

TABLE 97

Federal obligations for research and development, by state or location: FYs 2015–23

(Dollars in millions)

State or location	2015	2016	2017	2018	2019	2020	2021	2022	2023
All locations	125,846	113,002	115,508	125,737	138,170	162,959	188,879	189,643	185,639
Alabama	4,538	4,354	8,663	5,174	5,414	3,070	3,970	4,087	5,121
Alaska	208	212	280	300	334	279	323	273	361
Arizona	1,644	1,549	1,199	1,737	2,001	1,939	1,675	2,388	2,662
Arkansas	106	308	170	206	179	501	300	268	255
California	15,281	15,756	15,887	17,237	19,159	22,464	22,722	23,272	25,468
Colorado	3,506	4,183	3,396	4,917	5,268	5,024	6,292	4,639	7,518
Connecticut	2,293	2,366	2,349	2,568	2,673	2,566	2,600	2,642	2,220
Delaware	108	142	169	162	163	222	307	341	492
District of Columbia	4,222	4,204	4,867	6,158	6,228	16,315	37,482	33,938	9,863
Florida	2,933	2,782	2,880	3,179	3,892	4,061	4,095	4,250	4,885
Georgia	1,182	1,301	1,285	1,350	1,504	1,913	1,654	1,821	2,309
Hawaii	305	284	275	441	412	394	486	371	499
Idaho	533	568	679	824	920	840	672	702	835
Illinois	2,483	3,922	2,553	2,911	2,998	3,209	3,534	3,469	3,924
Indiana	678	719	690	781	894	1,104	1,081	1,277	1,614
Iowa	567	496	520	525	518	702	686	761	847
Kansas	194	188	212	233	283	352	414	445	594
Kentucky	297	273	289	303	313	354	542	413	498
Louisiana	254	279	397	321	432	437	457	512	488
Maine	138	137	158	188	189	185	249	230	284
Maryland	16,751	16,640	15,417	17,779	16,992	22,736	17,615	20,259	21,107
Massachusetts	6,055	5,533	5,238	6,036	6,838	8,850	9,570	8,495	9,422
Michigan	1,799	1,796	1,491	1,630	2,054	1,925	2,077	2,390	2,933
Minnesota	817	859	986	1,031	1,029	1,448	1,146	1,239	1,752
Mississippi	489	448	449	820	505	472	500	1,150	516
Missouri	1,296	1,259	1,604	1,492	2,375	2,080	2,059	1,838	2,116
Montana	152	170	151	195	191	213	287	292	489
Nebraska	216	205	211	211	244	255	303	325	349
Nevada	394	286	338	400	375	306	573	520	505
New Hampshire	342	374	351	472	669	483	526	445	577
New Jersey	1,632	1,677	1,963	2,367	2,834	2,885	3,400	3,386	2,380
New Mexico	3,543	3,662	3,383	3,630	3,756	3,502	3,884	3,493	3,946
New York	4,567	4,744	4,955	5,366	6,162	8,148	6,833	6,726	7,596
North Carolina	1,892	1,906	2,005	2,270	2,417	3,271	3,620	3,724	3,598
North Dakota	82	104	75	111	73	140	168	153	174

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(Dollars in millions)

State or location	2015	2016	2017	2018	2019	2020	2021	2022	2023
Ohio	2,639	2,497	2,550	4,207	5,188	5,216	3,861	8,243	5,636
Oklahoma	450	349	368	481	506	537	1,505	458	564
Oregon	558	544	573	627	697	814	1,070	812	902
Pennsylvania	3,710	3,981	3,788	4,148	4,093	5,214	4,547	4,912	5,083
Rhode Island	519	627	615	662	723	876	866	895	927
South Carolina	447	461	505	561	646	822	1,434	1,162	3,569
South Dakota	73	69	77	81	89	131	139	134	129
Tennessee	2,313	2,479	2,491	2,564	3,578	3,151	3,727	3,385	4,041
Texas	5,574	5,296	5,319	4,677	5,067	6,135	6,461	5,475	6,249
Utah	1,144	938	1,058	1,110	1,301	1,141	2,440	3,196	4,379
Vermont	82	82	81	97	120	129	244	162	289
Virginia	7,487	7,384	6,311	7,187	8,029	9,650	9,775	10,144	14,998
Washington	2,362	2,084	2,624	2,746	3,195	3,280	3,737	3,585	3,526
West Virginia	239	456	141	281	142	150	200	212	258
Wisconsin	701	723	730	759	840	908	989	1,115	1,158
Wyoming	53	44	46	49	68	87	197	80	77
Outlying areas	347	331	104	496	521	195	229	142	162
American Samoa	NA	NA	NA	NA	NA	NA	NA	NA	3
Guam	NA	NA	NA	NA	NA	NA	NA	NA	16
Northern Mariana Islands	NA	NA	NA	NA	NA	NA	NA	NA	5
Puerto Rico	66	72	68	75	82	88	120	102	92
U.S. Virgin Islands	NA	NA	NA	NA	NA	NA	NA	NA	11
Other areas ^a	281	259	36	421	439	107	109	41	35
Offices abroad ^b	28	4	2	12	4	48	179	21	82
Undistributed ^c	15,624	969	2,594	1,666	3,073	1,829	5,177	4,973	5,412

NA = not available; data were not collected at that level for that fiscal year.

^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 businesses (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). 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.