

TABLE 12. U.S. R&D expenditures, by state, performing sector, and funding sector: 2014
(Millions of current dollars)

State	All R&D	R&D rank	Performer:	Federal	FFRDCs			Business			Higher education ^a					Other nonprofit institutions	State, internal ^b	R&D intensity ^c						
			Funding source:	Federal	Total	Federal	Non-federal ^d	Total	Own	Non-federal ^e	Federal	Total	Federal	Other government	Business	Higher education	Non-profit	Other	Federal ^f	Total	GDP	Per-	Rank	
																						rank	cent	Rank
U.S. total ^g	477,708	na		34,396	17,903	17,523	380	340,728	282,570	31,604	26,554	64,704	35,051	3,788	3,817	16,040	4,063	1,944	6,111	580	17,348,100	na	2.75	na
States total ^g	451,504	na		28,958	17,719	17,331	387	331,222	274,718	30,043	23,780	67,012	37,816	3,863	3,722	15,731	3,979	1,901	6,015	578	17,830,308	na	2.53	na
Alabama	4,616	25		1,812	0	0	0	1,961	1,299	101	561	816	486	45	38	215	21	11	23	5	204,235	26	2.26	20
Alaska	289	49		44	0	0	0	57	37	11	9	174	95	14	6	54	3	2	4	9	52,804	47	0.55	48
Arizona	6,936	20		310	25	21	4	5,499	4,307	680	512	1,047	505	49	33	338	47	75	46	9	290,578	22	2.39	17
Arkansas	636	43		26	0	0	0	317	277	26	14	282	94	65	13	86	2	22	11	1	123,207	34	0.52	49
California	114,845	1		2,147	4,888	4,763	125	98,488	85,750	6,004	6,734	8,400	4,705	397	508	1,521	738	531	868	54	2,458,535	1	4.67	4
Colorado	6,775	22		380	522	490	32	4,551	3,829	249	473	1,232	902	36	84	119	77	15	82	8	314,878	18	2.15	24
Connecticut	10,219	14		19	0	0	0	9,093	6,819	438	1,836	1,063	636	19	48	282	66	12	24	21	258,532	23	3.95	8
Delaware	2,732	30		8	0	0	0	2,520	1,839	668	13	193	129	10	6	42	2	4	10	2	68,071	42	4.01	7
District of Columbia	3,935	27		2,656	11	11	0	338	183	28	126	543	314	5	11	145	60	9	385	1	122,510	35	3.21	12
Florida	9,009	15		779	0	0	0	5,783	3,877	686	1,221	2,273	1,117	176	106	715	99	60	131	44	882,798	4	1.02	38
Georgia	6,881	21		268	0	0	0	4,635	3,843	599	193	1,951	1,140	56	109	549	73	23	25	2	495,727	10	1.39	32
Hawaii	639	42		97	0	0	0	196	138	45	13	331	213	8	3	89	7	11	14	1	79,745	39	0.80	44
Idaho	2,130	33		51	480	460	20	1,448	1,223	219	6	143	77	31	3	26	3	2	1	7	65,242	43	3.26	11
Illinois	15,964	8		129	1,054	1,019	35	12,371	11,196	1,031	143	2,327	1,383	57	116	578	171	22	82	2	775,007	5	2.06	25
Indiana	7,343	18		131	0	0	0	5,901	5,015	791	95	1,309	556	91	66	477	93	26	1	1	336,411	16	2.18	22
Iowa	3,003	29		84	42	41	1	2,098	1,513	143	442	775	356	48	38	297	31	4	1	4	174,103	30	1.73	28
Kansas	2,510	31		24	0	0	0	1,934	1,325	598	12	548	244	55	49	174	22	4	3	1	147,765	31	1.70	29
Kentucky	1,717	35		21	0	0	0	1,158	768	50	340	534	220	65	22	173	18	34	1	3	194,643	28	0.88	42
Louisiana	1,120	38		57	0	0	0	386	299	53	35	666	285	95	38	209	29	11	2	9	243,317	24	0.46	50
Maine	596	45		20	0	0	0	373	308	19	46	127	64	23	4	33	2	1	74	2	56,600	45	1.05	35
Maryland	20,211	5		10,618	549	549	0	5,124	3,445	523	1,156	3,573	2,826	68	74	408	170	27	345	1	363,845	15	5.55	3
Massachusetts	27,945	2		558	1,273	1,270	3	21,105	17,101	3,106	899	3,501	2,158	33	237	620	303	150	1,498	11	476,743	12	5.86	2
Michigan	19,764	6		393	0	0	0	17,077	15,421	1,318	338	2,243	1,184	44	72	810	97	35	50	1	466,536	13	4.24	6
Minnesota	8,244	16		74	0	0	0	6,975	6,403	284	288	919	502	56	29	276	15	40	273	2	333,267	17	2.47	16
Mississippi	1,125	37		445	0	0	0	269	198	53	18	411	194	89	25	93	6	4	1	1	107,100	37	1.05	36

