

TABLE 129

**Federal obligations for research and development for selected agencies, by state or location: FYs 2011–19**

(Dollars in millions)

State or location	2011	2012	2013	2014	2015	2016	2017	2018	2019
All locations	132,793.6	135,995.4	122,985.2	127,927.2	125,846.3	113,002.0	115,507.6	125,737.3	138,170.3
Alabama	5,202.1	5,159.1	4,716.4	4,483.7	4,538.0	4,354.3	8,662.5	5,173.7	5,414.5
Alaska	196.5	159.1	185.5	136.9	208.0	211.9	280.0	299.8	334.2
Arizona	2,917.0	2,405.2	2,369.3	1,606.0	1,643.7	1,549.4	1,198.8	1,737.0	2,001.2
Arkansas	178.6	183.8	167.3	190.9	105.6	307.5	170.0	206.2	179.0
California	22,768.9	18,036.3	16,180.8	15,798.7	15,280.6	15,756.5	15,886.7	17,236.9	19,158.6
Colorado	3,815.5	3,744.7	3,394.0	3,611.4	3,506.4	4,183.1	3,395.6	4,916.8	5,267.9
Connecticut	2,426.0	2,231.1	2,516.6	2,287.0	2,292.8	2,365.9	2,349.3	2,568.2	2,673.2
Delaware	114.7	108.7	112.3	130.1	108.1	142.0	168.6	161.6	163.1
District of Columbia	3,013.5	3,339.3	3,908.1	3,980.1	4,221.7	4,204.5	4,867.4	6,157.7	6,228.2
Florida	2,481.8	2,355.8	2,282.0	2,447.6	2,932.7	2,781.5	2,879.5	3,178.5	3,892.0
Georgia	1,421.8	1,133.3	1,130.0	1,253.1	1,182.4	1,301.3	1,284.7	1,349.8	1,503.9
Hawaii	403.6	382.5	348.0	326.5	305.4	283.8	275.4	441.3	411.9
Idaho	430.2	446.9	380.8	597.9	532.6	568.4	679.1	824.2	919.9
Illinois	2,878.1	2,399.5	2,327.5	2,368.6	2,482.7	3,922.1	2,552.9	2,911.1	2,998.3
Indiana	903.0	838.3	692.6	771.2	678.3	719.1	689.8	781.3	894.1
Iowa	695.3	613.3	560.5	512.2	567.0	496.2	520.0	525.0	517.8
Kansas	367.8	231.6	234.3	187.1	193.7	187.9	211.6	232.8	282.6
Kentucky	242.0	308.1	306.8	296.7	296.7	272.6	289.5	302.8	313.4
Louisiana	597.3	313.8	278.0	284.5	253.7	278.5	397.2	321.1	432.1
Maine	180.0	247.8	169.9	131.1	138.0	137.5	158.0	188.4	189.0
Maryland	15,750.6	15,597.8	15,605.9	16,890.5	16,750.6	16,640.3	15,416.8	17,779.2	16,992.3
Massachusetts	7,758.4	6,279.3	5,690.8	6,268.5	6,055.0	5,532.6	5,238.4	6,036.0	6,837.8
Michigan	2,153.4	2,206.4	1,826.1	1,852.7	1,799.0	1,795.9	1,491.4	1,630.5	2,053.7
Minnesota	949.3	961.1	939.7	947.4	817.4	859.1	985.8	1,031.0	1,029.4
Mississippi	588.1	542.6	567.7	589.5	489.0	448.2	449.5	819.8	505.1
Missouri	1,193.3	1,122.8	1,056.3	1,038.6	1,296.3	1,258.6	1,603.8	1,492.0	2,375.1
Montana	181.7	190.2	134.5	170.5	152.2	169.5	151.0	194.7	191.4
Nebraska	262.2	261.9	200.5	234.1	216.4	204.8	210.6	211.3	243.7
Nevada	478.1	481.7	584.6	510.0	394.2	286.2	338.4	400.2	375.1
New Hampshire	406.0	490.7	296.2	335.9	342.1	373.5	351.1	472.4	669.3
New Jersey	2,582.7	2,167.0	1,726.9	1,968.5	1,631.9	1,676.6	1,962.6	2,367.3	2,834.4
New Mexico	3,456.2	3,378.6	3,421.5	3,714.2	3,542.9	3,662.1	3,383.4	3,630.3	3,755.7
New York	5,042.1	4,727.2	4,605.2	4,580.6	4,566.9	4,743.8	4,954.5	5,366.1	6,162.3
North Carolina	2,060.3	1,922.3	1,759.2	1,880.5	1,892.0	1,906.2	2,005.4	2,270.1	2,417.4
North Dakota	117.7	88.1	89.5	80.5	82.0	103.6	74.8	110.7	73.0
Ohio	3,554.7	3,436.3	2,425.7	2,454.5	2,638.5	2,497.4	2,549.8	4,206.8	5,188.2
Oklahoma	462.5	449.8	262.4	316.8	450.2	349.0	367.6	480.6	505.9
Oregon	711.1	632.1	529.0	601.5	557.5	543.8	572.5	626.8	696.9
Pennsylvania	4,513.0	3,724.9	3,295.4	3,695.3	3,710.5	3,980.6	3,787.5	4,147.6	4,092.5
Rhode Island	610.1	557.4	486.4	555.3	519.4	627.3	615.0	662.4	722.6
South Carolina	496.7	555.4	397.5	476.4	446.6	460.9	504.7	561.4	646.0
South Dakota	61.1	63.2	56.6	68.8	72.8	69.0	77.2	80.8	88.9
Tennessee	1,898.6	2,111.9	2,118.6	2,023.1	2,312.5	2,479.3	2,491.1	2,564.2	3,578.4
Texas	5,475.4	5,619.7	5,234.2	4,678.4	5,574.5	5,296.5	5,318.9	4,677.3	5,067.5
Utah	1,756.4	972.3	918.6	1,221.8	1,143.6	937.7	1,057.5	1,109.7	1,301.1
Vermont	124.4	103.4	103.0	115.7	81.6	82.4	80.7	97.1	119.9
Virginia	8,287.1	8,130.0	6,487.5	7,651.7	7,487.1	7,383.6	6,310.9	7,187.2	8,028.9
Washington	4,931.4	2,757.4	3,433.5	3,565.3	2,361.7	2,083.8	2,623.7	2,746.0	3,195.3
West Virginia	239.8	263.3	171.4	208.0	239.5	455.5	141.4	280.5	141.9

