

TABLE 5

Federal obligations for research and experimental development, by agency and type of R&D: FY 2019

(Dollars in thousands)

Agency	Total R&D	Basic research	Applied research	Experimental development		
				Total	Advanced technology	Major systems
All agencies	142,424,206.6	40,017,257.6	41,100,526.5	61,306,422.5	na	na
Departments						
Department of Agriculture	2,637,117.5	1,056,543.3	1,350,427.2	230,147.0	na	na
Agricultural Marketing Service	7,710.5	0.0	3,855.3	3,855.3	na	na
Agricultural Research Service	1,292,374.2	646,187.1	516,949.7	129,237.4	na	na
Animal and Plant Health Inspection Service	39,476.0	18,812.2	0.0	20,663.8	na	na
Economic Research Service	85,626.4	0.0	85,626.4	0.0	na	na
Forest Service	327,174.4	84,664.4	170,325.6	72,184.4	na	na
National Agricultural Statistics Service	9,469.1	0.0	5,263.0	4,206.1	na	na
National Institute of Food and Agriculture	871,374.4	306,879.6	564,494.8	0.0	na	na
Rural Business-Cooperative Service	3,912.5	0.0	3,912.5	0.0	na	na
Department of Commerce	1,534,715.8	253,176.4	1,028,763.0	252,776.5	na	na
National Institute of Standards and Technology	712,349.7	253,176.4	449,790.2	9,383.1	na	na
National Oceanic and Atmospheric Administration	718,863.6	0.0	541,827.6	177,036.0	na	na
National Telecommunications and Information Administration	7,900.0	0.0	7,900.0	0.0	na	na
U.S. Census Bureau	95,602.6	0.0	29,245.2	66,357.3	na	na
Department of Defense	58,779,506.7	2,510,170.5	5,758,234.9	50,511,101.4	6,923,229.2	43,587,872.3
Defense Advanced Research Projects Agency	3,320,955.0	478,318.0	1,264,987.0	1,577,650.0	1,411,522.0	166,128.0
Department of the Air Force	15,076,760.6	559,429.2	1,547,457.8	12,969,873.5	836,861.0	12,133,012.6
Department of the Army	10,274,787.1	494,668.0	1,461,518.3	8,318,600.8	1,636,954.0	6,681,646.8
Department of the Navy	15,341,234.6	655,662.5	935,022.4	13,750,549.8	1,008,189.3	12,742,360.5
Other defense agencies	14,765,769.4	322,092.8	549,249.3	13,894,427.3	2,029,702.9	11,864,724.4
Department of Education	235,843.1	57,276.0	131,380.1	47,187.0	na	na
Department of Energy	14,376,397.6	5,074,534.1	6,295,185.2	3,006,678.3	na	na
Advanced Research Projects Agency—Energy	404,954.5	0.0	202,477.3	202,477.3	na	na
Electricity Delivery and Energy Reliability	137,744.0	14,649.0	72,345.0	50,750.0	na	na
Energy Efficiency and Renewable Energy	1,695,831.0	0.0	1,270,334.0	425,497.0	na	na
Environmental Management	26,129.8	0.0	8,622.8	17,507.0	na	na
Fossil Energy	659,000.0	33,000.0	626,000.0	0.0	na	na
National Nuclear Security Administration	5,740,588.9	101,820.0	3,568,301.2	2,070,467.7	na	na
Defense Programs	3,660,447.3	0.0	3,434,107.1	226,340.2	na	na
Naval Nuclear Propulsion Program	1,788,618.0	0.0	0.0	1,788,618.0	na	na
Office of Defense Nuclear Nonproliferation	291,523.6	101,820.0	134,194.1	55,509.5	na	na
Nuclear Energy	606,393.0	0.0	378,272.7	228,120.4	na	na
Office of Cybersecurity, Energy Security, and Emergency Response	51,881.2	989.0	39,033.2	11,859.0	na	na
Office of Science	5,053,875.1	4,924,076.1	129,799.0	0.0	na	na
Department of Health and Human Services	39,191,188.6	19,099,834.2	19,254,566.8	836,787.6	na	na
Administration for Children and Families	2,254.8	0.0	2,254.8	0.0	na	na
Administration for Community Living	83,117.5	0.0	65,922.4	17,195.1	na	na
Agency for Healthcare Research and Quality	338,000.0	0.0	308,145.0	29,855.0	na	na

