

TABLE 105

## Federal obligations for research and development, by agency: FYs 2011–20

(Dollars in millions)

Agency	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 (preliminary)
All agencies	135,532.6	138,524.6	125,720.4	130,561.3	128,753.3	115,832.8	118,974.8	129,424.8	142,424.2	150,884.7
Departments										
Department of Agriculture	2,341.3	2,171.2	2,019.1	2,258.2	2,341.0	2,357.8	2,418.5	2,478.6	2,637.1	2,904.2
Agricultural Marketing Service	4.3	4.3	5.0	5.7	6.8	6.7	7.2	7.2	7.7	7.0
Agricultural Research Service	1,133.0	1,089.8	1,014.3	1,121.8	1,131.6	1,144.4	1,170.4	1,200.6	1,292.4	1,414.0
Animal and Plant Health Inspection Service	29.0	37.4	36.9	39.6	40.2	40.3	39.5	38.8	39.5	39.5
Economic Research Service	81.1	77.2	71.0	77.6	85.1	85.1	86.4	86.5	85.6	85.3
Foreign Agricultural Service	0.6	0.7	0.7	0.2	0.6	0.2	0.2	0.0	0.0	0.5
Forest Service	353.5	330.7	329.3	335.4	331.8	341.0	327.5	327.0	327.2	305.0
Grain Inspection, Packers, and Stockyards Administration	6.7	5.0	4.7	5.7	6.0	6.0	0.2	na	na	na
National Agricultural Statistics Service	7.4	7.4	7.5	9.4	9.3	9.3	9.4	9.5	9.5	9.0
National Institute of Food and Agriculture	724.1	614.2	546.1	657.0	726.1	721.3	774.4	804.9	871.4	1,040.0
Rural Business-Cooperative Service	1.7	4.5	3.6	5.8	3.5	3.6	3.3	4.2	3.9	3.9
Department of Commerce	1,067.1	1,054.8	1,092.2	1,375.1	1,331.3	1,350.9	1,612.5	1,438.7	1,534.7	1,621.8
Economic Development Administration	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
National Institute of Standards and Technology	506.9	512.7	535.1	602.3	633.9	629.4	715.7	686.1	712.3	768.4
National Oceanic and Atmospheric Administration	492.3	432.8	418.6	504.4	543.5	511.4	668.2	633.8	718.9	725.4
National Telecommunications and Information Administration	7.8	7.6	7.3	9.6	12.3	10.6	8.2	9.0	7.9	8.2
U.S. Census Bureau	59.5	101.7	131.3	258.8	141.6	199.6	220.3	109.9	95.6	119.8
Department of Defense	75,157.9	73,804.1	63,557.7	64,980.5	61,513.5	44,748.6	44,872.6	52,973.3	58,779.5	62,461.3
Defense Advanced Research Projects Agency	2,846.4	2,749.7	2,371.8	2,822.5	2,815.6	2,933.4	2,894.5	3,018.2	3,321.0	3,667.2
Department of the Air Force	26,500.1	27,545.2	23,524.2	24,210.4	22,320.1	7,321.5	8,099.5	11,202.7	15,076.8	15,621.8
Department of the Army	9,831.8	9,219.8	7,883.3	7,332.1	6,764.3	6,372.2	7,530.8	8,581.3	10,274.8	10,754.8
Department of the Navy	17,792.5	17,728.3	15,419.5	15,567.1	15,489.6	16,644.4	15,236.0	15,446.1	15,341.2	16,787.0
Other defense agencies	18,187.2	16,561.1	14,359.1	15,048.4	14,123.9	11,477.1	11,111.8	14,724.9	14,765.8	15,630.6
Department of Education	346.1	338.0	309.9	322.0	251.3	244.4	261.8	266.2	235.8	242.2
Department of Energy	9,945.8	9,952.0	9,841.0	10,525.8	11,391.0	12,208.6	12,308.4	12,832.4	14,376.4	16,136.0
Advanced Research Projects Agency—Energy	174.9	102.8	182.1	260.9	241.6	299.3	273.8	159.9	405.0	425.0
Bonneville Power Administration	13.2	14.5	14.4	16.0	15.6	15.6	14.0	0.0	0.0	0.0
Electricity Delivery and Energy Reliability	88.8	101.3	83.0	103.6	97.2	112.4	133.0	145.8	137.7	153.9
Energy Efficiency and Renewable Energy	863.2	986.1	917.9	866.4	1,079.2	1,287.7	1,441.0	1,686.3	1,695.8	2,566.6
Environmental Management	67.5	45.8	9.1	27.6	25.1	29.7	31.4	38.0	26.1	11.6
Fossil Energy	410.6	366.8	342.3	425.6	524.0	608.7	604.6	661.6	659.0	680.0
National Nuclear Security Administration	4,036.3	4,033.9	4,180.4	4,416.7	4,271.3	4,568.0	4,434.7	4,057.4	5,740.6	6,319.6
Defense Programs	2,771.0	2,762.3	2,892.8	3,025.9	2,975.3	3,107.1	2,965.6	2,572.0	3,660.4	4,367.8
Naval Nuclear Propulsion Program	941.7	1,040.1	994.0	1,093.7	1,083.4	1,215.7	1,220.0	1,205.8	1,788.6	1,648.4

