

The Federal Budget Process

The Federal Budgeting and Appropriations Process

July - February July - October March - June **Congress Finalizes Executive Branch Process Legislative Process** Spending Levels BUDGET BUDGET HOUSE AND APPROPRIATIONS FORMULATION SUBMISSION PASSAGE SENATE BUDGETS · The House and OMB gives · Generally, the · The House and guidance to President's Senate develop federal agencies **Budget Request** their own about levels of is submitted to funding and Congress on or priorities. about the 1st set spending hold hearings to The agencies Monday in levels. These work within February. will often those guidelines deviate from to structure a each other as budget proposal. President's OMB makes request. These final decisions resolutions are about the **NOT signed into** agencies' proposed budget.

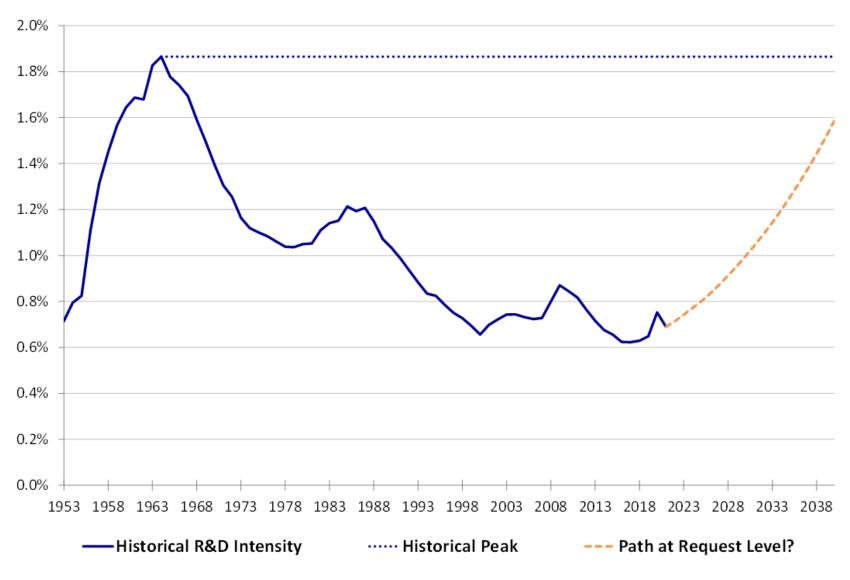
Federal FY22 Budget: R&D Summary

President Biden's budget request for FY2022 includes approximately \$171.3 billion for research and development (R&D), \$13.5 billion (8.5%) above the FY2021 estimated level of \$157.8 billion. In constant FY2022 dollars, the FY2022 R&D request represents an increase of \$10.6 billion (6.6%) above the FY2021 estimated level.

Under the President's FY2022 budget request, nearly all federal agencies would see their R&D funding increase relative to FY2021. The only exception is DOD.

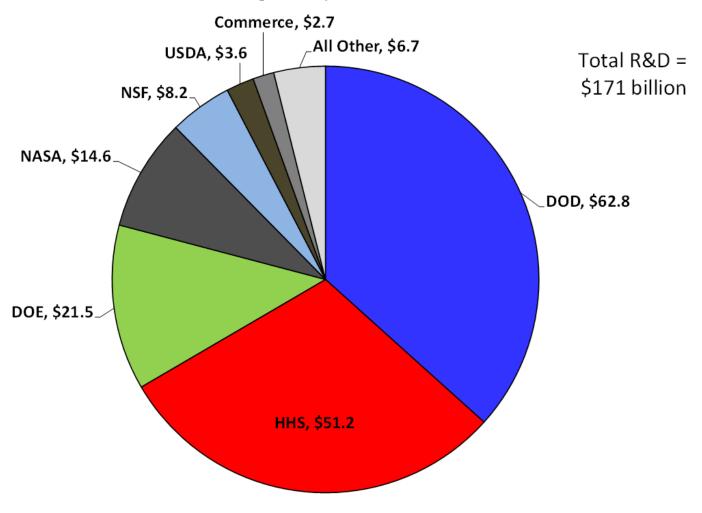
Department/Agency	FY2020 Actual	FY2021 Estimate		FY2021-FY2022		
			FY2022 Request	Dollar Change	Percent Change	
Department of Defense	62,438a	63,350a	62,800	-550	-0.9%	
Dept. of Health and Human Services	44,455	43,494	51,232	7,738	17.8%	
Department of Energy	19,476	19,312	21,452	2,140	11.1%	
NASA	14,801	13,226	14,565	1,339	10.1%	
National Science Foundation	6,800	7,408	8,173	765	10.3%	
Department of Agriculture	2,989	2,965	3,609	644	21.7%	
Department of Commerce	1,953	2,122	2,743	621	29.3%	
Department of Veterans Affairs	1,366	1,420	1,498	78	5.5%	
Department of Transportation	1,043	1,024	1,339	315	30.8%	
Department of the Interior	1,094	1,033	1,221	188	18.2%	
Department of Homeland Security	532	590	627	37	6.3%	
Smithsonian Institution	516	524	585	61	11.6%	
Environmental Protection Agency	237	445	473	28	6.3%	
Department of Education	344	322	346	24	7.5%	
Other	582	563	597	34	6.0%	
Total	158,626	157,798	171,260	13,462	8.5%	

