On December 21, Congress released the FY2021 omnibus appropriations package, the Consolidated Appropriations Act of 2021 (see section by section summary) and joint explanatory statements for all 12 appropriations bills. The $1.4 trillion package, which passed the House and Senate late last night, will fund the federal government through the end of the current fiscal year (September 30, 2021).

The bill provides $671.5 billion in base defense funding, a $5 billion increase over FY 2020, and $656.5 billion in nondefense funding, a $20 billion increase over FY2020. In the last year of the Budget Control Act caps, after accounting for rescissions and emergency spending, the package includes a $15 billion increase above the levels set in the Bipartisan Budget Act of 2019 for non-defense funding.

APLU President Peter McPherson released a statement applauding lawmakers’ work to fund the government through the end of the fiscal year, stating, “At a time of extraordinary uncertainty, this will help public research universities deliver on their mission to advance the public good.”

The detailed analysis below contains important FY2021 funding levels and policy provisions of interest to APLU institutions (see section by section summary). Attached to the omnibus and detailed below are significant authorization policy changes that amend the Higher Education Act, changes to the American COMPETE Act, energy research bills, and a modified version of the Copyright Alternative in Small Claims Enforcement Act.

The APLU Appropriations Priorities Chart has been updated to reflect congressional action. The appropriations chart includes comparisons to APLU requests, the President’s Budget Request, percentage increases compared to FY2020, and other important context.

**Agriculture, Rural Development, Food and Drug Administration (explanatory statement)**

The omnibus appropriations bill provides a 2.8 percent increase for the National Institute of Food and Agriculture (NIFA) with $992.6 million in funding for Research and Education Activities, $538.4 million for Extension Activities, and $39 million in Integrated Activities. The bill includes a modest 2.35 percent increase for the Agricultural and Food Research Initiative (AFRI) of $10 million, funding the program at $435 million. Report language directs NIFA to make regionally adapted, publicly held cultivar development a distinct funding priority within AFRI for fiscal year 2021. The report states that there is a need for research on eradicating livestock diseases. It further encourages NIFA to make competitive grants available to study improved management tools for zoonotic diseases with significant wildlife reservoirs.

The bill supports APLU’s request for funding of Evans-Allen research at $73 million and 1890s Extension at $62 million (a 9 percent increase over FY2020 for both programs). These increases bring the 1890s programs to parity in accordance with the goals included in authorization language. Research Grants for the 1994 institutions receive $4 million (5 percent increase over FY2020). Extension Services at 1994
Institutions receive $8.5 million (a 6 percent increase). Payments Funding for 1994 institutions receive $4.5 million (a 13 percent increase). Capacity funding for McIntire Stennis Cooperative Forestry is flat at $36 million.

The bill also holds funding flat at FY2020 levels for the Hatch Act (State Agricultural Experiment Station) and Smith Lever (Cooperative Extension at 1862 institutions) accounts. APLU remains concerned about the lack of increases in funding for Hatch and Smith-Lever, which have not kept up with inflation over the past five years. Hatch funding is vital to performing research at agriculture experiment stations. Funds made available through Smith-Lever ensure that farmers and communities have access to both innovations and information generated by the Colleges of Agriculture.

Another item of interest includes the Expanded Food and Nutrition Education Program (EFNEP), which receives flat funding at $70 million for FY2021. The bill report requests that the Office of the Chief Scientist complete a strategic plan for the Agriculture Advanced Research and Development Authority (AGARDA) within 180 days of enactment. The plan will describe how AGARDA can work in collaboration with ongoing research programs operating in Agricultural Research Service (ARS) and NIFA. No funding is provided for AGARDA in the bill. Finally, the bill includes a waiver for the SCRI matching requirement.

**Commerce-Justice-Science (explanatory statement)**

**National Science Foundation**
The bill allocates $8.487 billion to the National Science Foundation, representing a 2.5 percent increase from FY2020.

