

TABLE 13. U.S. R&D expenditures, by state, performing sector, and funding sector: 2011
(Millions of current dollars)

State	Performer:		Federal		FFRDCs		Business				U&C ^a				Other nonprofit institutions	State, internal ^b	R&D intensity ^f					
	Funding source:	All R&D	R&D rank	Federal	Total	Fed-eral	Non-federal ^d	Total	Paid by others		Total	Federal	Other govern-ment	Busi-ness	U&C	Non-profit	Federal ^f	Total	GDP	rank	Percent	Rank
									Own	Nonfederal ^e												
U.S. total ^g	428,163	na	35,775	17,718	NA	NA	294,093	238,768	24,015	31,309	62,457	37,714	3,718	3,189	12,965	4,872	6,553	NA	15,075,700	na	2.84	na
States total ^g	396,465	na	29,622	17,794	17,372	422	277,243	232,658	21,743	24,191	64,882	40,622	3,813	3,158	12,415	4,875	6,463	462	14,959,781	na	2.65	na
Alabama	4,946	24	2,125	0	0	0	1,879	835	348	697	901	576	40	32	222	31	27	14	178,533	26	2.77	15
Alaska	381	48	82	0	0	0	84	52	19	14	196	117	11	5	57	5	10	9	51,237	45	0.74	45
Arizona	6,453	19	403	48	43	5	4,931	3,776	477	678	998	532	60	28	292	85	66	7	255,989	20	2.52	21
Arkansas	678	42	31	0	0	0	344	307	21	17	283	139	58	11	62	13	14	6	106,557	35	0.64	49
California	91,420	1	2,884	4,254	4,114	139	75,035	64,104	3,963	6,968	8,227	5,156	419	476	1,119	1,056	982	38	1,908,985	1	4.79	5
Colorado	6,862	18	294	585	553	32	4,310	3,642	242	426	1,291	987	45	62	121	77	375	7	264,733	18	2.59	19
Connecticut	8,736	15	240	0	0	0	7,504	6,272	304	928	946	680	16	20	153	76	23	24	225,409	24	3.88	8
Delaware	2,296	31	3	0	0	0	2,097	1,453	625	18	189	131	7	6	41	3	5	2	64,377	41	3.57	9
District of Columbia	3,418	26	2,245	9	9	0	415	162	23	230	493	312	6	12	105	59	255	0.22	107,201	34	3.19	10
Florida	9,073	14	792	0	0	0	5,988	3,855	453	1,680	2,126	1,171	179	89	590	97	119	48	746,439	4	1.22	36
Georgia	5,779	21	183	0	0	0	3,839	3,303	347	190	1,717	1,096	54	85	382	100	37	4	417,438	11	1.38	34
Hawaii	746	41	112	0	0	0	252	183	49	19	364	242	22	23	58	19	15	4	70,006	39	1.07	39
Idaho	1,795	34	51	425	415	10	1,171	871	294	7	142	91	24	3	23	2	2	4	57,096	43	3.14	12
Illinois	15,974	8	361	1,131	1,083	48	12,038	10,764	1,108	167	2,353	1,534	60	99	516	144	90	2	670,247	5	2.38	22
Indiana	7,579	16	148	0	0	0	6,158	5,484	593	82	1,270	587	68	63	425	128	1	1	284,344	16	2.67	16
Iowa	3,144	28	60	32	31	1	2,314	1,736	D	D	725	408	49	34	206	28	11	1	146,057	30	2.15	25
Kansas	2,081	32	39	0	0	0	1,509	1,037	455	17	526	262	50	37	143	34	6	2	134,767	31	1.54	32
Kentucky	1,895	33	13	0	0	0	1,278	1,017	41	220	596	294	61	21	190	30	5	2	168,019	28	1.13	38
Louisiana	1,523	35	320	0	0	0	459	382	40	37	729	349	105	40	192	43	7	7	237,389	23	0.64	48
Maine	535	44	20	0	0	0	295	264	12	18	140	76	24	5	33	3	78	2	52,489	44	1.02	41
Maryland	19,219	4	9,902	473	473	0	5,101	2,867	558	1,677	3,417	2,690	57	84	409	178	324	2	305,175	15	6.30	2
Massachusetts	22,022	2	521	1,293	1,290	3	15,722	12,712	2,091	919	2,949	2,196	17	192	247	297	1,537	1	388,575	12	5.67	3
Michigan	16,372	7	498	0	0	0	13,660	12,156	1,212	292	2,160	1,286	53	61	654	107	53	2	385,123	13	4.25	6
Minnesota	7,394	17	101	0	0	0	6,174	5,592	342	240	899	509	65	33	210	81	219	2	279,987	17	2.64	17
Mississippi	941	39	231	0	0	0	235	189	15	31	470	280	73	18	87	12	1	4	97,533	36	0.96	42
Missouri	NA	NA	53	0	0	0	D	2,818	230	D	1,121	695	26	60	236	104	29	8	249,546	22	NA	NA
Montana	408	47	68	0	0	0	136	118	10	8	195	132	6	2	45	10	7	2	38,933	49	1.05	40
Nebraska	1,115	38	57	0	0	0	636	601	27	8	413	215	13	20	153	11	8	*	96,230	37	1.16	37
Nevada	889	40	83	0	0	0	638	554	62	23	165	116	6	3	37	3	2	*	129,421	32	0.69	47
New Hampshire	2,471	29	39	0	0	0	2,069	943	D	D	360	243	10	20	63	24	2	1	63,333	42	3.90	7
New Jersey	15,705	9	528	85	84	*	13,930	11,977	1,706	246	1,142	649	86	53	269	83	17	3	493,175	7	3.18	11
New Mexico	6,070	20	575	4,584	4,504	81	472	250	41	182	405	292	21	9	71	13	33	*	79,555	38	7.63	1
New York	18,566	5	210	527	504	22	12,072	9,141	812	2,119	5,299	3,310	274	269	996	450	351	108	1,169,436	3	1.59	30
North Carolina	9,356	13	387	0	0	0	6,193	5,157	909	128	2,567	1,609	155	301	362	140	190	19	436,144	9	2.15	26
North Dakota	504	46	29	0	0	0	261	236	17	7	211	109	50	9	36	7	3	*	39,992	48	1.26	35
Ohio	10,359	12	960	0	0	0	6,993	5,403	634	956	2,227	1,426	158	151	395	98	176	3	490,265	8	2.11	27
Oklahoma	1,207	37	186	0	0	0	604	507	39	58	389	193	49	26	103	17	28	*	156,058	29	0.77	44
Oregon	5,515	23	93	0	0	0	4,631	4,415	168	48	740	549	44	23	74	50	35	17	188,981	25	2.92	13