TABLE 12. U.S. R&D expenditures, by state, performing sector, and funding sector: 2014
(Millions of current dollars)

State	All R&D	R&D rank	Per-	Fed-	FFRDCs			Business			Higher education ^a					Other nonprofit institutions	State, internal ^b	R&D intensity ^c						
			former:	ederal	Total	Fed-eral	Non-federal ^d	Total	Own	Non-federal ^e	Fed-eral	Total	Fed-eral	Other government	Busi-ness	Higher ed-ucation	Non-profit	Other	Federal ^f	Total	GDP	Per-	Rank	
			Fund- ing source:	Fed-eral	Total	Fed-eral	Non-federal ^d	Total	Non-federal ^e	Fed-eral	Total	Other government	Busi-ness	Higher ed-ucation	Non-profit	Other	Federal ^f	Total	GDP	Per-	Rank			
Missouri	7,957	17		159	0	0	0	6,720	4,037	D	D	1,051	573	21	66	270	101	20	26	1	293,378	21	2.71	13
Montana	464	47		69	0	0	0	205	188	13	4	181	108	11	1	51	1	10	7	2	45,933	49	1.01	39
Nebraska	1,094	40		41	0	0	0	590	543	33	13	455	189	11	23	203	21	8	7	1	113,998	36	0.96	40
Nevada	817	41		31	0	0	0	631	576	36	19	154	100	14	3	29	2	6	1	*	141,282	33	0.58	47
New Hampshire	2,424	32		37	0	0	0	2,041	869	335	836	341	251	2	13	55	11	9	5	*	72,573	41	3.34	10
New Jersey	15,370	9		384	98	97	1	13,743	11,027	2,393	324	1,130	627	77	38	285	87	17	13	2	568,155	8	2.71	14
New Mexico	5,816	23		591	4,284	4,212	72	499	270	62	167	412	269	29	14	79	12	9	27	2	92,231	38	6.31	1
New York	20,820	4		195	573	556	17	13,818	10,794	1,347	1,677	5,639	3,039	347	389	1,328	393	142	336	259	1,441,003	3	1.44	30
North Carolina	11,343	12		310	0	0	0	8,091	6,125	1,856	110	2,815	1,612	143	349	527	148	35	113	14	499,449	9	2.27	19
North Dakota	523	46		27	0	0	0	271	247	21	2	222	77	58	13	65	2	7	1	1	54,830	46	0.95	41
Ohio	12,005	11		705	0	0	0	8,945	6,137	1,755	1,053	2,159	1,298	135	176	405	95	50	195	1	608,109	7	1.97	26
Oklahoma	1,113	39		57	0	0	0	607	543	47	18	420	169	75	36	116	12	11	29	*	180,425	29	0.62	45
Oregon	7,279	19		93	0	0	0	6,434	6,160	190	85	706	507	48	25	69	40	16	30	16	215,331	25	3.38	9
Pennsylvania	14,898	10		293	123	123	0	10,816	9,635	973	208	3,329	2,229	99	175	540	185	101	330	7	689,173	6	2.16	23
Rhode Island	1,298	36		248	0	0	0	542	479	26	37	446	205	10	5	204	17	6	61	*	57,049	44	2.27	18
South Carolina	2,034	34		124	121	121	0	1,089	936	72	81	656	291	26	44	269	18	8	26	17	198,714	27	1.02	37
South Dakota	271	50		17	0	0	0	135	121	13	2	105	53	19	2	23	6	2	14	*	46,674	48	0.58	46
Tennessee	4,245	26		141	1,294	1,259	35	1,586	1,365	172	49	1,133	665	32	47	342	36	12	90	1	314,191	19	1.35	34
Texas	22,467	3		1,025	12	11	1	16,373	13,674	1,566	1,134	4,899	2,030	771	334	1,182	365	218	154	3	1,586,468	2	1.42	31
Utah	3,669	28		151	0	0	0	2,809	2,275	114	420	689	428	37	47	145	27	5	1	18	147,108	32	2.49	15
Vermont	422	48		4	0	0	0	302	259	27	16	115	83	*	4	22	4	1	*	1	30,401	51	1.39	33
Virginia	10,489	13		2,653	1,347	1,318	29	4,994	2,877	381	1,735	1,381	744	73	59	449	47	9	103	10	479,809	11	2.19	21
Washington	18,987	7		262	1,022	1,010	12	15,699	15,195	298	205	1,537	1,053	68	67	204	119	26	456	10	443,665	14	4.28	5
West Virginia	604	44		112	0	0	0	279	252	23	5	196	90	14	13	65	5	8	13	4	73,741	40	0.82	43
Wisconsin	5,789	24		67	0	0	0	4,287	3,677	554	56	1,411	701	104	38	472	67	30	18	6	305,795	20	1.89	27
Wyoming	123	51		9	0	0	0	59	44	13	1	51	42	4	2	2	1	1	2	2	38,624	50	0.32	51

