

TABLE 113

Federal obligations for applied research, by agency: FYs 2012–21

(Dollars in millions)

Agency	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 (preliminary)
All agencies	31,027.4	29,753.2	31,603.5	32,298.4	34,812.0	36,599.8	38,392.4	41,100.5	43,758.1	43,924.2
Departments										
Department of Agriculture	1,112.6	1,023.7	1,152.1	1,203.9	1,221.0	1,251.1	1,270.4	1,350.4	1,224.6	1,272.9
Agricultural Marketing Service	2.1	2.5	2.9	3.4	3.3	3.6	3.6	3.9	3.5	3.5
Agricultural Research Service	435.9	405.7	448.7	452.6	457.8	468.1	480.2	516.9	569.4	634.8
Economic Research Service	70.2	64.5	70.6	85.1	85.1	86.4	86.5	85.6	81.7	87.0
Foreign Agricultural Service	0.5	0.5	0.2	0.4	0.2	0.2	0.0	0.0	0.0	0.0
Forest Service	187.2	204.7	186.8	175.6	190.9	182.1	169.2	170.3	172.5	149.9
Grain Inspection, Packers, and Stockyards Administration	5.0	4.7	5.7	6.0	6.0	0.2	na	na	na	na
National Agricultural Statistics Service	3.9	4.1	5.4	5.4	5.4	5.4	5.3	5.3	5.0	5.2
National Institute of Food and Agriculture	403.2	333.5	426.0	471.7	468.8	501.8	521.4	564.5	389.7	389.7
Rural Business-Cooperative Service	4.5	3.6	5.8	3.5	3.6	3.3	4.2	3.9	2.8	2.8
Department of Commerce	814.3	832.6	1,062.8	921.5	905.6	1,056.3	1,001.5	1,028.8	1,109.6	1,248.6
National Institute of Standards and Technology	333.3	335.4	384.9	398.8	377.5	444.6	448.6	449.8	466.3	526.9
National Oceanic and Atmospheric Administration	396.1	374.9	441.8	470.0	427.7	547.4	488.2	541.8	597.8	640.4
National Telecommunications and Information Administration	7.6	7.3	9.6	12.3	10.6	8.2	9.0	7.9	7.7	11.2
U.S. Census Bureau	77.3	115.0	226.5	40.5	89.8	56.1	55.8	29.2	37.9	70.1
Department of Defense	4,626.7	4,092.5	4,630.8	4,558.1	4,913.3	5,068.0	5,262.8	5,758.2	6,416.2	6,582.1
Defense Advanced Research Projects Agency	1,151.3	983.3	1,189.2	1,125.2	1,157.9	1,118.1	1,221.6	1,265.0	1,524.2	1,378.7
Defense Health Agency	na	na	NA	NA	NA	NA	NA	NA	153.4	189.1
Department of the Air Force	1,223.2	1,054.7	1,072.2	1,107.8	1,240.2	1,244.0	1,340.7	1,547.5	1,728.5	1,829.5
Department of the Army	915.0	859.0	982.6	941.6	1,060.4	1,233.2	1,217.2	1,461.5	1,382.7	1,489.8
Department of the Navy	826.1	740.1	871.9	844.7	923.6	970.6	953.3	935.0	1,056.7	1,140.6
Other defense agencies	511.1	455.4	515.0	538.9	531.2	502.1	530.1	549.2	570.7	554.4
Department of Education	201.6	177.8	183.4	137.4	140.1	141.4	135.3	131.4	135.8	219.6
Department of Energy	3,403.9	3,482.3	4,016.6	4,181.1	4,879.7	5,084.2	5,507.4	6,295.2	5,023.6	5,992.8
Advanced Research Projects Agency—Energy	56.4	92.0	150.0	138.9	172.1	150.6	80.0	202.5	219.0	213.5
Bonneville Power Administration	0.7	3.5	2.5	2.5	2.5	3.7	0.0	0.0	0.0	0.0
Electricity Delivery and Energy Reliability	57.7	49.8	61.0	56.6	66.6	74.4	81.5	72.3	65.3	51.7
Energy Efficiency and Renewable Energy	434.5	529.8	540.1	472.6	576.4	853.0	1,284.9	1,270.3	1,248.3	1,276.1
Environmental Management	14.7	3.0	16.2	8.3	9.8	10.4	12.5	8.6	7.3	9.7
Fossil Energy	161.4	150.6	157.5	193.6	225.2	223.7	628.6	626.0	645.4	683.3
National Nuclear Security Administration	2,293.2	2,355.0	2,714.3	2,637.2	3,126.6	2,997.2	2,556.3	3,568.3	2,279.3	3,344.3
Defense Programs	2,143.4	2,141.6	2,519.4	2,526.7	3,010.1	2,880.9	2,421.7	3,434.1	2,155.0	3,194.7
Office of Defense Nuclear Nonproliferation	149.8	213.4	194.9	110.5	116.5	116.3	134.7	134.2	124.3	149.6