Federal R&D Growth



Total Requested R&D by Agency, FY 2022

budget authority in billions of dollars



Source: OMB R&D data. R&D includes conduct of R&D and R&D facilities. © 2021 AAAS



How can we use this information?

If we understand the climate and priorities of the federal government, we can write responsive proposals (increased likelihood of proposal success)

Targeted hiring of faculty with expertise in priority areas

Planning – facilities, staffing, research infrastructure

Build interdisciplinary teams



National Institutes of Health

The following tables are in millions of dollars

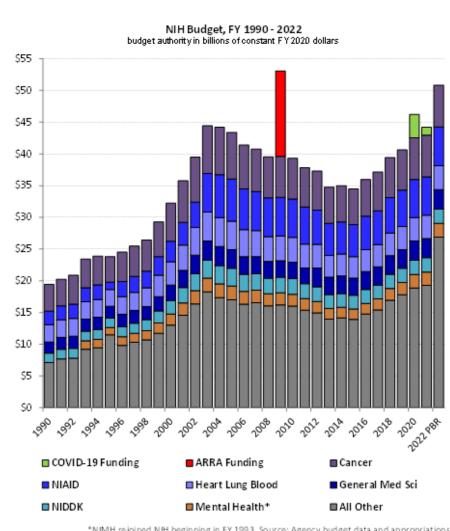
Institutes/Centers 2020 /z 2021 /3 2022 b 2022 b 2021 - 2021 National Cancer Institute 6,440 6,559 d 6,733 d +174 National Heart, Lung, and Blood Institute 3,625 d 3,665 d 3,846 d +181 National Institute of Dental and Craniofacial Research 478 d 485 d 516 d +31 National Institute of Diabetes and Digestive and Kidney Diseases 2,265 d 2,282 d 2,361 d +79 National Institute of Polity General Medical Sciences 2,447 d 2,511 d 2,783 d +272 National Institute of General Medical Sciences 2,937 d 2,991 d 3,096 d +105 Eunice K. Shriver National Institute of Child Health and Human Development /4 1,798 d 1,838 d 1,942 d +104 National Institute of Environmental Health Sciences: Labor/HHS 803 d 815 g 937 d +122 Appropriation 81 d 82 d 84 d +22 National Institute of Environmental Health Sciences: Interior Appropriation 81 d 82 d 4 National Institute of Arthritis and Musculoskeletal	The following tables are in millions of do					
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National Institute of Dental and Craniofacial Research 478 485 516 +31 National Institute of Diabetes and Digestive and Kidney Diseases 2,265 2,282 2,361 +79 National Institute of Neurological Disorders and Stroke 2,447 2,511 2,783 +272 National Institute of Allergy and Infectious Diseases 5,876 6,067 6,246 +179 National Institute of General Medical Sciences 2,937 2,991 3,096 +105 Eunice K. Shriver National Institute of Child Health and Human 1,798 1,838 1,942 +104 Development /4	National Cancer Institute	6,440	6,559	6,733	+174	
National Institute of Diabetes and Digestive and Kidney Diseases 2,265 2,282 2,361 +79 National Institute of Neurological Disorders and Stroke 2,447 2,511 2,783 +272 National Institute of Allergy and Infectious Diseases 5,876 6,067 6,246 +179 National Institute of General Medical Sciences 2,937 2,991 3,096 +105 Eunice K. Shriver National Institute of Child Health and Human Development /4 National Eye Institute 823 836 859 +23 National Institute of Environmental Health Sciences: Labor/HHS 803 815 937 +122 Appropriation National Institute of Environmental Health Sciences: Interior National Institute on Aging National Institute on Aging National Institute on Aging National Institute on Deafness and Communication Disorders National Institute on Deafness and Communication Disorders 491 498 512 +14 National Institute on Deafness and Alcoholism National Institute on Pury Abuse 1,458 1,480 1,853 +372 National Institute on Nursing Research National Institute on Furring Research 172 175 200 +25 National Institute of Biomedical Imaging and Bioengineering 405 411 422 +11 National Institute of Biomedical Imaging and Bioengineering 405 411 422 +11 National Institute of Monority Health and Health Disparities 336 392 652 +261 National Center for Complementary and Integrative Health 154 184 96 +12 National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 Advanced Research Projects Agency for Health 6,500 +6,500	National Heart, Lung, and Blood Institute	3,625	3,665	3,846	+181	
National Institute of Neurological Disorders and Stroke 2,447 2,511 2,783 +272 National Institute of Allergy and Infectious Diseases 5,876 6,067 6,246 +179 National Institute of General Medical Sciences 2,937 2,991 3,096 +105 Eunice K. Shriver National Institute of Child Health and Human 1,798 1,838 1,942 +104 Development /A 823 836 859 +23 National Institute of Environmental Health Sciences: Labor/HHS 803 815 937 +122 Appropriation 81 82 84 +2 Appropriation 81 82	National Institute of Dental and Craniofacial Research	478	485	516	+31	
National Institute of Allergy and Infectious Diseases 5,876 6,067 6,246 +179	National Institute of Diabetes and Digestive and Kidney Diseases	2,265	2,282	2,361	+79	
National Institute of General Medical Sciences 2,937 2,991 3,096 +105	National Institute of Neurological Disorders and Stroke	2,447	2,511	2,783	+272	
