

TABLE 51

Federal obligations for experimental development, by agency and performer: FY 2019

(Dollars in thousands)

Agency	Total	Intramural ^a	Extramural							
			United States and U.S. territories							Foreign
			Industry	Industry-administered FFRDCs	Universities and colleges	University-administered FFRDCs	Other nonprofits	Nonprofit-administered FFRDCs	State, local governments	
All agencies	61,306,422.5	21,014,509.4	33,707,091.8	2,410,913.0	1,619,492.9	469,483.2	558,717.5	990,620.2	86,075.9	449,518.7
Departments										
Department of Agriculture	230,147.0	209,664.6	0.0	0.0	18,562.6	0.0	1,586.5	0.0	34.8	298.3
Agricultural Marketing Service	3,855.3	3,855.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Agricultural Research Service	129,237.4	114,741.8	0.0	0.0	12,731.8	0.0	1,430.6	0.0	34.8	298.3
Animal and Plant Health Inspection Service	20,663.8	15,002.0	0.0	0.0	5,661.8	0.0	0.0	0.0	0.0	0.0
Forest Service	72,184.4	72,184.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Agricultural Statistics Service	4,206.1	3,881.2	0.0	0.0	169.0	0.0	156.0	0.0	0.0	0.0
Department of Commerce	252,776.5	162,867.5	152.5	0.0	80,539.9	7,433.3	687.1	296.8	797.3	2.0
National Institute of Standards and Technology	9,383.1	4,108.1	0.0	0.0	5,275.0	0.0	0.0	0.0	0.0	0.0
National Oceanic and Atmospheric Administration	177,036.0	92,402.0	152.5	0.0	75,264.9	7,433.3	687.1	296.8	797.3	2.0
U.S. Census Bureau	66,357.3	66,357.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Department of Defense, total experimental development	50,511,101.4	17,710,018.3	29,428,324.2	318,416.3	1,124,355.7	361,613.0	462,249.1	648,920.0	27,929.5	429,275.3
Defense Advanced Research Projects Agency	1,577,650.0	262,855.1	1,195,320.7	12,892.5	42,686.0	29,053.9	15,399.7	7,492.3	0.0	11,949.7
Department of the Air Force	12,969,873.5	3,410,088.7	8,910,422.9	101,426.0	79,720.5	80,171.9	11,800.2	272,989.6	8,227.5	95,026.3
Department of the Army	8,318,600.8	3,126,641.2	4,739,723.0	7,079.0	144,986.8	24,922.6	176,763.1	49,794.9	4.8	48,685.4
Department of the Navy	13,750,549.8	5,528,986.6	7,558,796.2	28,169.4	347,600.3	41,530.1	128,494.3	92,954.1	445.4	23,573.4
Other defense agencies	13,894,427.3	5,381,446.7	7,024,061.5	168,849.4	509,362.2	185,934.4	129,791.8	225,689.1	19,251.7	250,040.5
Department of Defense, advanced technology	6,923,229.2	2,636,363.0	3,433,933.5	63,414.6	327,226.7	82,501.2	248,371.9	56,778.0	2,243.6	72,396.6
Defense Advanced Research Projects Agency	1,411,522.0	201,943.3	1,090,104.5	12,892.5	42,686.0	29,053.9	15,399.7	7,492.3	0.0	11,949.7
Department of the Air Force	836,861.0	364,268.4	442,719.3	664.8	15,151.8	190.7	6,173.0	7,595.8	97.2	0.0

TABLE 51

Federal obligations for experimental development, by agency and performer: FY 2019

(Dollars in thousands)