The joint explanatory statement details NSF provisions important to our member institutions. For example, the agreement adopts House language regarding Historically Black Colleges and Universities (HBCU) Student Diversity and Success Research and expands it to encourage NSF to support the listed activities at Hispanic Serving Institutions (HSI), Alaska Native Serving Institutions, Native Hawaiian Serving Institutions, and Tribal Colleges and Universities and to direct NSF to include these types of institutions in the required report, in addition to HBCUs (page 127).

In lieu of House language regarding infrastructure planning, NSF and the National Science Board are encouraged to engage in robust planning for and investments in the next generation of world class facilities, including any projects recommended by the upcoming Astrophysics decadal survey. The Board found in its 2030 Vision report that: "Providing research infrastructure across the range of scientific fields and at various scales will require field-based, agency-based, and interagency planning and execution to ensure that infrastructure investments are complementary and that America’s S&E infrastructure is globally competitive” (page 131).

The agreement includes $46,500,000 for the HSI program to build capacity at institutions of higher education that typically do not receive high levels of NSF funding (page 132).

The agreement further includes funds up to the request levels for quantum information science research and provides no less than $160,000,000 for activities authorized under section 301 of the National Quantum Initiative Act and $50,000,000 for National Quantum Information Science Research Centers, as authorized in section 302 of that Act (page 130). The agreement fully funds AI related grants and interdisciplinary research initiatives across NSF at up to the fiscal year 2021 request level. In addition, the agreement reiterates House language to encourage NSF to continue its efforts in workforce
development for AI and other emerging technologies, with focused outreach to community colleges, Historically Black Colleges and Universities, Hispanic Serving Institutions, Tribal Colleges and Universities and other Minority Serving Institutions (page 130).

**National Aeronautics and Space Administration**
The bill provides increases from FY2020 levels to many APLU member priorities for the National Aeronautics and Space Administration (NASA) accounts such as $7.301 billion to its Science Mission Directorate, $828.7 million to the Aeronautics Research Directorate, and $51 million to the Space Grant Program. The bill provides $1.1 billion to Space Technology, which represents flat funding from FY2020 enacted levels.

Within the Aeronautics Research Directorate, the joint explanatory statement details that NASA is expected make additional awards to U.S. universities from the FY2020 solicitation to address additional technical barriers in aeronautics and is encouraged to utilize universities and their capabilities in areas where multidisciplinary convergent research is needed in early stage aeronautics research and technology development (page 118).

The agreement further includes $51,000,000 for the Space Grant Program. The agreement directs that these amounts be allocated to State consortia for competitively awarded grants in support of local, regional, and national STEM needs and directs that all 52 participating jurisdictions be supported at no less than $760,000 each.

**National Oceanic and Atmospheric Administration**
Within the National Oceanic and Atmospheric Administration (NOAA), Operations, Research and Facilities Account, Oceanic and Atmospheric Research receives $570.6 million, representing a 4.12 percent increase. The Sea Grant Program receives $75 million for the entire program, including several reports and surveys. Report language states that this is a $2.5 million or a 3.73 percent increase over FY2020 for the base program that funds universities in States around the country. The Sea Grant Aquaculture Research program is flat funded at $13 million in the bill.

**National Institute for Standards and Technology**
The National Institute for Standards and Technology’s (NIST) Manufacturing Extension Partnerships (MEP) and National Network for Manufacturing Innovation (NNMI) both receive increases for FY2021. The MEP received $150 million, representing a 2.74 percent increase, and the NNMI program received $16.5 million, representing a 3.13 percent increase over FY2020 enacted levels.

Within the joint explanatory statement for the NNMI program, members direct that no more than $5,000,000 may be used for coordination activities, of which up to $1,000,000 may be used to support the U.S. Food and Drug Administration's participation in biomanufacturing innovation institutes; $10,000,000 shall be used for the continuation of the existing NIST-funded institute; and $1,500,000 shall be for a competitive grant program to develop technology roadmaps for promising advanced manufacturing clusters (page 16).

