



Analysis of the Biden Administration's FY2023 Budget Request

On March 28, the White House released the administration's [FY2023 President's Budget Request \(PBR\)](#) to Congress. This document represents an analysis of the request for the various agencies and programs of particular interest to APLU institutions. We have updated the APLU [FY2023 appropriations priorities](#) chart to include the PBR numbers. Due to the late stage in which Congress finalized FY2022 spending levels, the PBR uses enacted FY2021 levels as a point of comparison, while APLU's analysis uses enacted FY2022 levels. In some cases, FY2023 PBR levels may be lower than FY2022 enacted levels because of the timing.

The proposed \$5.8 trillion request includes \$1.58 trillion for discretionary spending to fund federal agencies in FY2023. Of the proposed discretionary spending, \$769 billion is designated for nondefense programs (5.3 percent above FY2022) while \$813 billion is allocated to defense spending (4 percent above FY2022).

Below is information collected from the budget request about programs of interest in alphabetical order by department/agency.

FY2023 Budget Links

[Budget](#)

[Analytical Perspectives](#)

[Appendix](#) (including budget by agency)

Department of Agriculture (USDA)

The PBR includes \$1.8 billion in discretionary funding for the National Institute of Food and Agriculture (NIFA). The NIFA budget request includes support for both capacity funds and competitive grants to “generate science-based solutions” and “proactively identify and address emerging needs and opportunities” through a “grassroots model” in every community in the nation. The request provides that “the State institutions conduct research on the problems continuously encountered in the development of a permanent and sustainable agriculture and forestry system, and in the improvement of the economic and social welfare of rural and urban families. Because of differences in climate, soil, market outlets, and other local conditions, each State has distinct problems in the production and marketing of crops and livestock. Farmers, foresters, and people in rural communities in individual States naturally look to their State Agricultural Experiment Stations (SAES), universities, and colleges for solutions to the State and local problems and request services and solutions to address these problems.”

Unlike prior years, a new emphasis is placed upon capacity programs. The request provides that “the additional funding provided to capacity programs is to be coordinated with the funding for research and extension activities at Historically Black Colleges and Universities and multicultural serving institutions provided in the agriculture portion of the American Rescue Plan along with a wide range of programs for historically underserved farmers, ranchers and producers.” The request includes “[capacity] programs to provide long-term, sustainable support needed to grow the capacity for agricultural research, education, and extension activities at land-grant institutions and SAES,” then names the Hatch Act, Smith-Lever 3(b) and 3(c), 1890 Land-grant Institutions, McIntire-Stennis Cooperative Forestry, and other grant programs.

The request includes \$264 million for the Hatch Act, which supports State Agricultural Experiment Stations (SAES) at a 1.9 percent increase over FY2022. The request includes \$93 million for Evans-Allen research at 1890s institutions, a 16.3 percent increase over FY2022. The request outlines that the \$43 million for the McIntire Stennis Research program (a 19.4 percent increase over FY2022) is intended to prioritize underserved and minority audiences.

The request is flat funding compared with FY2022 for Smith Lever 3(b) and (c) and 1890s Extension programs. However, there is a \$10 million increase for Extension Services at 1994 Institutions. All Extension program increases will have a “special emphasis on climate change, workforce, nutrition and health promotion education, and support for youth Climate Corps through 4-H programming.”

The request includes \$564 million for the Agriculture and Food Research Initiative (AFRI), a 27 percent increase (\$119 million) over FY2022 for the nation’s premier competitive, peer-reviewed research program for fundamental and applied sciences in agriculture. The Agriculture Advanced Research and Development Authority (AGARDA) would receive \$4.9 million, which would build on the \$1 million it recently received in FY2022. The program, authorized in the 2018 Farm Bill, would likely fund technologies for growing and harvesting agricultural products and for combatting plant and animal diseases and pests.

Finally, the Budget includes \$2.3 million for Women and Minorities in STEM Fields (a 130 percent increase over FY2022). Per the request, the additional funding will allow Women and Minorities in Science, Technology, Engineering and Mathematics Fields Grant Program (WAMS) “to support a robust and diverse food and agricultural STEM workforce, highly competent in applying STEM knowledge and skills” from rural areas.

Department of Commerce

The administration’s FY2023 budget requests \$11.7 billion for the Department of Commerce, a \$1.8 billion (18 percent increase) from FY2022 levels. As per the letter, the request “makes historic investments to strengthen domestic supply chains, help American entrepreneurs bring

their products to the market, support minority business development, tackle the climate crisis, and promote opportunity and safety in space.”