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Nuclear Energy	336.4	236.1	295.9	596.7	630.9	688.5	762.7	378.3	392.3	387.5
Office of Cybersecurity, Energy Security, and Emergency Response	na	na	na	na	na	na	0.0	39.0	35.8	26.8
Office of Science	49.1	62.5	79.1	74.7	69.5	82.7	100.9	129.8	130.8	0.0
Department of Health and Human Services	15,146.8	14,026.3	14,582.0	15,119.9	16,483.3	16,977.3	18,560.6	19,254.6	22,424.8	21,620.7
Administration for Children and Families	8.4	2.4	3.2	2.2	3.1	2.4	3.0	2.3	1.6	3.1
Administration for Community Living	0.0	0.0	0.0	72.5	66.1	66.3	65.6	65.9	70.8	72.3
Agency for Healthcare Research and Quality	336.5	335.8	335.0	335.0	306.2	300.1	306.1	308.1	308.1	308.1
Agency for Toxic Substances and Disease Registry	1.4	1.1	1.4	1.8	2.2	2.8	1.6	7.0	9.6	9.6
Centers for Disease Control and Prevention	407.4	276.8	308.6	365.1	408.8	363.9	322.3	288.7	371.2	430.3
Centers for Medicare and Medicaid Services	21.0	20.0	33.6	24.0	29.5	28.9	230.7	133.5	223.6	228.0
Food and Drug Administration	352.6	360.6	389.1	375.7	485.9	375.0	477.6	493.1	464.0	495.0
Health Resources and Services Administration	24.2	24.1	25.5	24.6	23.5	26.8	33.6	30.0	32.5	31.4
National Institutes of Health	13,975.6	12,986.9	13,467.2	13,901.0	15,140.0	15,794.0	17,103.0	17,909.0	20,927.0	20,026.0
Office of the Secretary of Health and Human Services	19.5	18.6	18.6	18.0	18.0	16.9	17.1	17.0	16.5	16.9
Office of the Assistant Secretary for Planning and Evaluation	19.5	18.6	18.6	18.0	18.0	16.9	17.1	17.0	16.5	16.9
Department of Homeland Security	222.3	140.7	214.5	205.1	194.5	264.4	308.7	233.2	177.9	187.0
Countering Weapons of Mass Destruction Office	NA	NA	37.7	25.6	24.6	22.7	8.8	25.8	17.8	16.6
Cybersecurity and Infrastructure Security Agency	na	na	na	na	na	na	7.2	13.1	7.0	8.3
Science and Technology Directorate	210.1	133.7	168.4	173.1	162.8	235.3	286.3	188.4	151.6	159.0
U.S. Coast Guard	12.2	7.0	8.4	6.4	7.0	6.5	6.5	5.9	1.5	3.1
Department of Housing and Urban Development	63.1	44.1	36.5	38.2	42.9	41.2	40.3	21.9	NA	NA
Department of the Interior	570.3	551.9	597.1	627.0	672.1	667.5	570.0	608.3	614.5	649.5
Bureau of Indian Affairs	NA	NA	NA	NA	NA	NA	5.0	5.0	*	*
Bureau of Land Management	NA	NA	NA	15.4	17.0	17.0	12.9	12.9	13.7	12.2
Bureau of Ocean Energy Management	39.0	39.5	48.0	43.9	60.1	63.4	65.6	65.1	59.3	65.2
Bureau of Reclamation	7.5	7.5	9.0	7.3	18.6	22.8	16.8	16.5	19.1	18.0
Bureau of Safety and Environmental Enforcement	7.7	15.2	32.6	16.6	23.6	8.3	4.0	7.4	4.2	15.0
National Park Service	5.4	6.4	14.1	7.5	8.0	8.7	9.1	9.3	9.4	9.4