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Agency for Toxic Substances and Disease Registry	7,000.0	0.0	7,000.0	0.0	na	na
Biomedical Advanced Research and Development Authority	736,178.0	0.0	0.0	736,178.0	na	na
Centers for Disease Control and Prevention	419,425.9	77,206.4	288,660.1	53,559.4	na	na
Centers for Medicare and Medicaid Services	133,488.6	0.0	133,488.6	0.0	na	na
Food and Drug Administration	493,052.5	0.0	493,052.5	0.0	na	na
Health Resources and Services Administration	32,625.8	2,627.8	29,998.0	0.0	na	na
National Institutes of Health	36,929,000.0	19,020,000.0	17,909,000.0	0.0	na	na
Office of the Secretary of Health and Human Services	17,045.5	0.0	17,045.5	0.0	na	na
Office of the Assistant Secretary for Planning and Evaluation	17,045.5	0.0	17,045.5	0.0	na	na
Department of Homeland Security	647,153.2	46,283.8	233,243.0	367,626.4	na	na
Countering Weapons of Mass Destruction Office	81,421.6	5,376.7	25,817.5	50,227.4	na	na
Cybersecurity and Infrastructure Security Agency	13,126.0	0.0	13,126.0	0.0	na	na
Science and Technology Directorate	510,549.9	40,907.1	188,444.5	281,198.3	na	na
Transportation Security Administration	20,600.0	0.0	0.0	20,600.0	na	na
U.S. Coast Guard	19,516.0	0.0	5,855.0	13,661.0	na	na
U.S. Secret Service	1,939.7	0.0	0.0	1,939.7	na	na
Department of Housing and Urban Development	60,997.5	39,078.9	21,918.6	0.0	na	na
Department of the Interior	826,819.3	81,447.2	608,302.9	137,069.2	na	na
Bureau of Indian Affairs	5,000.0	0.0	5,000.0	0.0	na	na
Bureau of Land Management	20,757.0	867.0	12,857.0	7,033.0	na	na
Bureau of Ocean Energy Management	85,506.0	0.0	65,080.0	20,426.0	na	na
Bureau of Reclamation	23,167.0	0.0	16,514.0	6,653.0	na	na
Bureau of Safety and Environmental Enforcement	9,087.1	182.9	7,365.0	1,539.2	na	na
National Park Service	10,129.7	857.3	9,272.4	0.0	na	na
Office of Surface Mining Reclamation and Enforcement	327.5	0.0	327.5	0.0	na	na
U.S. Fish and Wildlife Service	32,650.0	0.0	32,650.0	0.0	na	na
U.S. Geological Survey	640,195.0	79,540.0	459,237.0	101,418.0	na	na
Department of Justice	121,221.9	21,228.1	84,168.4	15,825.5	na	na
Bureau of Prisons	6,596.0	0.0	1,249.0	5,347.0	na	na
Federal Bureau of Investigation	998.4	0.0	998.4	0.0	na	na
Office of Justice Programs	113,627.5	21,228.1	81,920.9	10,478.5	na	na
Department of Labor	4,366.1	0.0	4,366.1	0.0	na	na
Employee Benefits Security Administration	2,642.1	0.0	2,642.1	0.0	na	na
Occupational Safety and Health Administration	1,724.0	0.0	1,724.0	0.0	na	na
Department of State	62,200.0	0.0	62,200.0	0.0	na	na
Department of Transportation	1,012,477.7	0.0	745,596.2	266,881.6	na	na
Federal Aviation Administration	387,021.1	0.0	193,114.6	193,906.5	na	na

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Federal Highway Administration	451,624.9	0.0	414,879.6	36,745.3	na	na
Federal Motor Carrier Safety Administration	7,766.4	0.0	7,766.4	0.0	na	na
Federal Railroad Administration	39,427.3	0.0	31,936.1	7,491.2	na	na
Federal Transit Administration	2,750.0	0.0	2,750.0	0.0	na	na
National Highway Traffic Safety Administration	76,323.0	0.0	76,323.0	0.0	na	na
Office of the Secretary of Transportation	19,776.0	0.0	8,210.9	11,565.1	na	na
Pipeline and Hazardous Materials Safety Administration	27,789.1	0.0	10,615.6	17,173.4	na	na
Department of the Treasury	57,143.8	10,298.9	35,878.8	10,966.1	na	na
Bureau of Engraving and Printing	56,966.1	10,285.0	35,715.0	10,966.1	na	na
U.S. Mint	177.7	13.9	163.8	0.0	na	na
Department of Veterans Affairs	1,507,870.1	629,101.4	848,504.3	30,264.4	na	na
Other agencies						
Administrative Office of the U.S. Courts	6,448.3	0.0	6,448.3	0.0	na	na
Agency for International Development	220,588.2	0.0	171,713.9	48,874.4	na	na
Appalachian Regional Commission	898.9	0.0	898.9	0.0	na	na
Consumer Product Safety Commission	856.3	0.0	856.3	0.0	na	na
Environmental Protection Agency	485,305.0	0.0	404,784.0	80,521.0	na	na
Federal Communications Commission	2,005.3	0.0	2,005.3	0.0	na	na
Federal Trade Commission	6,003.2	0.0	6,003.2	0.0	na	na
Library of Congress	1,892.5	0.0	867.6	1,024.9	na	na
National Aeronautics and Space Administration	13,570,133.5	5,688,975.1	2,422,519.2	5,458,639.2	na	na
National Archives and Records Administration	511.0	0.0	511.0	0.0	na	na
National Science Foundation	5,996,140.0	5,212,090.0	784,050.0	0.0	na	na
Nuclear Regulatory Commission	74,856.6	780.0	74,076.6	0.0	na	na
Patient-Centered Outcomes Research Trust Fund	578,430.5	0.0	578,430.5	0.0	na	na
Smithsonian Institution	236,440.0	236,440.0	0.0	0.0	na	na
Social Security Administration	146,241.0	0.0	146,241.0	0.0	na	na
Tennessee Valley Authority	9,666.0	0.0	5,614.0	4,052.0	na	na
U.S. Agency for Global Media	6,107.0	0.0	6,107.0	0.0	na	na
U.S. Postal Service	26,664.2	0.0	26,664.2	0.0	na	na

na = not applicable; data were not collected at this level of detail for this agency or subagency.

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. 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, FYs 2019–20.