TABLE 105

**Federal obligations for research and development, by agency: FYs 2011–20**

(Dollars in millions)

Agency	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 (preliminary)
Office of Defense Nuclear Nonproliferation	323.5	231.5	293.6	297.0	212.7	245.2	249.0	279.5	291.5	303.5
Nuclear Energy	387.8	361.2	263.4	323.9	728.1	762.8	891.3	1,115.6	606.4	610.6
Office of Cybersecurity, Energy Security, and Emergency Response	na	na	na	na	na	na	na	0.0	51.9	43.9
Office of Science	3,903.5	3,939.5	3,848.2	4,085.1	4,409.0	4,524.5	4,484.7	4,967.7	5,053.9	5,324.9
Department of Health and Human Services	30,848.8	31,195.6	29,382.5	30,656.1	30,272.1	32,215.7	33,774.2	36,911.3	39,191.2	41,561.7
Administration for Children and Families	9.6	8.4	2.4	3.2	2.2	3.1	2.4	3.0	2.3	1.6
Administration for Community Living	0.0	0.0	0.0	0.0	76.0	83.1	83.3	82.7	83.1	90.2
Agency for Healthcare Research and Quality	370.7	365.8	365.0	364.0	364.0	334.0	324.0	334.0	338.0	308.1
Agency for Toxic Substances and Disease Registry	5.1	1.4	1.1	1.4	1.8	2.2	2.8	2.8	7.0	7.0
Biomedical Advanced Research and Development Authority	NA	NA	NA	NA	NA	NA	NA	NA	736.2	747.0
Centers for Disease Control and Prevention	385.9	512.4	362.9	408.9	489.3	521.2	475.5	451.1	419.4	405.2
Centers for Medicare and Medicaid Services	35.4	21.0	20.0	33.6	24.0	29.5	28.9	230.7	133.5	136.0
Food and Drug Administration	225.2	352.6	360.6	389.1	375.7	485.9	375.0	477.6	493.1	495.0
Health Resources and Services Administration	36.8	37.6	36.6	37.8	41.1	40.8	46.3	36.3	32.6	31.5
National Institutes of Health	29,760.2	29,876.8	28,215.3	29,399.6	28,880.0	30,698.0	32,419.0	35,276.0	36,929.0	39,323.0
Office of the Secretary of Health and Human Services	19.9	19.5	18.6	18.6	18.0	18.0	16.9	17.1	17.0	17.0
Office of the Assistant Secretary for Planning and Evaluation	19.9	19.5	18.6	18.6	18.0	18.0	16.9	17.1	17.0	17.0
Department of Homeland Security	559.1	601.8	390.8	582.7	742.2	572.2	856.6	911.8	647.2	507.7
Countering Weapons of Mass Destruction Office	NA	NA	NA	84.4	71.3	63.0	69.3	29.9	81.4	41.4
Cybersecurity and Infrastructure Security Agency	na	na	na	na	na	na	na	7.2	13.1	14.4
Science and Technology Directorate	537.8	562.7	369.1	472.2	651.4	485.7	765.8	832.0	510.5	422.0
Transportation Security Administration	NA	NA	NA	NA	NA	NA	NA	20.2	20.6	22.9
U.S. Coast Guard	21.3	39.1	21.7	26.1	19.6	23.5	21.5	21.5	19.5	4.9
U.S. Secret Service	NA	NA	NA	NA	NA	NA	NA	1.0	1.9	2.1
Department of Housing and Urban Development	72.9	89.6	67.4	54.3	58.5	66.8	63.8	62.0	61.0	88.6
Department of the Interior	706.0	737.8	709.3	757.6	800.1	856.5	862.6	765.6	826.8	882.7
Bureau of Indian Affairs	NA	NA	NA	NA	NA	NA	NA	5.0	5.0	5.0
Bureau of Land Management	NA	NA	NA	NA	16.4	18.0	18.0	20.8	20.8	20.8
Bureau of Ocean Energy Management	na	39.0	39.5	48.0	50.4	72.2	75.7	78.3	85.5	96.9
Bureau of Ocean Energy Management, Regulation and Enforcement	45.4	na	na	na	na	na	na	na	na	na
Bureau of Reclamation	11.5	10.0	10.1	12.0	9.8	20.9	27.4	21.4	23.2	36.4
Bureau of Safety and Environmental Enforcement	na	10.3	16.4	32.9	19.6	27.3	11.4	4.9	9.1	15.5
National Park Service	9.2	5.6	7.0	15.2	8.3	8.7	9.5	9.9	10.1	10.2
Office of Surface Mining Reclamation and Enforcement	NA	NA	NA	NA	NA	NA	NA	0.0	0.3	0.5