National Institute for Standards and Technology (NIST)

The budget request includes \$97 million for the Manufacturing USA Program (formerly known as the National Network for Manufacturing Innovation), an increase of \$80.5 million (488 percent), to “help launch two additional Manufacturing Innovation Institutes in 2023 and continue support for two institutes funded in 2022 as part of the Administration’s growing Manufacturing USA network.”

Overall, the discretionary budget invests \$372 million in NIST manufacturing programs, an increase of \$206 million from FY2021. This increase includes \$80 million for “the first year of an additional four Manufacturing USA Institutes, one of which will help restore the United States as a leader in the design and manufacture of semiconductors.”

The discretionary request also includes \$275 million for the Hollings Manufacturing Extension Partnership (MEP), an increase of 74 percent over FY2022. “The FY2023 request will provide funds to establish the infrastructure needed for a national supplier database, for sector and market-specific services to increase the number of companies within critical supply chains, support assistance for recruiting, retraining and upskilling a post pandemic workforce, and fund manufacturing experts to assist very small manufacturers’ advancement with technology and innovation such as Robotics, Automation, Artificial Intelligence, Industry 4.0.”

Economic Development Administration

The PBR requests \$47 million for the Build to Scale program, an increase of \$2 million (4.4 percent) from FY2022 levels.

National Oceanic and Atmospheric Administration (NOAA)

The PBR request for NOAA is \$6.9 billion. The full Congressional justification is not yet available.

National Science Foundation (NSF)

The president’s FY2023 discretionary request includes \$10.5 billion for NSF, a \$1.66 billion or 18.8 percent increase above FY2022 (\$8.84 billion).

This total includes a request of \$880 million for the newly established Technology, Innovation, and Partnerships (TIP) Directorate. The PBR provides that “the Directorate will work with

programs across the Agency and with other Federal and non-Federal entities to expedite technology development in emerging areas that are crucial for U.S. technological leadership, including trustworthy artificial intelligence, high performance computing, disaster response and resilience, quantum information systems, robotics, advanced communications technologies, biotechnology, cybersecurity, advanced energy technologies, and materials science.”

Other priority areas listed in the PBR include \$1.6 billion for research and development to better understand and prepare for the adverse impacts of climate change, \$393 million for programs to increase the participation of historically underrepresented communities (including support for building science and engineering research and education capacity at Historically Black Colleges and Universities and other Minority-Serving Institutions), and \$2 billion for research infrastructure.

NSF’s full budget can be found [here](#).

National Aeronautics and Space Administration (NASA)

The administration’s FY2023 budget requests \$26 billion for NASA, an 8.3 percent increase from FY2022.

The administration requests \$7.98 billion for the Science Mission Directorate, which represents a five percent increase from FY2022, while noting this request was “the highest ever including funds for the James Webb Space Telescope, the Mars Sample Return mission, and implementation of the Earth System Observatory.”

Additionally, the discretionary request includes \$2.41 billion for Earth Science programs, an increase of \$347 million (4.8 percent) above the FY2022 enacted level. “Within Earth Science, in addition to ramping up development of missions that will comprise the Earth System Observatory, the Budget enables NASA to pursue innovative ways to ensure sustained climate observations provide ongoing records of the changing climate and Earth system. Additional funds are requested to support a coordinated Agency wildfire initiative to leverage NASA expertise and assets to address scientific and technological barriers in wildfire risk management. Additionally, as part of a renewed emphasis on providing actionable data and information to a broad range of users, NASA is planning an Earth Information Center with an initial focus on prototyping capabilities for a greenhouse gas monitoring and information system that will integrate data from a variety of sources with a goal of making data more accessible and usable to Federal, State, and local governments, researchers, the public, and other users.”

For NASA’s Space Technology portfolio, the administration requests \$1.44 billion, \$340 million (30.9 percent) above FY2022 enacted levels. “The FY2023 funding request includes \$5 million to initiate the On-orbit Servicing, Assembly and Manufacturing (OSAM) Consortium consisting of

Government departments and agencies, universities, non-profit research institutions, NASA centers and mission directorates, and commercial companies. Additionally, this budget provides \$15 million for nuclear propulsion.” Furthermore, the discretionary request provides \$971.5 million, an increase of \$91 million above the FY2022 enacted level, for aeronautics research and development that “guides its efforts with a strategic implementation plan... [which] lays out NASA’s approach to addressing the three key drivers of aviation transformation: the growing demand for global air mobility, energy efficiency and environmental sustainability, and the opportunity for convergence between traditional aeronautical disciplines and technology advances in information technology, communications, energy, and other rapidly evolving technologies.”