Eunice K. Shriver National Institute of Child Health and Human Development /A National Eye Institute National Institute of Environmental Health Sciences: Labor/HHS National Institute of Environmental Health Sciences: Interior National Institute of Environmental Health Sciences: Interior National Institute of Aging National Institute on Aging National Institute on Aging National Institute on Aging National Institute on Deafness and Communication Disorders National Institute on Deafness and Communication Disorders National Institute on Deafness and Communication Disorders National Institute on Drug Abuse National Institute on Alcohol Abuse and Alcoholism National Institute on Alcohol Abuse and Alcoholism National Institute of Nursing Research National Institute of Nursing Research National Institute of Biomedical Imaging and Bioengineering National Institute of Biomedical Imaging and Bioengineering National Center for Complementary and Integrative Health National Center for Advancing Translational Sciences National Library of Medicine National Library of Medicine National Library of Medicine National Library of Medicine National University Health Accounts /6 National Library of Medicine National Research Projects Agency for Health Nation	National Institute of Allergy and Infectious Diseases	5,876	6,067	6,246	+179	
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National Eye Institute 823 836 859 +23 National Institute of Environmental Health Sciences: Labor/HHS 803 815 937 +122 Appropriation 81 82 84 +2 Appropriation 81 82 84 +2 Appropriation 3,546 3,900 4,036 +136 National Institute on Aging 3,546 3,900 4,036 +136 National Institute on Aging 3,546 3,900 4,036 +136 National Institute on Dring Aging 491 498 512 +14 National Institute on Drug Aduse 1,458 1,480 1,853 +372 National Institute on Microhal Abuse and Alcoholism 547 555 570 +15 National Institute of Nursing Research 172 175 200 +25 National Institute of Biomedical Imaging and Bioengineering 405 411 422 +11 National Institute on Minority Health and Health Disparities 336 392 652 +261	Eunice K. Shriver National Institute of Child Health and Human	1,798	1,838	1,942	+104	
National Institute of Environmental Health Sciences: Labor/HHS 803 815 937 +122 Appropriation 81 82 84 +2 Appropriation 81 82 84 +2 Appropriation 83 82 84 +2 Appropriation 83 82 84 +2 Appropriation 84 85 84 +2 Appropriation 85 85 85 86 84 86 84 86 86 84 86 86	Development /4					
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National Institute of Arthritis and Musculoskeletal and Skin Diseases 625 634 680 +46 National Institute on Deafness and Communication Disorders 491 498 512 +14 National Institute of Mental Health 2,043 2,106 2,214 +108 National Institute on Drug Abuse 1,458 1,480 1,853 +372 National Institute on Alcohol Abuse and Alcoholism 547 555 570 +15 National Institute of Nursing Research 172 175 200 +25 National Human Genome Research Institute 604 616 633 +17 National Institute of Biomedical Imaging and Bioengineering 405 411 422 +11 National Institute on Minority Health and Health Disparities 336 392 652 +261 National Center for Complementary and Integrative Health 152 154 184 +30 National Center for Advancing Translational Sciences 833 855 879 +24 Fogarty International Center 81 84 96 +12	Appropriation					
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National Institute of Mental Health 2,043 2,106 2,214 +108 National Institute on Drug Abuse 1,458 1,480 1,853 +372 National Institute on Alcohol Abuse and Alcoholism 547 555 570 +15 National Institute of Nursing Research 172 175 200 +25 National Institute of Biomedical Imaging and Bioengineering 405 411 422 +11 National Institute on Minority Health and Health Disparities 336 392 652 +261 National Center for Complementary and Integrative Health 152 154 184 +30 National Center for Advancing Translational Sciences 833 855 879 +24 Fogarty International Center 81 84 96 +12 National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200<	National Institute of Arthritis and Musculoskeletal and Skin Diseases	625	634	680	+46	