TABLE 105

## Federal obligations for research and development, by agency: FYs 2011–20

(Dollars in millions)

Agency	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 (preliminary)
U.S. Fish and Wildlife Service	NA	NA	NA	NA	29.8	32.5	32.8	32.7	32.7	32.7
U.S. Geological Survey	640.0	672.8	636.3	649.5	665.8	676.9	687.8	592.6	640.2	664.8
Department of Justice	102.3	85.0	118.7	160.5	149.7	208.0	126.9	106.6	121.2	107.0
Bureau of Prisons	11.6	10.5	11.1	10.8	11.0	11.0	9.6	5.8	6.6	7.0
Federal Bureau of Investigation	17.7	7.7	39.0	9.6	12.9	13.0	2.2	2.9	1.0	1.0
Office of Justice Programs	72.9	66.8	68.6	140.1	125.8	184.0	115.1	98.0	113.6	99.0
Department of Labor	55.6	21.5	16.3	14.1	14.2	9.6	4.6	4.8	4.4	4.7
Employee Benefits Security Administration	48.5	12.8	9.6	7.5	6.5	4.6	2.6	3.0	2.6	2.9
Occupational Safety and Health Administration	4.3	6.0	4.2	3.6	3.4	0.7	2.0	1.9	1.7	1.8
Pension Benefit Guaranty Corp.	2.8	2.7	2.6	3.0	4.3	4.3	0.0	0.0	NA	NA
Department of State	3.3	2.2	1.5	NA	2.0	2.0	2.1	62.1	62.2	62.3
Department of Transportation	841.4	898.4	855.0	828.1	855.6	936.8	948.6	1,046.0	1,012.5	1,335.2
Federal Aviation Administration	329.6	329.3	291.8	280.4	313.4	403.3	398.5	375.4	387.0	692.1
Federal Highway Administration	344.1	403.3	397.4	397.6	313.0	332.2	351.7	490.6	451.6	417.7
Federal Motor Carrier Safety Administration	6.3	7.3	7.8	7.5	7.6	10.6	11.7	9.3	7.8	11.1
Federal Railroad Administration	44.4	39.6	50.5	40.0	44.2	41.4	44.3	46.7	39.4	38.3
Federal Transit Administration	23.8	25.5	16.4	8.2	81.7	35.3	55.4	10.2	2.8	20.0
National Highway Traffic Safety Administration	71.0	68.7	64.8	65.1	62.5	86.6	69.0	76.0	76.3	74.2
Office of the Secretary of Transportation	9.3	8.9	10.9	15.1	11.5	17.9	11.1	16.4	19.8	27.0
Pipeline and Hazardous Materials Safety Administration	7.9	11.0	10.7	14.2	21.8	9.6	7.0	21.6	27.8	54.8
Research and Innovative Technology Administration	5.1	4.9	4.7	na	na	na	na	na	na	na
Department of the Treasury	77.6	75.6	74.1	74.0	73.1	85.2	8.2	37.7	57.1	60.6
Bureau of Engraving and Printing	5.8	5.0	9.4	9.4	9.5	18.8	6.9	37.7	57.0	60.4
Internal Revenue Service	70.8	69.0	64.5	64.0	63.6	64.6	0.0	0.0	0.0	0.0
U.S. Mint	1.0	1.6	0.2	0.6	*	1.8	1.3	0.0	0.2	0.2
Department of Veterans Affairs	612.9	614.8	639.0	588.8	661.6	695.2	682.3	1,349.0	1,507.9	1,602.7
Other agencies										
Administrative Office of the U.S. Courts	NA	NA	NA	NA	NA	6.8	8.0	6.8	6.4	7.7
Agency for International Development	119.2	77.4	125.5	59.9	212.2	192.8	192.2	166.6	220.6	220.6
Appalachian Regional Commission	0.4	0.6	0.2	0.6	0.4	0.9	0.1	0.5	0.9	0.0
Consumer Product Safety Commission	NA	2.0	1.3	1.8	2.0	2.0	1.9	1.0	0.9	0.2
Environmental Protection Agency	577.0	576.3	522.8	530.9	515.6	508.0	493.6	487.4	485.3	488.5
Federal Communications Commission	3.7	4.0	5.2	6.7	4.8	5.1	7.2	5.5	2.0	1.8
Federal Trade Commission	2.7	2.9	2.7	2.5	1.9	3.0	5.7	5.8	6.0	7.3
Library of Congress	1.5	1.1	1.3	1.2	1.3	1.7	1.9	3.3	1.9	2.7
National Aeronautics and Space Administration	6,570.5	10,660.5	10,368.1	10,753.6	11,360.7	12,403.8	12,594.6	10,716.7	13,570.1	13,400.4