Agency	Total	Intramural ^a	Extramural							
			United States and U.S. territories							Foreign
			Industry	Industry-administered FFRDCs	Universities and colleges	University-administered FFRDCs	Other nonprofits	Nonprofit-administered FFRDCs	State, local governments	
Department of the Army	1,636,954.0	687,350.9	811,010.8	22.8	69,053.2	4,404.0	56,090.5	2,380.4	0.0	6,641.2
Department of the Navy	1,008,189.3	415,539.7	417,767.5	851.4	68,780.0	200.0	97,322.5	6,549.6	329.4	849.2
Other defense agencies	2,029,702.9	967,260.7	672,331.3	48,983.1	131,555.8	48,652.6	73,386.2	32,759.8	1,817.0	52,956.4
Department of Defense, major systems	43,587,872.3	15,073,655.3	25,994,390.7	255,001.7	797,129.0	279,111.8	213,877.1	592,141.9	25,685.9	356,878.8
Defense Advanced Research Projects Agency	166,128.0	60,911.8	105,216.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Department of the Air Force	12,133,012.6	3,045,820.3	8,467,703.5	100,761.2	64,568.7	79,981.2	5,627.2	265,393.7	8,130.3	95,026.3
Department of the Army	6,681,646.8	2,439,290.2	3,928,712.2	7,056.2	75,933.6	20,518.6	120,672.6	47,414.5	4.8	42,044.1
Department of the Navy	12,742,360.5	5,113,446.9	7,141,028.7	27,318.0	278,820.4	41,330.1	31,171.8	86,404.4	116.0	22,724.2
Other defense agencies	11,864,724.4	4,414,186.0	6,351,730.1	119,866.3	377,806.4	137,281.9	56,405.6	192,929.3	17,434.7	197,084.2
Department of Education	47,187.0	1,911.5	10,512.3	0.0	30,477.4	0.0	4,140.4	0.0	145.4	0.0
Department of Energy	3,006,678.3	77,211.9	332,996.9	2,084,480.3	210,101.3	67,495.6	10,533.8	219,920.8	3,711.3	226.5
Advanced Research Projects Agency—Energy	202,477.3	0.0	85,594.9	10,582.8	81,578.5	5,374.4	6,974.3	12,372.3	0.0	0.0
Electricity Delivery and Energy Reliability	50,750.0	1,160.2	3,344.4	11,834.1	6,019.0	5,083.1	3,547.4	19,605.1	156.7	0.0
Energy Efficiency and Renewable Energy	425,497.0	0.0	99,232.7	32,013.4	103,084.2	45,096.3	0.0	142,515.7	3,554.6	0.0
Environmental Management	17,507.0	0.0	4,422.5	3,504.1	9,429.7	150.7	0.0	0.0	0.0	0.0
National Nuclear Security Administration	2,070,467.7	74,587.1	74,491.1	1,906,625.5	0.0	2,180.0	12.0	12,572.0	0.0	0.0
Defense Programs	226,340.2	74,587.1	61,331.2	88,400.0	0.0	0.0	12.0	2,010.0	0.0	0.0
Naval Nuclear Propulsion Program	1,788,618.0	0.0	0.0	1,788,618.0	0.0	0.0	0.0	0.0	0.0	0.0
Office of Defense Nuclear Nonproliferation	55,509.5	0.0	13,160.0	29,607.5	0.0	2,180.0	0.0	10,562.0	0.0	0.0
Nuclear Energy	228,120.4	1,464.6	54,052.3	119,920.4	9,989.9	9,611.0	0.0	32,855.7	0.0	226.5
Office of Cybersecurity, Energy Security, and Emergency Response	11,859.0	0.0	11,859.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 51

Federal obligations for experimental development, by agency and performer: FY 2019

(Dollars in thousands)