TABLE 12. U.S. R&D expenditures, by state, performing sector, and funding sector: 2014
(Millions of current dollars)

State	All R&D	Per- former: R&D rank	Fed- eral Fund- ing source:	FFRDCs			Business					Higher education ^a					Other nonprofit insti- tutions	State, in- ternal ^b	R&D intensity ^c								
				Fed- eral Total	Fed- eral Non- federal ^d	Non- federal ^d	Total	Paid by others		Fed- eral Total	Fed- eral gov- ern- ment	Busi- ness	Higher ed- ucation	Non- profit	Other	Fed- eral ^f			Total	GDP GDP	rank	Per- cent	Rank				
								Own	Non- federal ^e															Other	Higher		
U.S. undistributed ^h	14,013	na		4,507	0	0	0	9,506	7,852	D	0	0	0	0	0	0	0	0	0	0	0	0	0	na	na	na	na
Puerto Rico ⁱ	127	na		6	0	0	0	NA	NA	NA	NA	115	85	3	3	22	1	1	1	5	103,100	na	NA	na	na	na	na
Other ^j	284	na		257	0	0	0	0	0	0	0	27	22	3	*	1	*	2	*	na	na	na	na	na	na	na	na

* = < \$0.5 million; D = data withheld to avoid disclosing operations of individual companies; na = not applicable; NA = not available.

FFRDC = federally funded R&D center; GDP = gross domestic product.

^a State-level higher education R&D data have not been adjusted to eliminate the double counting of funds passed through from one academic institution to another. At the national level, funds passed through to educational subrecipients accounted for 4.7% of total R&D expenditures reported by universities and colleges (U&C) in FY 2014.

^b Internal performers include state agency and department employees and also services performed by others in support of an internal R&D project.

^c R&D intensity is the ratio of total R&D performed in a state to its state GDP.

^d Nonfederal sources of R&D expenditures reported by FFRDCs in FY 2014 included state and local governments (\$28 million), business (\$221 million), nonprofit organizations (\$37 million), and all other sources (\$101 million).

^e R&D paid for by nonfederal sources includes funding from other companies located inside (\$13 billion) or outside (\$17 billion) the United States, U.S. state government agencies (\$138 million), foreign government agencies and laboratories (\$415 million), other organizations located inside (\$523 million) or outside (\$55 million) the United States.

^f Other sources of support for nonprofit institutions were unavailable by state. In 2014, total nonprofit performance is estimated at \$19.5 billion. Business provided an estimated \$1.5 billion to the nonprofit sector, and nonprofit institutions provided an estimated \$11.9 billion.

^g States totals differ from U.S. totals for several reasons: (1) some R&D expenditures cannot be allocated to 1 of the 50 states or the District of Columbia; (2) nonfederal sources of other nonprofit R&D expenditures could not be allocated by state; (3) state-level higher education data have not been adjusted to eliminate double counting of funds passed through from one academic institution to another; and (4) state-level R&D data are not converted from fiscal years to calendar years.

^h Reported data that could not be assigned to 1 of the 50 states or the District of Columbia.

ⁱ Data on business R&D performance in Puerto Rico are not collected.

^j Includes R&D expenditures reported for outlying areas (Guam, U.S. Virgin Islands) and offices abroad but excludes Puerto Rico.

NOTE: Business R&D data refer to calendar years; the data for the other R&D performers refer to fiscal years but are used here as approximations to calendar year data.

SOURCES: National Science Foundation, National Center for Science and Engineering Statistics, National Patterns of R&D Resources (annual series). State GDP data are from the U.S. Bureau of Economic Analysis, <http://www.bea.gov/regional/index.htm>, accessed 15 June 2016.