

Table 97. Federal obligations for research and development, by state or location: FYs 2016–24

(Dollars in millions)

State or location	2016	2017	2018	2019	2020	2021	2022	2023	2024
All locations	113,002	115,508	125,737	138,170	162,959	188,887	189,648	185,298	193,144
Alabama	4,354	8,663	5,174	5,414	3,070	3,970	4,087	5,121	7,780
Alaska	212	280	300	334	279	323	273	361	373
Arizona	1,549	1,199	1,737	2,001	1,939	1,675	2,388	2,662	2,348
Arkansas	308	170	206	179	501	300	268	255	325
California	15,756	15,887	17,237	19,159	22,464	22,722	23,272	25,468	24,604
Colorado	4,183	3,396	4,917	5,268	5,024	6,292	4,639	7,518	9,213
Connecticut	2,366	2,349	2,568	2,673	2,566	2,600	2,642	2,220	2,127
Delaware	142	169	162	163	222	307	341	492	251
District of Columbia	4,204	4,867	6,158	6,228	16,315	37,490	33,943	9,875	10,177
Florida	2,782	2,880	3,179	3,892	4,061	4,095	4,250	4,885	4,634
Georgia	1,301	1,285	1,350	1,504	1,913	1,654	1,821	2,309	1,988
Hawaii	284	275	441	412	394	486	371	499	487
Idaho	568	679	824	920	840	672	702	835	918
Illinois	3,922	2,553	2,911	2,998	3,209	3,534	3,469	3,924	4,014
Indiana	719	690	781	894	1,104	1,081	1,277	1,614	2,814
Iowa	496	520	525	518	702	686	761	847	831
Kansas	188	212	233	283	352	414	445	594	516
Kentucky	273	289	303	313	354	542	413	498	466
Louisiana	279	397	321	432	437	457	512	488	495
Maine	137	158	188	189	185	249	230	284	298
Maryland	16,640	15,417	17,779	16,992	22,736	17,615	20,259	21,107	21,456
Massachusetts	5,533	5,238	6,036	6,838	8,850	9,570	8,495	9,422	9,529
Michigan	1,796	1,491	1,630	2,054	1,925	2,077	2,390	2,933	2,599
Minnesota	859	986	1,031	1,029	1,448	1,146	1,239	1,398	1,364
Mississippi	448	449	820	505	472	500	1,150	516	479
Missouri	1,259	1,604	1,492	2,375	2,080	2,059	1,838	2,116	2,376
Montana	170	151	195	191	213	287	292	489	265
Nebraska	205	211	211	244	255	303	325	349	332
Nevada	286	338	400	375	306	573	520	505	518
New Hampshire	374	351	472	669	483	526	445	577	530
New Jersey	1,677	1,963	2,367	2,834	2,885	3,400	3,386	2,380	1,942
New Mexico	3,662	3,383	3,630	3,756	3,502	3,884	3,493	3,946	3,675
New York	4,744	4,955	5,366	6,162	8,148	6,833	6,726	7,596	6,381
North Carolina	1,906	2,005	2,270	2,417	3,271	3,620	3,724	3,598	3,284
North Dakota	104	75	111	73	140	168	153	174	210
Ohio	2,497	2,550	4,207	5,188	5,216	3,861	8,243	5,636	10,321
Oklahoma	349	368	481	506	537	1,505	458	564	613

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Oregon	544	573	627	697	814	1,070	812	902	782
Pennsylvania	3,981	3,788	4,148	4,093	5,214	4,547	4,912	5,083	5,152
Rhode Island	627	615	662	723	876	866	895	927	930
South Carolina	461	505	561	646	822	1,434	1,162	3,569	2,559
South Dakota	69	77	81	89	131	139	134	129	130
Tennessee	2,479	2,491	2,564	3,578	3,151	3,727	3,385	4,041	3,894
Texas	5,296	5,319	4,677	5,067	6,135	6,461	5,475	6,249	7,674
Utah	938	1,058	1,110	1,301	1,141	2,440	3,196	4,379	5,203
Vermont	82	81	97	120	129	244	162	289	190
Virginia	7,384	6,311	7,187	8,029	9,650	9,775	10,144	14,998	15,116
Washington	2,084	2,624	2,746	3,195	3,280	3,737	3,585	3,526	3,263
West Virginia	456	141	281	142	150	200	212	258	298
Wisconsin	723	730	759	840	908	989	1,115	1,158	1,141
Wyoming	44	46	49	68	87	197	80	77	111
Outlying areas	331	104	496	521	195	229	142	162	566
American Samoa	NA	NA	NA	NA	NA	NA	NA	3	2
Guam	NA	NA	NA	NA	NA	NA	NA	16	9
Northern Mariana Islands	NA	NA	NA	NA	NA	NA	NA	5	2
Puerto Rico	72	68	75	82	88	120	102	92	90
U.S. Virgin Islands	NA	NA	NA	NA	NA	NA	NA	11	5
Other areas ^a	259	36	421	439	107	109	41	35	457
Offices abroad ^b	4	2	12	4	48	179	21	82	109
Undistributed ^c	969	2,594	1,666	3,073	1,829	5,177	4,973	5,412	5,492

NA = not available; agency did not provide data.

^a Through volume 72 (FYs 2022–23), other areas included American Samoa, Guam, Northern Mariana Islands, and U.S. Virgin Islands as well as Baker Island, Guam, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Islands, Navassa Island, Palmyra Atoll, and Wake Island. As of volume 73 (FYs 2023–24), obligations were collected separately for American Samoa, Guam, Northern Mariana Islands, and U.S. Virgin Islands.

^b Offices abroad includes R&D performed or administered in foreign countries by the U.S. government.

^c Undistributed includes Department of Defense (DOD) obligations for which the location of performance is not reported. It includes DOD obligations for business (formerly 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. Through volume 70 (FYs 2020–21), 11 agencies were 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 2020. As of volume 71, all agencies report data for this section of the survey; therefore, the data are not directly comparable with totals reported in previous years. 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. Geographic distribution of DOD development funding to businesses 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 System Development) nor Budget Activity 8 (Software and Digital Technology Pilot Programs) 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. FYs 2020, 2021, and 2022 obligations include additional funding provided by supplemental COVID-19 pandemic-related appropriations (e.g., Coronavirus Aid, Relief, and Economic Security [CARES] Act). For additional notes associated with the agencies listed in this table, see technical table A-2 at <https://nces.nsf.gov/surveys/federal-funds-research-development/2024-2025#technical-tables>.

Source(s):

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