**Economic Development Administration**
The agreement provides $38 million, an increase of 15 percent for grants under the Regional Innovation Partnership (RIP), also referred to as Build to Scale (B2S). Of the amount provided for RIP grants, no less than $30,000,000 shall be for the i6 Challenge, also referred to as the B2S Venture Challenge, and no less than $6,000,000 shall be for Seed Fund Support, also referred to as the B2S Capital Challenge. As
part of the fiscal year 2021 spend plan, EDA is directed to provide a detailed justification for any funding provided herein that is intended to be used to support a B2S Industry Challenge in fiscal year 2021. EDA shall continue to ensure that RIP awards go to multiple grantees in multiple and diverse geographic areas, including an increased focus on organizations and States that have not previously received funding from the program. Furthermore, within funds provided for RIP, EDA shall award not less than 40 percent of grants to support rural communities (page 7).

Defense (explanatory statement)

The final bill includes a 2.61 percent increase for DoD Science and Technology Basic Research 6.1 accounts, allocating $2.671 billion for FY2021. Combined, 6.1-6.3 Science and Technology accounts, received a 4.97 percent increase, growing from $16.074 billion in FY2020 to $16.873 for FY2021. The Defense Advanced Research Projects Agency (DARPA) also saw an increase of 1.24 percent for FY2021. The bill overall provides $3.501 billion for the agency. Of particular note, the Minerva Research Initiative received $17 million, representing a 48.94 percent increase over FY2020 enacted levels. Both the Senate and the Administration’s budget requested that this program be zeroed out.

To view a breakdown of the basic research program elements that APLU tracks, please view the APLU FY2021 Appropriations Chart.

Energy and Water Development (explanatory statement)

The bill provides small 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 0.47 percent increase to $427 million.

The joint explanatory statement directs the Department of Energy to provide to the Committees on Appropriations of both Houses of Congress a briefing that details all programs, projects, and activities to be funded in the Office of Science that are not directed by this recommendation or explicitly included in the fiscal year 2021 budget request. The plan shall be provided not later than 90 days after enactment of this Act (page 131).

The agreement also provides not less than $100,000,000 for Artificial Intelligence and Machine Learning capabilities across the Office of Science Programs and provides not less than $245,000,000 for the Office of Science’s coordinated and focused research program in quantum information science (page 131).

Furthermore, the Department is encouraged to expand its relationships with the National Institutes of Health (NIH) in order to work together more strategically to leverage the Department of Energy’s research capabilities, including instrumentation, materials, modeling and simulation, and data science. The agreement supports the budget request proposal of $1,000,000 for collaboration with NIH within the Department's data and computational mission space (page 131).

Department of Homeland Security (explanatory statement)

Student and Exchange Visitor Program: The bill directs Immigration and Customs Enforcement (ICE) to continue guidance issued on March 13, 2020 regarding the maintenance and eligibility for international student nonimmigrant status impacted by the COVID-19 pandemic, and urges ICE to include applications for F and M student visas.
**Interior and Environment** *(explanatory statement)*

The bill provides $11 million in support for the United States Geological Survey’s (USGS) Water Resources Research Institutes, a 10 percent increase. The USGS Cooperative Research Units (CRUs) funding is $25 million, a 4 percent increase.

The EPA’s Office of Science and Technology funding is $729.3 million, a 1.9 percent increase over FY2020. The increases for these programs match the APLU request levels. The Joint Fire Science Program is flat funded at $6 million. Also of interest, report language provides $2 million for Downed Timber Research and not less than $3 million to support the Northeastern States Research Cooperative.

The National Endowment for the Humanities (NEH) receives $167.5 million, a 3.2 percent increase over FY2020 levels. The bill encourages NEH to provide support to projects that focus on “our Nation's history and culture, including Russian orthodox sacred sites and churches listed on the National Register of Historic places in need of restoration.” The bill also urges NEH to consider grant applications that spotlight narratives of communities tied to recently discovered sites of the transatlantic slave trade.