Agency	Total	Intramural ^a	Extramural							
			United States and U.S. territories							Foreign
			Industry	Industry-administered FFRDCs	Universities and colleges	University-administered FFRDCs	Other nonprofits	Nonprofit-administered FFRDCs	State, local governments	
Department of Health and Human Services	836,787.6	34,739.2	658,314.3	0.0	105,343.7	0.0	35,290.1	0.0	3,100.2	0.0
Administration for Community Living	17,195.1	0.0	3,129.5	0.0	11,066.0	0.0	2,897.0	0.0	102.7	0.0
Agency for Healthcare Research and Quality	29,855.0	29,855.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Biomedical Advanced Research and Development Authority	736,178.0	0.0	655,184.9	0.0	58,115.6	0.0	22,877.5	0.0	0.0	0.0
Centers for Disease Control and Prevention	53,559.4	4,884.2	0.0	0.0	36,162.2	0.0	9,515.6	0.0	2,997.5	0.0
Department of Homeland Security	367,626.4	95,532.3	219,564.2	7,373.9	1,113.2	1,939.7	1,423.8	33,031.1	217.9	7,430.3
Countering Weapons of Mass Destruction Office	50,227.4	1,479.3	29,591.3	7,373.9	1,113.2	775.0	300.0	3,633.9	0.0	5,960.9
Science and Technology Directorate	281,198.3	85,035.0	163,040.2	0.0	0.0	914.7	1,123.8	29,397.2	217.9	1,469.4
Transportation Security Administration	20,600.0	0.0	20,600.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
U.S. Coast Guard	13,661.0	9,018.0	4,643.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
U.S. Secret Service	1,939.7	0.0	1,689.7	0.0	0.0	250.0	0.0	0.0	0.0	0.0
Department of the Interior	137,069.2	111,050.0	2,678.8	0.0	11,842.7	0.0	1,226.8	99.0	10,171.8	0.0
Bureau of Land Management	7,033.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7,033.0	0.0
Bureau of Ocean Energy Management	20,426.0	18,650.2	1,694.3	0.0	0.0	0.0	0.0	0.0	81.5	0.0
Bureau of Reclamation	6,653.0	1,174.0	425.0	0.0	4,318.0	0.0	349.0	99.0	288.0	0.0
Bureau of Safety and Environmental Enforcement	1,539.2	481.4	469.2	0.0	0.0	0.0	588.6	0.0	0.0	0.0
U.S. Geological Survey	101,418.0	90,744.4	90.4	0.0	7,524.7	0.0	289.2	0.0	2,769.3	0.0
Department of Justice	15,825.5	1,852.7	194.5	0.0	6,507.3	0.0	2,297.9	0.0	4,973.1	0.0
Bureau of Prisons	5,347.0	1,247.0	0.0	0.0	0.0	0.0	0.0	0.0	4,100.0	0.0
Office of Justice Programs	10,478.5	605.7	194.5	0.0	6,507.3	0.0	2,297.9	0.0	873.1	0.0

TABLE 51

Federal obligations for experimental development, by agency and performer: FY 2019

(Dollars in thousands)

Agency	Total	Intramural ^a	Extramural							
			United States and U.S. territories							Foreign
			Industry	Industry-administered FFRDCs	Universities and colleges	University-administered FFRDCs	Other nonprofits	Nonprofit-administered FFRDCs	State, local governments	
Department of Transportation	266,881.6	43,368.7	92,206.6	0.0	11,866.5	0.0	9,273.4	77,424.8	32,639.5	102.0
Federal Aviation Administration	193,906.5	22,206.5	85,239.4	0.0	8,551.0	0.0	484.7	77,424.8	0.0	0.0
Federal Highway Administration	36,745.3	4,105.8	0.0	0.0	0.0	0.0	0.0	0.0	32,639.5	0.0
Federal Railroad Administration	7,491.2	960.4	4,822.0	0.0	1,048.6	0.0	558.2	0.0	0.0	102.0
Office of the Secretary of Transportation	11,565.1	10,475.1	1,090.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pipeline and Hazardous Materials Safety Administration	17,173.4	5,620.9	1,055.2	0.0	2,266.8	0.0	8,230.5	0.0	0.0	0.0
Department of the Treasury	10,966.1	0.0	10,966.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bureau of Engraving and Printing	10,966.1	0.0	10,966.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Department of Veterans Affairs	30,264.4	30,264.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other agencies										
Agency for International Development	48,874.4	4,887.4	9,427.7	0.0	6,157.4	0.0	27,926.9	0.0	0.0	475.0
Environmental Protection Agency	80,521.0	41,376.2	39,144.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Library of Congress	1,024.9	1,024.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Aeronautics and Space Administration	5,458,639.2	2,488,739.8	2,898,557.0	642.5	12,625.2	31,001.5	2,081.5	10,927.7	2,355.0	11,709.2
Tennessee Valley Authority	4,052.0	0.0	4,052.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FFRDC = federally funded research and development center.

^a Intramural activities cover costs associated with the administration of intramural R&D programs and extramural R&D procurements by federal personnel as well as actual intramural performance.**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.