National Institute on Drug Abuse 1,458 1,480 1,853 +372 National Institute on Alcohol Abuse and Alcoholism 547 555 570 +15 National Institute of Nursing Research 172 175 200 +25 National Human Genome Research Institute 604 616 633 +17 National Institute of Biomedical Imaging and Bioengineering 405 411 422 +11 National Institute on Minority Health and Health Disparities 336 392 652 +261 National Center for Complementary and Integrative Health 152 154 184 +30 National Center for Advancing Translational Sciences 833 855 879 +24 Fogarty International Center 81 84 96 +12 National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 <td>National Institute on Deafness and Communication Disorders</td> <td>491</td> <td>498</td> <td>512</td> <td>+14</td>	National Institute on Deafness and Communication Disorders	491	498	512	+14	
National Institute on Alcohol Abuse and Alcoholism 547 555 570 +15 National Institute of Nursing Research 172 175 200 +25 National Human Genome Research Institute 604 616 633 +17 National Institute of Biomedical Imaging and Bioengineering 405 411 422 +11 National Institute on Minority Health and Health Disparities 336 392 652 +261 National Center for Complementary and Integrative Health 152 154 184 +30 National Center for Advancing Translational Sciences 833 855 879 +24 Fogarty International Center 81 84 96 +12 National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health -	National Institute of Mental Health	2,043	2,106	2,214	+108	
National Institute of Nursing Research 172 175 200 +25 National Human Genome Research Institute 604 616 633 +17 National Institute of Biomedical Imaging and Bioengineering 405 411 422 +11 National Institute on Minority Health and Health Disparities 336 392 652 +261 National Center for Complementary and Integrative Health 152 154 184 +30 National Center for Advancing Translational Sciences 833 855 879 +24 Fogarty International Center 81 84 96 +12 National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health 6,500 +6,500	National Institute on Drug Abuse	1,458	1,480	1,853	+372	
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National Institute of Biomedical Imaging and Bioengineering 405 411 422 +11 National Institute on Minority Health and Health Disparities 336 392 652 +261 National Center for Complementary and Integrative Health 152 154 184 +30 National Center for Advancing Translational Sciences 833 855 879 +24 Fogarty International Center 81 84 96 +12 National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health 6,500 +6,500	National Institute of Nursing Research	172	175	200	+25	
National Institute on Minority Health and Health Disparities 336 392 652 +261 National Center for Complementary and Integrative Health 152 154 184 +30 National Center for Advancing Translational Sciences 833 855 879 +24 Fogarty International Center 81 84 96 +12 National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health 6,500 +6,500	National Human Genome Research Institute	604	616	633	+17	
National Center for Complementary and Integrative Health 152 154 184 +30 National Center for Advancing Translational Sciences 833 855 879 +24 Fogarty International Center 81 84 96 +12 National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health 6,500 +6,500	National Institute of Biomedical Imaging and Bioengineering	405	411	422	+11	
National Center for Advancing Translational Sciences 833 855 879 +24 Fogarty International Center 81 84 96 +12 National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health 6,500 +6,500	National Institute on Minority Health and Health Disparities	336	392	652	+261	
Fogarty International Center 81 84 96 +12 National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health 6,500 +6,500	National Center for Complementary and Integrative Health	152	154	184	+30	
National Library of Medicine 457 462 475 +13 Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health 6,500 +6,500	National Center for Advancing Translational Sciences	833	855	879	+24	
Office of the Director /4, 5 2,007 2,175 2,245 +70 21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health 6,500 +6,500	Fogarty International Center	81	84	96	+12	
21st Century Cures Innovation Accounts /6 157 109 150 +41 Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health 6,500 +6,500	National Library of Medicine	457	462	475	+13	
Buildings and Facilities 200 200 250 +50 Advanced Research Projects Agency for Health 6,500 +6,500	Office of the Director /4, 5	2,007	2,175	2,245	+70	
Advanced Research Projects Agency for Health 6,500 +6,500	21st Century Cures Innovation Accounts /6	157	109	150	+41	
	Buildings and Facilities	200	200	250	+50	
Total, Program Level 41,685 42,936 51,953 +9,017	Advanced Research Projects Agency for Health			6,500	+6,500	
	Total, Program Level	41,685	42,936	51,953	+9,017	

