

TABLE 10. U.S. R&D expenditures, by state, performing sector, and source of funds: 2012
(Millions of current dollars)

State	All R&D	R&D rank	Performer: Fund-ing source:	Fed-eral	FFRDCs			Business			Higher education ^a						Other nonprofit institutions	State, in-ternal ^b	R&D intensity ^c							
					Fed-eral	Total	Fed-eral	Non-federal ^d	Total	Own	Paid by others		Fed-eral	gov-ernment	Busi-ness	Higher ed-ucation			Non-profit	Other	Fed-eral ^f	Total	GDP	rank	Per-cent	Rank
											Non-federal ^e	Fed-eral														
U.S. total ^g	435,347	na		34,017	17,301	16,868	468	302,251	247,280	24,350	30,621	63,284	37,016	3,633	3,347	14,136	3,894	1,259	6,239	467	16,163,200	na	2.69	na		
States total ^g	410,941	na		28,549	17,446	17,006	440	292,675	239,858	22,827	26,292	65,591	39,991	3,698	3,277	13,644	4,031	950	6,209	471	16,141,152	na	2.55	na		
Alabama	3,924	26		1,772	0	0	0	1,284	779	58	447	833	538	36	33	201	19	5	27	9	189,542	26	2.07	27		
Alaska	292	49		60	0	0	0	39	23	8	8	182	111	10	6	50	3	2	6	5	59,643	43	0.49	49		
Arizona	6,510	19		399	47	42	4	4,962	3,864	417	682	1,039	542	46	30	340	55	26	50	13	271,503	21	2.40	18		
Arkansas	636	43		20	0	0	0	305	275	16	15	289	128	59	11	75	2	14	19	3	118,993	34	0.53	48		
California	97,531	1		2,324	4,110	3,958	152	81,689	69,493	4,615	7,581	8,390	5,095	440	513	1,263	746	333	958	59	2,125,717	1	4.59	4		
Colorado	6,455	20		354	569	532	37	4,105	3,462	241	402	1,339	992	67	75	127	64	12	81	8	278,551	19	2.32	20		
Connecticut	8,681	14		345	0	0	0	7,343	5,527	310	1,505	947	688	16	29	144	64	6	22	24	242,930	24	3.57	8		
Delaware	2,614	31		3	0	0	0	2,415	1,866	530	19	186	128	8	7	40	2	2	8	2	60,650	42	4.31	6		
District of Columbia	3,133	27		2,071	8	8	0	260	153	16	91	502	297	5	10	127	62	*	293	*	111,870	35	2.80	14		
Florida	8,289	15		714	0	0	0	5,211	3,353	444	1,414	2,184	1,169	163	96	645	90	21	131	49	769,007	4	1.08	37		
Georgia	5,952	22		184	0	0	0	3,875	3,295	340	240	1,866	1,156	53	91	463	92	11	23	4	438,324	11	1.36	35		
Hawaii	676	42		127	0	0	0	188	130	39	19	336	216	16	21	68	7	8	21	4	72,512	39	0.93	42		
Idaho	1,850	34		80	536	526	11	1,079	833	237	8	146	91	22	4	27	2	*	1	7	58,231	44	3.18	11		
Illinois	16,736	9		191	1,092	1,037	55	13,001	11,769	1,018	214	2,363	1,517	53	102	543	143	5	87	2	704,138	5	2.38	19		
Indiana	7,541	17		187	0	0	0	6,044	5,223	756	65	1,306	620	75	63	443	103	3	3	1	306,838	16	2.46	17		
Iowa	2,605	32		78	34	33	1	1,763	1,186	149	428	718	394	49	31	218	25	2	7	4	156,606	30	1.66	30		
Kansas	2,629	30		24	0	0	0	2,072	1,446	579	48	527	271	52	39	137	24	4	4	1	138,958	31	1.89	29		
Kentucky	1,708	35		37	0	0	0	1,074	772	37	266	587	268	65	22	210	22	*	7	3	177,967	28	0.96	41		
Louisiana	1,112	38		42	0	0	0	363	282	28	52	699	320	101	40	198	23	18	3	5	251,369	23	0.44	50		
Maine	532	46		61	0	0	0	275	236	12	26	120	55	24	4	33	3	2	75	1	53,235	45	1.00	39		
Maryland	18,354	4		10,137	461	461	0	4,028	1,929	544	1,555	3,368	2,641	57	75	408	171	16	359	1	336,481	15	5.45	3		
Massachusetts	24,129	2		492	1,346	1,345	2	17,491	14,157	2,461	873	3,213	2,221	18	212	412	266	84	1,586	1	431,937	12	5.59	2		
Michigan	17,844	6		655	0	0	0	14,912	13,460	1,100	352	2,236	1,268	42	62	758	74	33	39	2	416,769	13	4.28	7		
Minnesota	7,381	18		57	0	0	0	6,216	5,616	320	280	865	502	55	31	230	25	23	242	1	298,272	17	2.47	16		
Mississippi	1,143	37		392	0	0	0	273	219	10	44	476	260	77	22	107	6	4	0	2	101,549	37	1.13	36		