The PBR also includes \$57 million for the Space Grant program, a 4.6 percent increase over FY2022. Per summary documents, “no major programmatic changes are planned. However, with increased base award funding, each consortium will increase the number of student awards and other programming. NASA will look to expand opportunities to partner with mission directorates on awards that support mission priorities and align with Space Grant capabilities. Additionally, Space Grant will continue to monitor the Space Grant K-12 Inclusivity and Diversity in STEM (SG KIDS) awardees as they execute NASA-aligned hands-on activities that are geared towards historically underrepresented student populations.”

Environmental Protection Agency (EPA)

The president’s FY2023 request includes \$11.9 billion for EPA, a \$2.34 billion or 24.5 percent increase from the FY2022 enacted level. The budget request for the EPA Office of Science and Technology has not been released.

Department of Defense (DoD)

The president’s FY2023 discretionary request includes \$773 billion for DoD. While DoD’s press release states the importance of the Research, Development, Testing & Evaluation (RDT&E) accounts to “invest in breakthrough technologies that drive innovation, support capacity in the defense technology industrial base, ensure American technological leadership, and underpin the development of next-generation defense capabilities,” the total request for RDT&E was \$130 billion (a \$10.9 billion increase over FY2022), which includes flat funding at \$2.4 billion for basic research. Most of the university-based research programs tracked by APLU would receive significant cuts under the proposal, with the biggest exception being the Defense Advanced Research Projects Agency (DARPA), which would receive an eight percent increase over FY2022.

DoD’s FY2023 [budget documents](#) provide additional information.

Department of Education (ED): Student Aid and Higher Education

The PBR proposes to increase the maximum Pell Grant award to \$8,670 for the 2023-2024 academic year through a mix of both mandatory and discretionary spending. On the discretionary spending side, the PBR proposes a \$900 increase over FY2021 levels. Compared to FY2022 levels, the proposal represents a \$500 increase. The PBR also includes a \$1,275 increase to the mandatory add-on award for Pell. The budget notes that this increase would represent a significant down payment on the President's commitment to doubling the maximum Pell Grant by 2029. The PBR also continues to propose expanding federal student aid, including Pell Grant eligibility, to Deferred Action for Childhood Arrivals (DACA) recipients.

The request calls for \$1.298 billion for the TRIO program, an additional \$161 million over FY2022 appropriations, representing an increase of 14 percent. The PBR also requests \$408 million for GEAR UP, a \$30 million or eight percent increase over FY2022.

The PBR proposes to flat fund several other higher education programs, including the Supplemental Educational Opportunity Grant (SEOG) program, the Federal Work Study (FWS) program, the Graduate Assistance for Areas of National Need (GAANN) program, and Title VI international education programs. The request uses FY2021 appropriations as a basis for flat funding—\$880 million for SEOG, \$1.19 billion for FWS, \$23.5 million for GAANN, and \$78.2 million for Title VI. Compared to FY2022 final appropriations, the PBR appears to cut these programs, but APLU's understanding is that the administration will support flat funding for these programs at the FY2022 enacted levels.

The PBR also calls for \$662.5 million for the Institute of Education Sciences (IES), which includes a \$20 million increase over FY2021 appropriations directed toward assessment. This is significantly less than final FY2022 appropriations, which provided \$737 million for IES. Again, it is APLU's understanding that the administration will not support funding IES at less than FY2022 levels.

Further, the PBR proposes increases for several Historically Black Colleges and Universities (HBCU) and Minority-Serving Institutions (MSI) programs authorized in the Higher Education Act, including a \$450 million initiative to expand research and development infrastructure at four-year HBCUs, Tribally Controlled Colleges and Universities (TCCUs), and MSIs. Some proposals for increases to HBCU and MSI programs were relatively small and based on FY2021 appropriations, which appear as cuts when compared to FY2022 final levels. It is APLU's understanding that the administration will support funding all programs at minimum at FY2022 levels.

Also of note, the PBR proposes \$110 million in completion and retention grants for FY2023, provided through the Fund for the Improvement of Postsecondary Education (FIPSE). Congress appropriated \$10 million for completion and retention grants through FIPSE in FY2022. The ED

budget justification document for higher education details that the program would “provide competitive grants to States, TCCUs, and systems of institutions of higher education (IHEs) to implement or expand evidence-based, statewide, and institutional level retention and completion reforms that improve student outcomes.” The proposal for completion and retention grants is significantly more modest than the administration’s call last year for \$62 billion for a College Completion Fund—the administration has said that the PBR does not include specific items that were a part of the Build Back Better framework. Nonetheless, this completion and retention grant program represents the first federal investment specifically aimed at boosting college completion.