NIH

https://www.hhs.gov/sites/default/files/fy-2022-budget-in-brief.pdf

- \$52 billion for National Institutes of Health (NIH), which includes \$6.5 billion to launch the Advanced Research Projects Agency for Health (ARPA-H) -- an initiative that will have an initial focus on cancer and other diseases such as diabetes and Alzheimer's with the goal of driving transformational innovation in health research and speed application and implementation of health breakthroughs.
- The request includes funds for research on the health impacts of climate change. Most of the money would support extramural research efforts aimed at understanding health-related climate vulnerability and building health resilience, with special attention to the impact on vulnerable health disparities populations.
- Historic investment to end the opioid crisis including \$2.2 billion across NIH Institutes and Centers for opioids, stimulant, and pain research, an increase of \$627 million above FY 2021 enacted
- Health disparities and inequities research: \$330 million—\$250 million for NIMHD and \$80 million for targeted cardiovascular, nursing, and international health disparities and inequities research at NHLBI, NINR, and the Fogarty International Center, respectively





*NIMH rejoined NIH beginning in FY 1993. Source: Agency budget data and appropriations.

Adjusted for biomedical R&D inflation (BRDPI). © 2021 AAAS

NIH Highlights

- •NIH topline: \$52 billion (\$+9 billion, +21%)
 - Topline LESS ARPA: +\$2.5 billion, +6%

- Most institutes rise ~3%. Some outliers:
 - Minority Health +66%
 - Drug Abuse +25%
 - NIEHS: +14%
 - Neuro Disorders: +11%
- •RPGs increase by almost 1,500, success rate rises to 22%

•ARPA-Health: "operationally unique...with a distinctive culture and organizational structure"



FY 2022

BUDGET REQUEST TO CONGRESS

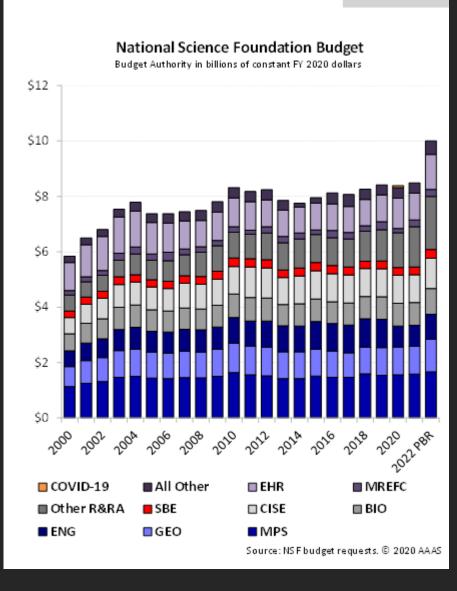
National Science Foundation

https://www.nsf.gov/about/budget/fy2022/tables.jsp#overview

- \$10.2 billion, which is a 19.1% increase over FY 2021 enacted.
 - \$1.2 billion for climate and clean energy research, which is \$500 millionabove FY 2021 enacted
 - \$100 million, which is a \$50 million increase over FY 2021 enacted, forfunding for programs that aim to increase participation in science and engineering of individuals from racial and ethnic groups who are traditionally underrepresented in these fields.
 - Proposes the creation of a new Technology Directorate at the agency, focused on funding for emerging technologies areas, such as artificial intelligence, disaster response and resilience, quantum informationsciences, advanced communications and biotechnology.
 - Proposes \$8.14 billion for research and related activities, \$1.3 billion for education and human resources, and \$249 million for major research equipment and facilities construction.
 - Proposes \$100 million, roughly a 50 percent increase, in funding for programs that aim to increase participation in science and engineering of individuals from racial and ethnic groups underrepresented in these fields.