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	Funding source:	All R&D	R&D rank	Federal	Total	Fed-eral	Non-federal ^d	Total	Own	Paid by others			Total	Federal	Other govern-ment	Busi-ness	U&C	Non-profit	Federal ^f	Total	GDP	rank	Percent	Rank
										Nonfederal ^e	Federal	Other												
Pennsylvania	13,651	10	220	108	107	0	9,718	9,018	463	237	3,313	2,371	117	159	498	167	286	6	581,256	6	2.35	23		
Rhode Island	1,396	36	323	0	0	0	542	451	51	40	459	213	13	7	195	31	71	*	49,423	46	2.82	14		
South Carolina	2,389	30	157	135	135	0	1,399	949	334	116	623	332	9	30	220	31	33	43	168,716	27	1.42	33		
South Dakota	293	49	9	0	0	0	136	112	21	3	136	88	18	2	21	8	10	*	41,667	47	0.70	46		
Tennessee	4,218	25	108	1,558	1,514	44	1,434	1,279	119	35	1,017	719	36	30	192	39	101	*	263,626	19	1.60	29		
Texas	20,623	3	462	16	16	*	15,309	12,920	1,219	1,169	4,662	2,326	702	285	887	461	164	10	1,321,005	2	1.56	31		
Utah	3,276	27	193	0	0	0	2,438	1,874	83	482	627	403	31	22	148	23	8	10	124,454	33	2.63	18		
Vermont	519	45	6	0	0	0	374	329	20	24	137	106	*	2	25	5	*	2	26,545	51	1.95	28		
Virginia	11,166	11	2,738	1,436	1,424	12	5,562	3,138	339	2,085	1,284	772	129	53	264	67	139	7	433,611	10	2.58	20		
Washington	17,979	6	268	1,096	1,072	24	14,558	13,659	321	578	1,570	1,091	92	35	234	119	476	10	357,056	14	5.04	4		
West Virginia	597	43	119	0	0	0	247	213	13	22	211	122	15	4	65	4	12	8	66,109	40	0.90	43		
Wisconsin	5,605	22	83	0	0	0	4,053	3,548	467	38	1,444	788	126	43	289	198	18	6	253,349	21	2.21	24		
Wyoming	115	50	7	0	0	0	46	33	6	7	58	49	4	2	3	1	2	3	38,190	50	0.30	50		
U.S. undistributed ^h	NA	na	4,473	0	0	0	D	6,111	0	0	0	0	0	0	0	0	0	0	0	0	na	na	na	
Puerto Rico ⁱ	188	na	9	14	14	*	NA	NA	NA	NA	164	122	4	4	30	4	1	*	98,757	na	NA	na		
Other ^j	62	na	35	0	0	0	0	0	0	0	28	22	3	*	0	3	*	na	na	na	na	na		

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

FFRDC = federally funded research and development center; GDP = gross domestic product; U&C = universities and colleges.

^a State-level university 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 in FY 2011.

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

^c R&D intensity is 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 2011 included state and local governments (\$27 million), business (\$190 million), nonprofit organizations (\$61 million), and all other sources (\$146 million).

^e R&D paid for by nonfederal sources includes funding from other companies located inside (\$11.1 billion) or outside (\$12.0 billion) the United States, U.S. state government agencies (\$321 million), foreign government agencies and laboratories (\$63 million), other organizations located inside (\$369 million) or outside (\$129 million) the United States.

^f Other sources of support for nonprofit institutions were unavailable by state. In 2011, total nonprofit performance is estimated at \$18.1 billion. Business provided an estimated \$1.4 billion to the nonprofit sector, and nonprofit institutions provided an estimated \$10.4 billion.

^g States totals differ from U.S. totals for several reasons: (a) some R&D expenditures cannot be allocated to 1 of 50 states or the District of Columbia, (b) nonfederal sources of other nonprofit R&D expenditures could not be allocated by state, (c) state-level U&C data have not been adjusted to eliminate double counting of funds passed through from one academic institution to another, and (d) 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, Virgin Islands) and offices abroad, but excluding Puerto Rico.

NOTES: Industry R&D data refer to calendar years; other R&D data 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 (NSF/NCSES), National Patterns of R&D Resources (annual series), Business Research and Development and Innovation Survey, Survey of Research and Development Expenditures at Universities and Colleges, Survey of Federal Funds for Research and Development, Survey of State Government R&D. State GDP data are from the U.S. Bureau of Economic Analysis, <http://www.bea.gov>, accessed 1 August 2013.