Department of Energy (DOE)

The president’s FY2023 budget requests \$48.2 billion for DOE, a \$3.3 billion or 7.3 percent increase from the agency’s FY2022 allocation.

The discretionary request invests \$7.8 billion, an increase of more than \$300 million or four percent over FY022, in DOE’s Office of Science “to support cutting-edge research at the national laboratories and universities to: advance the Nation’s understanding of climate change; identify and accelerate novel technologies for clean energy solutions; provide new computing insight through quantum information science and artificial intelligence that would address scientific and environmental challenges; leverage data, analytics, and computational infrastructure to strengthen pandemic preparedness in support of U.S. biodefense and pandemic preparedness strategies and plans; and support the Nation’s leading scientific user facilities. New programs would promote U.S. leadership in the industries of the future, including biotechnology and biomanufacturing, and support the Cancer Moonshot initiative.”

The PBR includes \$700 million for the Advanced Research Projects Agency – Energy (ARPA-E), an increase of \$250 million or 55 percent over FY2022. The PBR provides “this investment in high-potential, high-impact research and development would help remove the technological barriers to advance energy and environmental missions. The Budget also proposes expanded authority for ARPA-E to more fully address innovation gaps around adaptation, mitigation, and resilience to the impacts of climate change.”

Department of Health and Human Services

National Institutes of Health (NIH)

The PBR includes \$49 billion for NIH in FY2023, a \$4 billion increase over the FY2022 enacted level. The Advanced Research Project Agency for Health (ARPA-H) would receive \$5 billion within the NIH total. The PBR provides that ARPA-H will have “an initial focus on cancer and other diseases such as diabetes and dementia, this major investment would drive transformational innovation in health technologies and speed the application and

implementation of health breakthroughs.” ARPA-H received \$1 billion in the FY2022 omnibus appropriations bill to establish the agency.

Many existing NIH Institutes would receive flat funding for FY2023 as most of the proposed increase would go to further establish ARPA-H.

Department of Interior (DOI)

The Department of Interior Joint Fire Science Program and the USDA Forest Service both request \$4 million each which holds the program steady with a total request of \$8 million, equal to the FY2022 enacted level. Additionally, the request includes \$28.15 million for Cooperative Research Units within the United States Geological Survey (USGS), an increase of \$2.15 million over FY2022.

The PBR includes the USGS, Water Resources Research Act (WRRRA) at \$15 million in FY2023, an increase of 7.1 percent over FY2022.

Department of State and U.S. Agency for International Development (USAID)

Department of State

The PBR would provide \$788 million for the Department of State Educational and Cultural Exchange (ECE) Programs, a 6.3 percent increase over FY2022 levels, of which \$363.7 million is marked for Academic programs. A specific request number is not listed for two of APLU’s priority programs: EducationUSA and the Increase and Diversity Education Abroad for U.S. Students (IDEAS) Program. The PBR includes \$16 million for the Benjamin A. Gilman International Scholarship Program, the same funding level as FY2022. The justification notes that “the Gilman Program, which provides study abroad opportunities for minority populations, will provide 3,000 American undergraduates the opportunity to master globally competitive skills. EducationUSA will bolster U.S. higher education to compete against China, Russia, and others to attract a greater share of globally mobile students to American institutions. English language programs will combat disinformation and increase access for more than ten million learners and teachers.” Furthermore, the justification states that the Fulbright Program will support more than 7,000 participants.

USAID

The president’s 2023 request includes \$353.1 million for the USAID Bureau for Resilience and Food Security (RFS), an increase of 4.7 percent over the FY2021 enacted level. The RFS supports USAID programs in agricultural research and development to accomplish innovation and outreach goals related to the Global Food Security Act and the USAID Feed the Future

programs. The increase is part of an investment across development sectors—including water, health and health security, and agriculture—to ensure significant climate co-benefits.

As is customary, the PBR does not include specific funding level requests for Feed the Future Innovation Labs or “Higher Education” within Development Assistance.

ABOUT THE ASSOCIATION OF PUBLIC AND LAND-GRANT UNIVERSITIES

APLU is a research, policy, and advocacy organization dedicated to strengthening and advancing the work of public universities. With a membership of 244 public research universities, land-grant institutions, state university systems, and affiliated organizations, APLU's agenda is built on the three pillars of increasing degree completion and academic success, advancing scientific research, and expanding engagement. Annually, its 202 U.S. member campuses enroll 4.2 million undergraduates and 1.2 million graduate students, award 1.2 million degrees, employ 1.1 million faculty and staff, and conduct \$48.7 billion in university-based research.