NATIONAL SCIENCE FOUNDATION NSF BIG IDEAS FUNDING EX 2000 PURPLY TO CONCOUNTS							
FY 2022 BUDGET REQUEST TO CONGRESS (Dollars in Millions)							
NSF Big Ideas	FY 2020 Actual	FY 2021 Estimate	FY 2022 Request				
Research Ideas	\$177.15	\$150.00	\$150.00				
Harnessing the Data Revolution for 21st Century Science and Engineering (HDR)	30.00	30.00	30.00				
The Future of Work at the Human-Technology Frontier (FW-HTF)	30.00	30.00	30.00				
Navigating the New Arctic (NNA)	27.20	30.00	30.00				
The Quantum Leap (QL) ¹	30.00	-	-				
Understanding the Rules of Life (URoL)	29.95	30.00	30.00				
Windows on the Universe (WoU)	30.00	30.00	30.00				
Enabling Big Ideas	\$73.43	\$144.92	\$196.92				
Growing Convergence Research (GCR)	15.90	16.00	24.17				
Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES)	20.75	20.00	46.50				
Mid-scale Research Infrastructure	30.37	108.92	126.25				
Mid-scale RI Track 1	30.37	32.67	50.00				
Mid-scale RI Track 2	-	76.25	76.25				
NSF 2026 ¹	6.42	-	-				
Total	\$250.59	\$294.92	\$346.92				

¹ Starting in FY 2021, all Quantum Leap stewardship activities are managed with the broader Quantum Information Science (QIS) portfolio. See the NSF-Wide Investments chapter for detail on QIS.



NSF Highlights

- NSF topline: \$10 billion (\$+1.7 billion, +20%)
 - Topline LESS Technology, Innovation, and Partnership Directorate (TIP): +\$1.2 billion, +14%
- Largest increases for Geosciences (GEO) and Engineering (ENG), smallest for Math and Physical Sciences
 - Relatively larger increases for Advanced Industries (AI, quantum, biotech, etc)
- Research grants up 1,800, success rate: 28%
 - Also ~\$22,000 increase in median annualized award size
- Education and Human Resources (EHR): +16% or +\$177 million, mostly for STEM diversity
- Research Infrastructure up 5%; larger focus on midscale infrastructure and instrumentation



United States Department of Agriculture

FY 2022

BUDGET SUMMARY

USDA:

https://www.usda.gov/sites/default/files/documents/20 22-budget-summary.pdf

- •Budget includes \$4 billion to support research to advance the competitiveness of U.S. agriculture, promote food security and increase climate change research.
 - Investments are prioritized for research that advances innovation and science-based approaches to put technologies into the hands of farmers.
 - Address threats from wildfires, including funding to address issues related to hazardous fuels and forest resilience projects
 - Increase in funding for climate smart agriculture, climate resilience, and clean energy.
 - Expand broadband access in rural areas; to provide safe drinking water and waste-water infrastructure in rural communities; to improve voluntary public and private land conservation efforts; to help rural communities to use clean energy; to help with rural economic development issues; and to advance equity.

U.S. DEPARTMENT OF EDUCATION



Fiscal Year 2022 Budget Summary

US Department of Education

https://www2.ed.gov/about/overview/budget/budget22/summary/22summary.pdf

- Boost in support for Children with Disabilities: \$17.5 billion for special education programs, with \$15.5 billion for IDEA, a \$2.6 billion increase over FY 21 and the largest increase to the program in two decades
- Expanding Access to Broadband: \$100 billion over 10 years to bring high-quality, reliable broadband to all American families which will close the homework gap
- Increases the funding level for programming intended to support historically underserved students in science and engineering fields by \$100 million (approximately 50 percent).
- o Increases to federal student aid programs (Pell, SEOG, Work Study)

Department of Energy FY 2022 Congressional

FY 2022 Congressional Budget Request



Budget in Brief



Budget Request

NASA FY 2022 Request Directly Supports Administration Priorities



Department of Energy:

https://www.energy.gov/sites/default/files/2021-06/doe-fy2022-budget-in-brief-v4.pdf

\$46.1 billion, which is a 10.2% increase over FY 2021 enacted.

