

TABLE 97

Federal obligations for research and development, by state or location: FYs 2014–22

(Dollars in millions)

State or location	2014	2015	2016	2017	2018	2019	2020	2021	2022
All locations	127,927	125,846	113,002	115,508	125,737	138,170	162,959	188,861	189,604
Alabama	4,484	4,538	4,354	8,663	5,174	5,414	3,070	3,970	4,087
Alaska	137	208	212	280	300	334	279	323	273
Arizona	1,606	1,644	1,549	1,199	1,737	2,001	1,939	1,675	2,388
Arkansas	191	106	308	170	206	179	501	300	268
California	15,799	15,281	15,756	15,887	17,237	19,159	22,464	22,722	23,272
Colorado	3,611	3,506	4,183	3,396	4,917	5,268	5,024	6,292	4,639
Connecticut	2,287	2,293	2,366	2,349	2,568	2,673	2,566	2,600	2,642
Delaware	130	108	142	169	162	163	222	307	341
District of Columbia	3,980	4,222	4,204	4,867	6,158	6,228	16,315	37,464	33,917
Florida	2,448	2,933	2,782	2,880	3,179	3,892	4,061	4,095	4,250
Georgia	1,253	1,182	1,301	1,285	1,350	1,504	1,913	1,654	1,821
Hawaii	326	305	284	275	441	412	394	486	371
Idaho	598	533	568	679	824	920	840	672	702
Illinois	2,369	2,483	3,922	2,553	2,911	2,998	3,209	3,534	3,469
Indiana	771	678	719	690	781	894	1,104	1,081	1,277
Iowa	512	567	496	520	525	518	702	686	761
Kansas	187	194	188	212	233	283	352	414	445
Kentucky	297	297	273	289	303	313	354	542	413
Louisiana	285	254	279	397	321	432	437	457	512
Maine	131	138	137	158	188	189	185	249	230
Maryland	16,890	16,751	16,640	15,417	17,779	16,992	22,736	17,615	20,259
Massachusetts	6,269	6,055	5,533	5,238	6,036	6,838	8,850	9,570	8,495
Michigan	1,853	1,799	1,796	1,491	1,630	2,054	1,925	2,077	2,390
Minnesota	947	817	859	986	1,031	1,029	1,448	1,146	1,239
Mississippi	590	489	448	449	820	505	472	500	1,150
Missouri	1,039	1,296	1,259	1,604	1,492	2,375	2,080	2,059	1,838
Montana	171	152	170	151	195	191	213	287	292
Nebraska	234	216	205	211	211	244	255	303	325
Nevada	510	394	286	338	400	375	306	573	520
New Hampshire	336	342	374	351	472	669	483	526	445
New Jersey	1,968	1,632	1,677	1,963	2,367	2,834	2,885	3,400	3,386
New Mexico	3,714	3,543	3,662	3,383	3,630	3,756	3,502	3,884	3,484
New York	4,581	4,567	4,744	4,955	5,366	6,162	8,148	6,833	6,726
North Carolina	1,881	1,892	1,906	2,005	2,270	2,417	3,271	3,620	3,724
North Dakota	80	82	104	75	111	73	140	168	153
Ohio	2,454	2,639	2,497	2,550	4,207	5,188	5,216	3,861	8,243
Oklahoma	317	450	349	368	481	506	537	1,505	458
Oregon	602	558	544	573	627	697	814	1,070	812
Pennsylvania	3,695	3,710	3,981	3,788	4,148	4,093	5,214	4,547	4,912
Rhode Island	555	519	627	615	662	723	876	866	895
South Carolina	476	447	461	505	561	646	822	1,434	1,162
South Dakota	69	73	69	77	81	89	131	139	134
Tennessee	2,023	2,313	2,479	2,491	2,564	3,578	3,151	3,727	3,385
Texas	4,678	5,574	5,296	5,319	4,677	5,067	6,135	6,461	5,475
Utah	1,222	1,144	938	1,058	1,110	1,301	1,141	2,440	3,196
Vermont	116	82	82	81	97	120	129	244	162
Virginia	7,652	7,487	7,384	6,311	7,187	8,029	9,650	9,775	10,144
Washington	3,565	2,362	2,084	2,624	2,746	3,195	3,280	3,737	3,576
West Virginia	208	239	456	141	281	142	150	200	212
Wisconsin	701	701	723	730	759	840	908	989	1,115

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(Dollars in millions)

State or location	2014	2015	2016	2017	2018	2019	2020	2021	2022
Wyoming	46	53	44	46	49	68	87	197	80
Outlying areas	318	347	331	104	496	521	195	229	142
Puerto Rico	71	66	72	68	75	82	88	120	102
Other areas ^a	247	281	259	36	421	439	107	109	41
Offices abroad ^b	38	28	4	2	12	4	48	179	21
Undistributed ^c	16,728	15,624	969	2,594	1,666	3,073	1,829	5,177	4,973

^a 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.

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

^c Undistributed totals include 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) 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.