

Analysis of the FY 2021 Senate Appropriations Funding Bills

On Tuesday, November 10, the Senate Appropriations Committee released all 12 appropriations bills and related report language. The Senate is not expected to markup their appropriations bills prior to negotiations with the House. Unlike the House, the Senate did not include pandemic relief funding as part of their FY 2021 appropriations bills. Congress must pass a package by December 11 to avert a government shutdown.

Over the summer, the House advanced all 12 appropriations bills through the Appropriations Committee and 10 of them across the House floor, leaving out the Homeland Security and Legislative Branch bills. For reference, APLU’s Office of Governmental Affairs developed [detailed analyses](#) of House appropriations bills of interest to APLU member institutions.

302(b) allocations

Below is a chart detailing subcommittee 302(b) allocation increases from FY 2020 for both the House and Senate. Due to imposed budget caps, Congress only had increased discretionary funding of \$5 billion to allocate across the federal government.

Subcommittee	FY 2020 (in billions) CBO	FY 2021 (in billions) House	FY 2021 (in billions) Senate
Agriculture	\$23,493	\$23,980	\$23,330
Commerce, Justice, Science	\$70,675	\$71,473	\$71,094
Defense	\$622,665	\$626,190	\$627,323
Energy and Water	\$48,343	\$49,607	\$51,752
Financial Services and General Government	\$23,828	\$24,636	\$24,105
Homeland Security	\$50,468	\$50,718	\$52,617
Interior, Environment	\$35,989	\$36,760	\$35,805
Labor, HHS, Education	\$183,042	\$182,914	\$184,472
Legislative Branch	\$5,049	\$5,300	\$5,266
Military Construction, VA	\$103,486	\$102,648	\$100,235
State, Foreign Operations	\$46,685	\$47,850	\$47,164
Transportation, HUD	\$74,277	\$75,924	\$74,838

Below are funding levels and additional items of interest included in the Senate FY 2021 spending bills. The APLU [Appropriations Priorities Chart](#) has been updated to reflect this new information. The appropriations chart includes comparisons to APLU requests, the President’s Budget Request, percentage increases compared to FY 2020, and other important context.

Agriculture, Rural Development, Food and Drug Administration, and Related Agencies ([bill text](#), [summary](#), and [report language](#))

The Senate Agriculture appropriations bill includes an \$11.4 million increase over the FY 2020 enacted level for the United States Department of Agriculture’s National Institute of Food and Agriculture (NIFA), or a 1 percent increase. The Senate mark is remarkably different from the House bill which provided \$47.86 million for NIFA over the FY 2020 enacted level (a 3 percent increase). Unlike the House bill, all of the capacity lines—Hatch, Smith Lever, Evans-Allen, 1890s Extension, McIntire Stennis—which support researchers, technical staff, and extension agents, as well as provide funds for state and regional research priorities, the Cooperative Extension System farm and community programs, and forestry research, remained level at the FY 2020 enacted in the Senate mark. Collectively, these funding lines amount to \$734 million. The only program that received an increase was NIFA’s premier competitive grants program, the Agriculture and Food Research Initiative (AFRI), which received a \$10 million or a 2.35 percent increase in the Senate mark, bringing the subcommittee’s appropriation to \$435 million, which is in-line with the House level.

The Agriculture Advanced Research and Development Authority (AGARDA) did not receive funding or endorsement. This contrasts with House report language that requests the USDA Chief Scientist to complete an AGARDA strategic plan within 180 days of passage of the bill. Within the bill and report language, the multi-university crop research initiative known as Genomes to Phenomes receives \$1 million to support the development of tools and datasets that can be used across multiple crop species to improve the output and efficiency of agriculture.

Finally, the Senate bill provides the Secretary of Agriculture with the authority to waive the matching funds requirement for the Specialty Crop Research Initiative through Sec. 752 of the Senate bill.

Commerce, Justice, Science, and Related Agencies ([bill text](#), [summary](#), and [report language](#))

National Science Foundation (NSF)

The Senate bill allocates \$8.478 billion to NSF. This reflects a 2.39 percent increase from FY 2020 allocations but falls \$72 million short of the House’s level for FY 2021. In report language, the committee states that “it is aware of the impact the COVID-19 pandemic has had on agency operations” and “continues to monitor agency needs directly related to COVID-19” (pg. 6). The Senate wishes to address any COVID-19 related needs in a supplemental appropriations bill, not through the FY 2021 appropriations process.