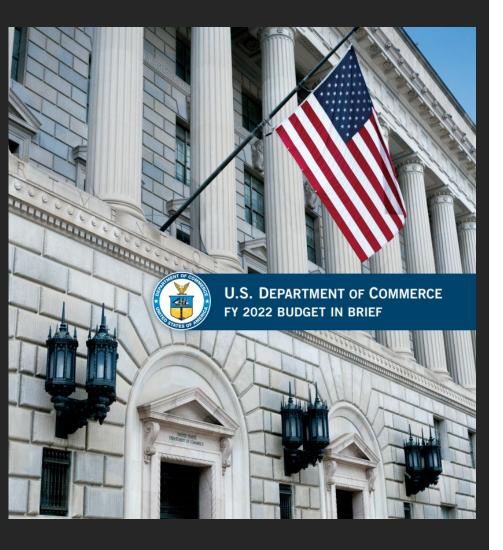
- Proposes \$200 million for the creation of an ARPA-Climate (ARPA-C) to invest in high-risk, high-reward research to address the climate crisis.
- Proposes \$4.7 billion for the Energy Efficiency and Renewable Energy (EERE) office, which is a \$1.8 billion increase over FY 2021 enacted.
- Proposes \$501 million for ARPA-E, which is 17% increase over FY 2021 enacted.

NASA:

https://www.nasa.gov/sites/default/files/atoms/files/fy2022 budget summary.pdf

\$24.7 billion, which is a 6.3% increase over FY 2021 enacted.

- \$20 million for the Office of STEM Engagement to expand initiatives to attract and retain underserved and underrepresented students in engineering and other STEM fields, in partnership with minority serving institutions and other higher education institutions.
- Provides a \$30 million increase to accelerate transformative science at the frontiers of biological and physical sciences research in space.
- \$57 million for the Space Grant College and Fellowship Program (\$6 million increase over FY21) and \$48 million for the Minority University Research and Education Project (\$10 million increase over FY 2021 enacted).



Department of Commerce

https://www.commerce.gov/sites/default/files/2021-06/BiB-Final-622-Noon.pdf

- \$11.4 billion, which is a 27.7% increase above FY2021 enacted.
 - Economic Development Administration:
 - \$10 million, an increase of \$6 million, for STEM Apprenticeship Pilot program.
 - \$10 million (new) for Regional Innovation Hubs
 - NOAA: \$6.9 billion, an increase of more than \$1.4 billion over the 2021 enacted level, for the National Oceanic and Atmospheric Administration.
 - \$722 million for Office of Oceanic and Atmospheric Research (OAR), which is a 27% increase over FY21 enacted.
 - \$40 million allocation for proposed Advanced Research Projects Agency-Climate (ARPA-C).
 - \$2 billion, an approximately \$500 million increase over the 2021 enacted level, for the next generation of satellites.
 - \$1.497 billion for National Institute of Standards and Technology (NIST),
 which is a 45% increase over FY21 enacted.
 - \$916 million, an increase of \$128 million over the 2021 enacted level, to expand scientific and technological research at NIST.
 - \$150 million in new funding to establish two additional Manufacturing USA Institutes.

Other Agencies

Department of Homeland Security

- \$52 billion, which is a 0.2% increase over FY 2021 enacted.
 - Proposes \$599 million for research and development with new investments in climate resilience, cybersecurity data analytics and transportation security technologies.
 - Proposes \$45.8 million for university centers of excellence, which is a 13% increase over FY 2021 enacted.

EPA

- \$936 million is provided for a new Accelerating Environmental and Economic Justice initiative to support environmental justice issues for low- income and marginalized communities, including for community air quality monitoring and other areas.
- Additional funding is provided related to protecting communities from hazardous waste and environmental damage, including for cleaning up environmentally damaged areas.
- \$1.8 billion is provided to tackle climate change with urgency. Funding would support programs that would help to address climate change, including for greenhouse gas emissions, environmental justice, and other areas.

Department of Transportation

- \$88 billion is requested for FY 2022.
 - The budget incorporates language suggesting that the President is committed to making a "once-in-a-lifetime" generational investment to significantly improve America's transportation infrastructure.
 - \$2.5 billion is provided for the Capital Investment Grant Program to assist with transit projects.
 - \$250 million is provided to assist transit agencies with procuring low and no emission buses.
 - \$1 billion is provided for the Better Utilizing Investments to Leverage Development (BUILD) grant program, which funds surface transportation infrastructure projects.
 - \$88.5 million for clean climate research activities to reduce the impact of aviation on climate change and air quality.

National Endowment for the Humanities (NEH) /National Endowment for the Arts (NEA)

- The President's budget request provides a funding level for the NEH at \$177.5 million, a 6% increase over FY 2021.
- The NEA was funded at \$201 million.



