which centers would be prioritized.

The **Cooperative Research Units**, funded at \$17.37 million in FY 2017, would be eliminated.

The **Water Resources Research Act Program**, funded at \$6.5 million in FY 2017 would also be eliminated.

The **National Geospatial Program** would receive a decrease of \$16.5 million or 24.5 percent compared to the FY 2017 level of \$67.4 million. The **National Cooperative Geological Mapping Program** would receive \$22.4 million, an 8.2 percent decrease compared to FY 2017.

New and Signature Initiatives

Consistent with the Administration's recent executive order to ensure critical minerals³⁵ development in the U.S., the request would prioritize the **Mineral and Energy Resources** account. Specifically, the request would eliminate funding for the **Environmental Health** program and divert the money to the Mineral and Energy Resources account for a total of \$84.1 million, which would be an increase compared to the FY 2017 level of \$73 million. Overall, however, the **Energy and Mineral Resources, and Environmental Health account** would receive a topline decrease of 10.8 percent compared to the FY 2017 level.

The FY 2019 request proposes the renaming and reorganization of the **Climate and Land Use** account into the Land Resources account with three programs: National Land Imaging Program, Land Change Science Program, and the Regional Climate Adaptation Science Centers. The change reflects "stakeholder-focused realignment activities" and responds to the Administration's directive to streamline federal agency functions.

Ongoing Areas of Interest

Within the **Natural Hazards** program, the budget request would provide \$51.0 million for the **Earthquake Hazards** program and "prioritizes funding to maintain robust national earthquake monitoring and reporting capabilities" although this would be a 20.7 percent decrease compared to the FY 2017 level. The **Global Seismic Network** and **Landslide Hazards** would also receive decreases compared to FY 2017 enacted levels.

Within the **Ecosystems** account, the **Invasive Species** program would remain relatively flat at \$17.1 million compared to the FY 2017 level of \$17.37 million. Note that total Department of Interior (DOI) invasive species activities would receive \$101.1 million, a decrease compared to the FY 2017 level of \$108.1 million.

Landsat would receive \$31.9 million for development of the series 9 ground system component.

Sources: the U.S. Geological Survey FY 2019 Budget in Brief is available at https://www.doi.gov/sites/doi.gov/files/uploads/fy2019_bib_bh049.pdf.

³⁵ <https://www.whitehouse.gov/presidential-actions/presidential-executive-order-federal-strategy-ensure-secure-reliable-supplies-critical-minerals/>, *Presidential Executive Order on a Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals*, the White House, 2017

US Geological Survey
(in thousands of \$)

	FY 2017 Actual	FY 2019 Request	FY 2019 Request vs. FY 2017
USGS, total	1,085,167	859,680	-225,487 (20.8%)
Natural Hazards	145,013	117,302	-27,711 (19.1%)
Earthquake Hazards Program	64,303	50,999	-13,304 (20.7%)
Global Seismographic Network	6,653	4,937	-1,716 (25.8%)
Ecosystems	159,732	96,131	-63,601 (39.8%)
Land Resources (Climate and Land Use Change)	149,275	103,242	-46,033 (30.8%)
Climate Science Centers	25,335	12,989	-12,346 (48.7%)
Energy, Minerals and Environmental Health	94,311	84,105	-10,206 (10.8%)
Water Resources	214,754	164,922	-49,832 (23.2%)
Water Resources Research Act	6,500	0	-6,500 (100%)
Core Science Systems	116,050	92,278	-23,772 (20.5%)
Science Support	105,611	89,250	-16,361 (15.5%)
Facilities	100,421	112,450	-12,029 (12.0%)

Corporation for National and Community Service

President Trump's FY 2019 budget request includes approximately \$123 million, 88 percent below the FY 2017 enacted levels, for the Corporation for National and Community Service (CNCS), which would be a dramatic cut intended to terminate CNCS operations.

The Trump Administration proposes eliminating CNCS, stating that the responsibilities for community service and volunteerism are beyond the role of the Federal Government and better suited for the private and nonprofit sector. The funds allocated are intended for use in winding down CNCS operations and to manage existing programs for one final year.

Sources: The CNCS FY 2019 Congressional Budget Justification can be viewed at https://www.nationalservice.gov/sites/default/files/documents/CNCS_FY%202019_CBJFinalPDF_508.pdf

Corporation for National and Community Service (in thousands of \$)

	FY 2017 Enacted	FY 2019 Request	FY 2019 Request vs. FY 2017
CNCS, total	1,030,358	122,646	-907,712 (88.1%)
Social Innovation Fund	0	0	--
AmeriCorps State and National	386,010	2,341	-383,669 (99.4%)
AmeriCorps VISTA	92,364	4,910	-87,454 (94.7%)
AmeriCorps NCCC	30,000	24,087	-5,913 (19.7%)

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