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Office of Surface Mining Reclamation and Enforcement	NA	NA	NA	NA	NA	NA	0.0	0.3	0.6	2.2
U.S. Fish and Wildlife Service	NA	NA	NA	29.8	32.5	32.8	32.7	32.7	32.7	32.7
U.S. Geological Survey	510.7	483.2	493.4	506.4	512.4	514.6	424.1	459.2	475.5	494.9
Department of Justice	60.1	57.1	134.1	123.0	144.0	84.6	75.0	84.2	83.8	85.9
Bureau of Prisons	1.7	2.5	2.2	2.5	2.5	1.9	1.3	1.2	1.8	1.9
Federal Bureau of Investigation	6.9	2.4	0.0	0.0	0.0	0.0	2.9	1.0	4.7	0.9
Office of Justice Programs	51.5	52.2	131.9	120.5	141.4	82.7	70.8	81.9	77.3	83.0
Department of Labor	18.9	13.9	11.2	10.2	5.6	4.6	4.8	4.4	4.7	4.3
Employee Benefits Security Administration	12.8	9.6	7.5	6.5	4.6	2.6	3.0	2.6	2.7	2.3
Occupational Safety and Health Administration	6.0	4.2	3.6	3.4	0.7	2.0	1.9	1.7	2.0	2.0
Pension Benefit Guaranty Corp.	0.2	0.2	0.2	0.4	0.3	0.0	0.0	NA	NA	NA
Department of State	2.2	1.5	NA	2.0	2.0	2.1	62.1	62.2	30.0	30.0
Department of Transportation	690.0	647.5	643.8	662.6	625.1	695.6	750.9	745.6	900.2	848.5
Federal Aviation Administration	216.4	196.9	197.5	207.2	207.5	212.3	194.8	193.1	247.0	297.4
Federal Highway Administration	340.5	320.1	337.9	273.2	247.2	305.4	419.6	414.9	471.9	355.8
Federal Motor Carrier Safety Administration	6.9	7.2	7.2	7.6	9.7	11.2	8.8	7.8	8.9	11.4
Federal Railroad Administration	27.5	39.5	29.8	32.9	30.7	34.1	32.6	31.9	34.8	35.5
Federal Transit Administration	24.8	13.6	0.0	72.4	35.3	55.4	10.2	2.8	40.2	54.0
National Highway Traffic Safety Administration	68.7	64.8	65.1	62.5	86.6	69.0	76.0	76.3	68.9	66.0
Office of the Secretary of Transportation	0.0	0.0	4.0	1.9	3.7	2.8	3.4	8.2	12.1	22.8
Pipeline and Hazardous Materials Safety Administration	2.0	2.0	2.4	4.8	4.6	5.4	5.7	10.6	16.5	5.6
Research and Innovative Technology Administration	3.3	3.4	NA	NA	NA	NA	NA	NA	NA	NA
Department of the Treasury	75.2	73.2	73.2	72.3	80.5	1.3	26.6	35.9	44.0	52.5
Bureau of Engraving and Printing	4.6	8.4	8.6	8.7	14.1	0.0	26.6	35.7	43.9	52.4
Internal Revenue Service	69.0	64.5	64.0	63.6	64.6	0.0	0.0	0.0	0.0	0.0
U.S. Mint	1.6	0.2	0.6	*	1.8	1.3	0.0	0.2	0.1	0.1
Department of Veterans Affairs	325.9	355.0	321.5	416.3	458.0	394.7	792.2	848.5	918.1	987.8
Other agencies										
Administrative Office of the U.S. Courts	NA	NA	NA	NA	6.8	8.0	6.8	6.4	5.0	6.4
Agency for International Development	77.4	116.5	59.2	212.2	148.5	191.5	120.4	171.7	134.8	134.8
Appalachian Regional Commission	0.6	0.2	0.6	0.4	0.9	0.1	0.5	0.9	0.7	*

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Agency	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 (preliminary)
Consumer Product Safety Commission	2.0	1.3	1.8	2.0	2.0	1.9	1.0	0.9	0.4	0.4
Environmental Protection Agency	403.7	446.2	453.5	440.4	430.0	417.5	412.9	404.8	411.9	404.4
Federal Communications Commission	4.0	5.2	6.7	4.8	5.1	6.1	4.8	2.0	1.8	2.6
Federal Trade Commission	2.9	2.7	2.5	1.9	3.0	5.7	5.8	6.0	6.0	7.5
Library of Congress	0.5	0.7	0.7	0.8	1.0	0.9	0.9	0.9	1.2	1.2
National Aeronautics and Space Administration	2,494.3	2,598.2	2,312.7	2,329.7	2,332.3	2,319.5	2,011.4	2,422.5	2,554.8	2,055.6
National Archives and Records Administration	2.0	1.1	0.9	0.7	0.7	0.5	0.5	0.5	0.0	0.0
National Science Foundation	517.4	594.4	678.1	695.8	760.1	778.6	760.3	784.1	889.2	900.3
Nuclear Regulatory Commission	82.6	75.9	85.0	91.9	80.5	66.0	76.3	74.1	66.4	71.4
Patient-Centered Outcomes Research Trust Fund	41.1	334.4	282.6	152.1	114.9	883.9	491.7	578.4	469.7	390.9
RESTORE Act Centers of Excellence Research Grants Program	na	na	na	na	na	na	na	na	9.2	5.0
Social Security Administration	64.9	56.7	59.6	58.9	129.0	109.5	71.6	146.2	69.7	129.4
Tennessee Valley Authority	NA	NA	NA	NA	NA	2.6	5.9	5.6	6.4	8.5
U.S. Agency for Global Media	NA	NA	NA	NA	NA	NA	NA	6.1	4.8	4.8
U.S. Postal Service	NA	NA	NA	28.0	29.4	73.3	53.2	26.7	18.2	19.0

* = amount greater than \$0 but less than \$50,000. na = not applicable; agency or subagency did not exist as such or in that organization in that year. NA = not available; data were not collected at that level for that fiscal year.

Note(s):

Because of rounding, detail may not add to total. Only those agencies and subdivisions that had obligations in variables represented by this table appear in the table. FYs 2020 and 2021 obligations include additional funding provided by supplemental COVID-19 related appropriations (e.g., Coronavirus Aid, Relief, and Economic Security [CARES] Act). See technical table A-2 for additional notes associated with the agencies listed in this table.

Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development.