Recently added CDMRP FY21 pre-announcements are now available for viewing. Click https://go.usa.gov/iss/kx and https://go.usa.gov/iss/44 to get detailed information for Kidney and Prostate Cancer research, respectively. For information about exeetily added F921 program funding opportunities, including Combat Casualty Care and Lung Cancer, click https://go.usa.gov/iss/ACZ.

The Congressionally Directed Medical Research Programs, https://go.usa.gov/xsV7F, strives to transform healthcare for service members and the American public through innovative and impactful research. A listing of current CDMRP and other USAMRDC extramural funding opportunities can be accessed at

https://go.usa.gov/xsV7u. Search CFDA 12.420.

For CDMRP news and information, consider subscribing to receive email notifications at





National Science Foundation 🤣 @NSF · Mar 18

One of the top priorities of NSF is strengthening pathways into STEM fields and expanding opportunities for everyone and anyone to bring their talents into the STEM community.

NSF Director, NSF staff & scientists share why diversity in #STEM matters.



Why Does Diversity in STEM Matter?

NSF Director Sethuraman Panchanathan, NSF employees and NSF-supported researchers from ... ${\mathcal S}$ youtube.com

DOE Announces \$34.5 Million for Data Science and Computation Tools to Advance Climate Solutions



DOE Office of Science <updates@info.science.doe.gov>

1 If there are problems with how this message is displayed, click here to view it in a web browser.

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

U.S. Department of Energy Announces \$34.5 Million for Data Science and Computation Tools to Advance Climate Solutions

Artificial Intelligence and Machine Learning Can Boost Clean Energy Technologies, Energy Efficiency, and Climate Modeling

The U.S. Department of Energy (DOE) today announced up to \$34.5 million to harness cutting-edge research tools for new scientific discoveries, including clean energy and climate solutions. Two new funding opportunities will support researchers using data science and computation-based methods—including artificial intelligence and machine learning—to tackle basic science challenges, advance clean energy technologies, improve energy efficiency, and predict extreme weather and climate patterns.







AHA Accepting LOIs for New Strategically Focused Research Network

Letters of Intent are being accepted until Tuesday, February 9, 2021, for applications to the American Heart Association's <u>Disparities in Cardio-Oncology Strategically Focused Research</u>
Network. Letters of Intent are required in order to be considered for an invitation to submit a full proposal.

Stay informed!

Listservs; Newsletters

- Subscribe to agency communications because funding opportunities and other announcements can offer insight into priorities
- Free webinars

Social Media Outlets

 Many agencies have accounts on multiple platforms—their posts and tweets inform followers as to their priorities and what has been



How can we use this information?

President's Budget - Key areas, common themes, proposed dollars allocated



Agency Budgets - Priority areas by office, institute, etc.



Institutional alignment – Faculty Insights, Research Interest Groups



Funding Opportunities - Pivot, Grants.gov, Faculty Insights, Others (October Session)



Ideas Labs, Form Teams, develop a proposal that is responsive to the federal priority/priorities

Resources

American Association for The Advancement of Science (AAAS)

- Historical Data
- Explanation of Budgeting Process
- Federal R&D Dashboard

https://www.aaas.org/programs/r-d-budget-and-policy/federal-rd-budget-dashboard

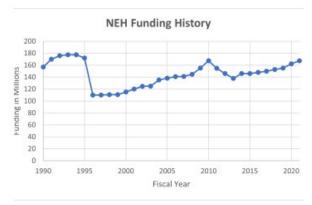
American Institute of Physics (AIP)

 Up to date information on appropriations/budget tracker

https://www.aip.org/fyi/federal-science-budget-tracker

Arts and Humanities

- NEH Appropriations History: https://www.neh.gov/neh-appropriations-history
- NEA Appropriations History: https://www.arts.gov/about/appropriations-history



Questions?

More from the Office of Research

Funding Your Research

Friday, October 22, 2021, Noon to 1 p.m. via Zoom

Register Online

Learn about the resources on campus that can help you find funding opportunities that match your research agenda. We will share the basics of using Pivot, the research analytics services available on campus, and learn about strategies that will help give your proposal a competitive edge.

Broader Impacts & Beyond

Friday, November 12, Noon to 1 p.m. via Zoom

Register Online

Join Dr. Sara Vassmer, Director of The Connector to learn about the resources and partners at Mizzou that can help you develop successful broader impacts activities and productive collaborations.

More events and opportunities at:

https://research.missouri.edu/researchfrst/