**Labor-Health and Human Services-Education** *(explanatory statement)*

National Institutes of Health
The final bill provides $42.9 billion for the National Institutes of Health (NIH), which represents an increase of $1.25 billion from FY2020 enacted levels.

The agreement continues to direct NIH to provide $5,000,000 to the Inspector General to continue additional investigations into the issue of foreign threats to research stating: “The Chinese government continues to recruit NIH-funded researchers to steal intellectual property, cheat the peer-review system, establish shadow laboratories in China, and help the Chinese government obtain confidential information about NIH research grants. NIH reported in June 2020 that of the 189 scientists at 87 institutions investigated by NIH, 93 percent received undisclosed support from the Chinese government. Approximately three quarters of those under investigation had active NIH grants, and nearly half had at least two grants. The agreement directs that the Committees be notified quarterly on the progress of these investigations, as well as the institutions, scientists, and research affected” (page 64).

The agreement does not include report language on Use of Human Fetal Tissue in Research and Timely Evaluation of Promising Biomedical Research Proposals (page 64).

Further, the agreement directs NIH to commission an independent study by the National Academies of Sciences, Engineering, and Medicine (NASEM) to explore the current and future use of nonhuman primates in intramural NIH research. This study should include, but not be limited to: an assessment of the extent to which primates will continue to be necessary for intramural NIH biomedical research and, if so, in what areas; an analysis of primate availability and transportation options to fulfill current and future research needs; and a review of existing and anticipated future alternatives to the use of primates and how these could reduce NIH’s reliance on nonhuman primates to fulfill the agency’s mission currently and in the future (page 69).

In terms of human research alternatives, the agreement directs NIH to provide a report to the Committees no later than 180 days after enactment of this Act on: 1) progress the Interagency
Coordinating Committee on the Validation of Alternative Methods has made on finding alternatives to non-animal research methods; and 2) the incentives, if any, NIH offers to encourage grantees to consider these alternatives. This directive also replaces the directive included under the heading "Office of the Director" entitled "Animal Use in Research" in House Report 116-450.

The agreement also provides $50,000,000 for grants to public and/or not-for-profit entities to expand, remodel, renovate, or alter existing research facilities or construct new research facilities as authorized under 42 U.S.C. section 283k (page 61).

Health Resources Services Administration
The bill also provides the Title VII Health Professions and Title VIII Nursing Workforce Development programs with $754 million, a 2.65 percent increase from FY2020 enacted levels.

Agency for Healthcare Research and Quality
Additionally, the bill provides flat funding of $338 million for the Agency for Healthcare Research and Quality (AHRQ). The President's budget proposed eliminating the agency and consolidating AHRQ into the NIH as a new institute.

Department of Education
The final appropriations bill includes $22.475 billion for the Pell Grant program, level with FY2020 appropriations. It would increase the maximum Pell Grant award by $150 to $6,495, the fourth year in a row that the maximum grant has been increased by $150. The bill also rescinds $500 million from the Pell reserve.

The bill funds the Supplemental Education Opportunity Grant (SEOG) program at $880 million, a 1.73 percent increase over FY2020. The bill also funds the Federal Work Study program (FWS) at $1,190 million, the TRIO program at $1,097 million, and the GEAR UP program at $368 million, increases of slightly less than one percent for each of these programs over FY2020 appropriations levels. Title VI International Education programs saw a 2.62 percent increase to 78.2 million, while funding for the Graduate Assistance in Areas of National Need (GAANN) program was slightly increased to 23.5 million. During a tight budget year, every program saw at least a small increase in appropriations.

Finally, the Institute of Education Sciences (IES) received $642.5 million, a little more than a 3 percent increase over FY2020 appropriations. IES also received $28 million in emergency COVID-19 funding, all allocated for the National Assessment of Educational Progress (NAEP).