TABLE 105

**Federal obligations for research and development, by agency: FYs 2011–20**

(Dollars in millions)

Agency	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 (preliminary)
National Archives and Records Administration	3.1	2.0	1.1	0.9	0.7	0.7	0.5	0.5	0.5	0.0
National Science Foundation	5,145.6	5,169.8	4,955.9	5,403.3	5,669.7	5,589.4	5,517.6	5,849.5	5,996.1	6,156.6
Nuclear Regulatory Commission	83.8	82.6	75.9	85.0	91.9	80.6	67.4	77.7	74.9	65.3
Patient-Centered Outcomes Research Trust Fund	41.1	41.1	334.4	282.6	152.1	114.9	883.9	491.7	578.4	540.7
Smithsonian Institution	193.1	197.0	195.0	194.9	195.7	206.2	207.9	227.9	236.4	241.4
Social Security Administration	53.0	64.9	56.7	59.6	58.9	129.0	109.5	71.6	146.2	131.8
Tennessee Valley Authority	NA	NA	NA	NA	NA	NA	5.6	13.2	9.7	8.2
U.S. Agency for Global Media	NA	NA	NA	NA	NA	NA	NA	NA	6.1	6.2
U.S. Postal Service	NA	NA	NA	NA	28.0	29.4	73.3	53.2	26.7	26.6

\* = 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. Beginning with FY 2016, the totals reported for development obligations represent a refinement to this category by more narrowly defining it to be "experimental development." Most notably, totals for development do not include the Department of Defense (DOD) Budget Activity 7 (Operational Systems Development) obligations. Those funds, previously included in DOD's development obligation totals, support the development efforts to upgrade systems that have been fielded or have received approval for full-rate production and anticipate production funding in the current or subsequent fiscal year. Therefore, the data are not directly comparable with totals reported in previous years. FY 2020 preliminary data do not include obligations from 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.