The subcommittee report includes significant funding for industries of the future research supported by the NSF, including \$160,000,000 for activities in the National Quantum Initiative Act and \$50,000,000 for National Quantum Information Science Research Centers (pg. 173), as well as funding NSF Artificial Intelligence activities at the budget requested levels (pg. 174).

The Senate also notes the importance of NSF instrumentation and infrastructure programs and fully funds the mid-scale research instrumentation program and encourages the Foundation to

make no fewer than one mid-scale award in an EPSCoR State (pg. 174). The Senate report states that NSF should invest in additional high-end computational systems and recommends that NSF “establish a timely, well-funded budget line in future budget submissions to Congress to support world-class leadership in computing for the national open science community” (pg. 172). The Committee also encourages GAO to continue its annual review of programs funded within Major Research Equipment and Facilities Construction (MREFC) so that GAO can report to Congress on the status of large-scale NSF projects and activities (pg. 174).

Lastly, the committee requests \$20,000,000 to support the Historically Black Colleges and Universities Excellence in Research program (pg. 174). This level is equal to FY 2020 allocations as well as the House recommendation.

National Aeronautics and Space Administration (NASA)

The Senate bill provides increases from FY 2020 levels to many (NASA) accounts important to APLU institutions. The Senate provides \$7.275 billion to the Science Mission Directorate, reflecting a 1.9 percent increase from FY 2020 levels. The Senate’s recommendation is \$177 million higher than what the House would provide. The Senate also recommends \$828.7 million for the Aeronautics Research Directorate and \$1.206 billion for the Space Technology Directorate. The Senate bill provides \$48 million for the Space Grant Program, which is flat funding from FY 2020 and is also \$2 million lower than the House level.

National Oceanic and Atmospheric Administration (NOAA)

The Senate provides NOAA’s Oceanic and Atmospheric Research Office with \$552 million, representing an increase of 0.73 percent increase over FY 2020 enacted levels. This differs greatly from the increase provided by the House approved funding level of \$584.4 million. In the Senate bill, the Sea Grant Program would receive \$69 million, representing a \$2 million increase over FY 2020. Again, this is lower than the \$71 million appropriation level in the House version. The base Sea Grant program was provided \$67 million in appropriation in FY 2020. In the Senate mark, the Marine Aquaculture Program would receive \$13.5 million for FY 2021, a 3.85 percent increase over FY 2020. The House did not increase the Marine Aquaculture Program in their bill.

National Institute for Standards and Technology (NIST)

The Senate recommends \$149.5 million, or a 2.4 percent increase over FY 2020 enacted levels for NIST’s Manufacturing Extension Partnerships (MEP). The Senate provides flat funding of \$16 million for NIST’s National Network for the Manufacturing Innovation (NNMI) program.

Economic Development Administration (EDA)

Lastly, the EDA’s Regional Innovation program is provided \$38.5 million, an increase of 16.67 percent from FY 2020 levels.

Defense ([bill text](#), [summary](#), and [report language](#))

The Senate provides steep decreases to many APLU member institution priorities within the Department of Defense (DoD). The Senate bill appropriates \$2.407 billion for DoD's Science and Technology Basic Research 6.1 accounts, representing a 7.53 percent decrease from FY 2020 levels and is \$214 million below the House level for FY 2021. The combined, 6.1-6.3 Science and Technology accounts would receive a decrease of 5.69 percent, declining from \$16.074 billion in FY 2020 to \$15.159 billion for FY 2021. The Defense Advanced Research Projects Agency (DARPA) saw an increase of 1.0 percent for FY 2021. The bill overall provides \$3.491 billion for the agency.

Unfortunately, the Senate bill and report do not include dedicated funding for the Minerva Research Initiative. The House provides \$17 million, which is in line with APLU's requested amount. The President's Budget Request eliminated this program.

To view a breakdown of the basic research program elements that APLU tracks, please view the [APLU FY 2021 Appropriations Chart](#).

Energy, Water Development, and Related Agencies ([bill text](#), [summary](#), and [report language](#))

The Senate bill provides increases for both the Department of Energy (DOE) Office of Science and ARPA-E. DOE's Office of Science would receive a 0.37 percent increase to \$7.026 billion, and ARPA-E would receive a 1.18 percent increase to \$430 million. Like the House, the Senate did not adopt the administration's proposal to terminate this program.