The report language (at page 115) adds to the House committee report language, directing the Department to issue guidance on the “ability to benefit” provision within HEA that serves as a simple and clear resource for implementation at institutions of higher education. The provision allows students to pursue a higher education and receive Federal financial aid without a high school diploma.

The agreement also contains several reporting requirements for the Office of Federal Student Aid, regarding their Next Gen loan servicing initiative. The agreement expresses concerns with the course changes FSA has taken and will require detailed reporting on the anticipated use of funds to carry out the project.

Finally, in addition to a $2 million increase for the Child Care Access Means Parents in School (CCAMPIS) program to $55 million for FY2021, the agreement requires ED to permit a 90-day application period for
new CCAMPIS awards due to prior concerns about insufficient application periods. The bill also extends the period of availability for these funds through December 31, 2021 to accommodate this new requirement.

State and Foreign Operations (explanatory statement)

The bill provides the United States Agency for International Development (USAID) with $235 million for higher education, including $35 million for partnerships between United States higher education institutions and those in developing countries to increase international higher education capacity. This represents flat funding from FY2020 levels.

The Bureau for Food Security’s Feed the Future Innovation Labs receive $55 million, also representing flat funding. The Feed the Future Innovation Labs funds are included in the report language, whereas the higher education capacity funds are in the bill language.

The Benjamin A. Gilman International Scholarship Program is flat funded at $16 million, including $700 thousand for the McCain Scholars and Fellowship programs. The bill does not specify direct appropriations to the Capacity-Building / Increase and Diversify Education Abroad for U.S. Students (IDEAS) program.

Department of Transportation, Housing and Urban Development (explanatory statement)

The bill includes $5 million for partnerships with qualified universities on research related to improving the safety, capacity, and efficiency of rail infrastructure.

Division FF: Other Matter (section by section summary)

Title VII: FAFSA Simplification
The emergency spending package also includes significant Higher Education Act legislation, the FAFSA Simplification Act, which makes substantial changes to the Free Application for Federal Student Aid (FAFSA), Pell eligibility, and the HBCU Capital Financing Program. APLU has prepared a separate analysis of this bill, available here.

Division Q: Intellectual Property

Subtitle A Copyrights, Sec. 212 (page 2544)
This section includes a modified version of the Copyright Alternative in Small-Claims Enforcement Act (CASE Act) - H.R. 2426/S. 1273

The CASE Act was inspired by a desire for a cheaper and more efficient mechanism than federal court litigation for small- and medium-sized copyright holders to enforce their rights. The forum that would be created by the CASE Act – the Copyright Claims Board (CCB) – would be an administrative tribunal operating independently of the federal courts and charged with resolving copyright infringement disputes involving claims up to $30,000 in damages.

APLU and other associations had raised concerns that the legislation as introduced could lead to an increased number of abusive claims (i.e., trolling) that are costly, disruptive, and have a chilling effect on fair uses of content by colleges and universities and their students, faculty, and staff.
The final language includes a specific opt-put for libraries and archives and excludes claims or counter claims against a federal or state entity.

**Division Z: Energy Act of 2020 (page 3194)**

This section contains numerous applied energy research bills introduced in both the House and Senate designed to conduct comprehensive clean energy research, development, demonstration, and commercialization activities. This includes the reauthorization of the Advanced Research Projects Agency – Energy (ARPA-E) and an increased authorization level to $761,000,000 over the next 5 years. APLU endorsed H.R. 4091, the ARPA-E Reauthorization Act.

For more information, please see this summary provided by the House Science, Space, and Technology Committee.

**Division FF OTHER MATTER**

**Title XV—American COMPETE Act (page 5515)**

This section amends the American COMPETE Act and instructs the Secretary of Commerce in conjunction with other agencies to conduct studies to support the advancement of specific technology areas in the U.S. economy including:

- Artificial Intelligence
- Quantum Computing
- Blockchain Technology
- New and Advanced Materials
- Unmanned Delivery Services
- Internet of Things in Manufacturing
- Advanced Three-Dimensional Printing
- Combating online harms through innovation