TABLE 129

**Federal obligations for research and development for selected agencies, by state or location: FYs 2011–19**

(Dollars in millions)

State or location	2011	2012	2013	2014	2015	2016	2017	2018	2019
Wisconsin	742.2	734.3	654.0	701.1	700.7	722.7	729.5	759.4	839.5
Wyoming	37.2	75.6	41.2	45.8	53.5	43.7	45.8	48.6	67.6
Outlying areas	269.0	193.0	228.6	318.0	347.1	331.1	104.1	496.1	520.7
Puerto Rico	97.4	71.3	82.6	71.0	65.9	71.8	67.6	74.7	81.8
Other areas <sup>a</sup>	171.7	121.6	146.1	247.0	281.3	259.3	36.5	421.4	438.9
Offices abroad <sup>b</sup>	35.7	91.6	165.5	38.0	28.3	3.7	1.8	12.3	4.3
Undistributed <sup>c</sup>	4,373.4	20,468.0	15,210.8	16,728.5	15,624.4	969.2	2,593.9	1,666.5	3,073.1

<sup>a</sup> Includes American Samoa, Baker Island, Guam, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Islands, Navassa Island, Northern Mariana Islands, Palmyra Atoll, U.S. Virgin Islands, and Wake Island.

<sup>b</sup> Includes R&D performed or administered in foreign countries by the U.S. government.

<sup>c</sup> Undistributed totals include Department of Defense (DOD) obligations for which the location of performance is not reported. It includes DOD obligations for industry R&D that were included in individual state totals prior to FY 2012 and obligations for other performers that were not reported prior to FY 2011. The undistributed total for FY 2019 also include Department of Health and Human Services' Biomedical Advanced Research and Development Authority obligations for which the location of performance could not be reported.

**Note(s):**

Because of rounding, detail may not add to total. Eleven agencies are required to report data for this section of the survey: the Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Homeland Security, the Interior, and Transportation; the Environmental Protection Agency; the National Aeronautics and Space Administration; and the National Science Foundation. Obligations of these 11 agencies represented more than 97% of total federal R&D obligations in FY 2019. Although the nongeographic historical tables incorporate corrections to previously reported data that have been submitted by reporting agencies, corresponding corrections to geographic distributions are rarely obtainable. Starting with volume 62 (FYs 2012–14), an "undistributed" category was added to the geographic location tables for DOD obligations for which the location of performance is not reported. It includes DOD obligations for industry R&D that were included in individual state totals prior to FY 2012 and DOD obligations for other performers that were not reported prior to FY 2011. This change was applied retroactively to FY 2011 data. Geographic distribution of DOD development funding to industry reflects location of prime contractors and not the numerous subcontractors who perform much of the R&D. 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 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. 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.