The Senate report continues to support DOE's Office of Science engagement in industries of the future such as quantum information science and artificial intelligence. The report directs the Department "to collaborate with private sector stakeholders, the user community and interagency partners, to develop a roadmap to provide researchers access to quantum systems so as to enhance the U.S. quantum research enterprise, stimulate the fledgling U.S. quantum computing industry, educate the future quantum computing workforce, and accelerate advancement of quantum computer capabilities." The committee expects a briefing within 90 days of the enactment of this act on such a roadmap (pg. 116).

The Senate report further directs the Department to "establish a working group comprised of the Office of Science and national laboratories and a consortium of universities to assist universities in the development of a curriculum to promote the next generation of scientists utilizing artificial intelligence, quantum information science, and machine learning." The Committee expects a report and briefing on this issue within 180 days of enactment of this act on a plan to meet universities educational curriculum needs to support this future scientific workforce (pg. 122).

Lastly, the Senate encourages increased collaboration between DOE's Office of Science and the National Institutes of Health in order to "more strategically leverage the Department's Scientific User Facilities and research capabilities, including instrumentation, materials, modeling and simulation, and data science" (pg. 117).

Similar to other Senate appropriations reports, the Energy and Water report notes that the Committee is “aware of the impact the COVID–19 pandemic has had on agency operations” (pg. 1) and seeks to address any COVID-19 related needs in a supplemental appropriations bill, not through the FY 2021 appropriations process.

Interior, Environment, and Related Agencies ([bill text](#), [summary](#), and [report language](#))

All APLU priority areas for this bill receive flat funding in the Senate mark. The United States Geological Survey (USGS) Water Resources Research Act program is funded consistent with FY 2020 enacted levels (\$10 million). The USGS Cooperative Research Units received \$24 million, differing from the House increase to \$25 million. The Joint Fire Science Program receives \$6 million. Finally, the Office of Science and Technology within the Environmental Protection Agency is funded at \$717 million, a \$1 million increase over FY 2020 enacted.

The National Endowment for the Humanities receives \$162.3 million, level with FY 2020 but \$7.7 million less than the House and APLU’s recommendation. The President’s Budget Request would provide \$33.4 million to close the agency.

Labor, Health and Human Services, Education, and Related Agencies ([bill text](#), [summary](#), and [report language](#))

Health and Human Services

The Senate bill provides \$43.680 billion for the National Institutes of Health (NIH), an increase of \$2 billion above the FY 2020 enacted level. Unlike the House, which provides \$5 billion in emergency appropriations for the NIH, the Senate does not include any emergency pandemic relief funding in their bills.

In the committee’s report, the Senate continues to dedicate funding for Alzheimer’s research, opioid addiction research, the BRAIN Initiative, firearm injury and mortality prevention research, amongst other areas.

The Senate also notes that “much of the Nation’s biomedical research infrastructure, including laboratories and research facilities at academic institutions and nonprofit research organizations, is outdated or insufficient.” The Senate allocates \$50,000,000 for “grants to public, nonprofit, and not-for-profit entities to expand, remodel, renovate, or alter existing research facilities, or to construct new research facilities” (pg. 112).

In terms of research security, the Committee notes that it “remains concerned about foreign threats to the research infrastructure in the United States and supports the efforts by NIH, HHS, and the Inspector General to combat this threat.” The Committee dedicates funding to sustain current partnerships with HHS’ Office of National Security as well as to the Inspector General to continue additional investigations and review of this issue (pg. 116). The Committee also encourages the NIH Director to work with the HHS Assistant Deputy Secretary for National Security to improve the security of intellectual property derived from NIH-funded research (pg. 118).

Of interest to institutions conducting research involving nonhuman primates, the report notes that the Senate “remains concerned about efforts to mandate the reduction of nonhuman primate models in both intramural and extramural research” and directs the NIH to “provide a written update on the critical necessity of nonhuman primates to biomedical research, specific areas of research in which nonhuman primates are used, and how NIH plans to address future availability and transportation of this critical model in the fiscal year 2022 CJ” (pg. 121).

Through report language, the Senate also directs NIH to provide an update detailing how alternatives to fetal tissue acquired after an elective abortion can be used in fetal tissue research. Specifically, the CJ should detail how the use of donated tissue from a spontaneous abortion (miscarriage) or stillbirth would impact fetal tissue research (pg. 116).

Lastly, the Senate urges the NIH to continue and expand efforts to diversify the scientific workforce by encouraging the Director to “increase the participation of underrepresented minority researchers and continue its support of underrepresented junior faculty in research programs” (pg. 122).

The bill also provides the Title VII Health Professions and Title VIII Nursing Workforce Development programs with \$750.67 million, a \$16 million increase from FY 2020 enacted levels.

While the Senate rejects the administration’s budget request to create a new National Institute for Research on Safety and Quality by consolidating the Agency for Healthcare Research and Quality into NIH, the bill only provides \$256.66 million, or a 24.1 percent decrease, in funding for agency.

Education

The Senate bill provides \$73.2 billion in discretionary funding for the U.S. Department of Education, an overall increase of \$433 million. The proposed levels for higher education programs in the Senate bill fall well below the community’s request levels though, providing flat funding for most higher education programs.

First, the Senate bill would provide \$22.475 billion for the Pell Grant program, consistent with appropriations levels from the previous several years. Like the House bill, the Senate bill would increase the maximum Pell award by \$150 to \$6,495. Notably though, the Senate includes a rescission of \$300 million from the Pell Grant program’s surplus (also sometimes called the “reserve.”

Under the Senate bill, campus-based aid programs—the Supplemental Education Opportunity Grant (SEOG) and Federal Work-Study (FWS)—would both receive flat funding. The President’s budget proposed to eliminate SEOG and cut funding for FWS in half. Conversely, the House bill would provide both programs with modest increases. The Senate bill would also flat fund the TRIO and GEAR UP programs, which received increases of \$10 million and \$5 million respectively in the House bill. The PBR proposed significant cuts to TRIO and the elimination of GEAR UP.

Further, the Senate bill would flat fund Title VI programs supporting international education as well as the Graduate Assistance in Areas of National Need (GAANN) program, both of which the President's budget proposed to eliminate. The House bill provided both programs with small increases.

Finally, the Senate bill would increase funding for the Institute of Education Sciences (IES) by a little less than 2 percent, approximately \$635.5 million. This is slightly higher than the House bill's proposed \$630.5 million for FY 2021—the President's budget proposed cutting IES funding to \$565 million.

Of interest, the Senate bill would provide \$21 million in additional funding to programs supporting Historically Black Colleges and Universities (HBCUs) and other Minority-Serving Institutions (MSIs) authorized through Titles III and V of the Higher Education Act. Also of note, the Senate bill would continue funding the Child Care Access Means Parents in School (CCAMPIS) program at \$53 million.

The Senate Committee report is less extensive than the House report, with no key policy provisions or GAO reports of special interest. The committee report outlines a few key requests for agency reports on student loan servicing and ongoing implementation of the Public Service Loan Forgiveness (PSLF) program. Of note, the Committee also recommends that ED provide support for students who have difficulty completing the FAFSA because their parents have opioid or other substance use disorders.

State, Foreign Operations, and Related Agencies ([bill text](#), [summary](#), and [report language](#))

U.S. Agency for International Development (USAID) Higher Education programs remain flat at \$235 million in the Senate bill. Within Higher Education programs, new and ongoing partnerships receive \$35 million or flat funding. These partnerships are focused on building the capacity of higher education institutions and systems in developing countries. The Senate report provides \$55 million, or flat funding, for the Feed the Future Innovation Labs.

Another program of interest is USAID's Combating Antimicrobial Resistance. The Committee provides not less than \$155 million to address related international collaboration and capacities for antimicrobial prevention, surveillance, control, and research and development. Additionally, the Global Health Security Agenda (GHSA) program receives \$275 million, a significant increase over FY 2020 enacted of \$173.4 million. PREDICT is one of the projects funded by the GHSA, which supports identification of zoonotic disease transmission pathways from animals to people.

The bill provides flat funding for the Benjamin A. Gilman International Scholarship Program at \$16 million, equal to the House bill, and is \$14.1 million more than the President's FY 21 budget request, but \$2 million below the APLU's FY 2021 request. The bill does not specify a funding level for the Capacity-Building / Increase and Diversify Education Abroad for U.S. Students (IDEAS) Program.