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(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	govern-ment	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	Fed-eral	govern-ment	Busi-ness	Higher ed-ucation	Non-profit	Other	Federal ^f	Total	GDP	Per-	Rank		
Missouri	8,235	16		119	0	0	0	6,982	3,282	D	D	1,097	653	24	64	251	103	3	29	7	269,356	22	3.06	12
Montana	366	48		57	0	0	0	105	81	15	10	197	127	10	2	49	2	7	5	2	42,140	49	0.87	44
Nebraska	1,105	39		83	0	0	0	578	539	24	15	438	210	10	21	175	20	1	6	*	103,062	36	1.07	38
Nevada	845	41		55	0	0	0	634	552	64	19	153	108	5	2	35	4	*	2	*	128,896	33	0.66	45
New Hampshire	2,345	33		67	0	0	0	1,857	796	187	873	416	250	11	19	110	22	3	4	1	66,111	41	3.55	9
New Jersey	17,630	8		603	81	79	2.07	15,810	13,854	1,637	318	1,115	671	64	51	245	75	10	18	3	528,788	8	3.33	10
New Mexico	5,905	23		675	4,350	4,276	74	445	242	34	170	401	282	24	9	72	5	9	33	1	89,188	38	6.62	1
New York	18,249	5		210	517	489	27	11,732	8,831	963	1,937	5,361	3,212	282	288	1,121	383	75	353	76	1,280,737	3	1.42	33
North Carolina	9,382	13		319	0	0	0	6,254	5,143	931	180	2,682	1,665	116	317	425	156	2	106	20	452,358	9	2.07	26
North Dakota	480	47		41	0	0	0	222	202	11	9	216	101	53	11	42	3	5	1	1	49,509	47	0.97	40
Ohio	10,928	11		826	0	0	0	7,755	5,402	1,232	1,121	2,129	1,354	126	151	366	85	46	216	2	548,526	7	1.99	28
Oklahoma	1,044	40		109	0	0	0	463	406	32	25	437	232	61	23	107	8	5	34	1	171,432	29	0.61	46
Oregon	6,031	21		101	0	0	0	5,156	4,873	234	48	722	535	43	25	73	35	12	33	18	210,242	25	2.87	13
Pennsylvania	13,210	10		237	113	113	1	9,318	8,683	354	281	3,231	2,355	101	133	473	160	9	305	6	629,851	6	2.10	23
Rhode Island	1,291	36		272	0	0	0	450	408	24	18	493	228	15	7	206	36	1	75	*	51,566	46	2.50	15
South Carolina	2,660	29		188	132	132	0	1,615	1,206	301	108	637	321	9	32	242	19	13	37	50	177,985	27	1.49	32
South Dakota	266	50		13	0	0	0	112	94	14	4	129	77	18	2	25	6	2	11	*	43,758	48	0.61	47
Tennessee	4,328	25		218	1,553	1,512	42	1,437	1,118	253	67	1,025	709	33	34	209	37	3	94	1	280,485	18	1.54	31
Texas	20,673	3		625	13	12	0.68	15,163	12,859	1,039	1,266	4,651	2,173	727	303	985	416	47	208	12	1,463,021	2	1.41	34
Utah	2,912	28		137	0	0	0	2,134	1,546	127	461	622	404	32	21	140	18	7	2	18	134,483	32	2.17	22
Vermont	592	45		4	0	0	0	466	425	28	13	120	91	*	3	22	4	0	*	1	28,422	51	2.08	25
Virginia	10,101	12		2,370	1,449	1,439	10	4,756	2,356	303	2,098	1,379	767	129	54	352	70	6	139	9	445,090	10	2.27	21
Washington	17,678	7		246	1,034	1,013	21	14,494	13,678	284	531	1,475	1,056	83	32	198	83	24	416	13	390,918	14	4.52	5
West Virginia	627	44		105	0	0	0	305	257	15	33	196	106	16	4	65	5	*	16	5	69,711	40	0.90	43
Wisconsin	5,698	24		57	0	0	0	4,135	3,654	431	50	1,484	759	93	38	386	184	24	16	7	272,086	20	2.09	24
Wyoming	106	51		5	0	0	0	30	23	5	3	66	57	4	2	2	0	1	1	4	41,839	50	0.25	51

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			Fund- ing source:	Fed- eral	Total	Fed- eral	Non- federal ^d	Total	Own	Non- federal ^e	Fed- eral	Total	Fed- eral	govern- ment	Busi- ness	Higher ed- ucation	Non- profit	Other	Federal ^f	Total	GDP	Per- cent	Rank	
U.S. undistributed ^h	14,250	na		4,670	0	0	0	9,580	7,423	D	0	0	0	0	0	0	0	*	0	0	0	na	na	na
Puerto Rico ⁱ	164	na		6	0	0	0	NA	NA	NA	NA	152	111	4	5	30	2	*	1	6	101,496	na	na	na
Other ^j	154	na		119	0	0	0	0	0	0	0	32	28	3	*	*	*	1	3	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; HE = higher education.

^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 (U&C) in FY 2012.

^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 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 2012 included state and local governments (\$39 million), business (\$184 million), nonprofit organizations (\$77 million), and all other sources (\$139 million).

^e R&D paid for by nonfederal sources includes funds from other companies located inside (\$12 billion) or outside (\$12 billion) the United States, U.S. state government agencies (\$157 million), foreign government agencies and laboratories (\$120 million), and other organizations located inside (\$334 million) or outside (\$22 million) the United States.

^f Other sources of support for nonprofit institutions were unavailable by state. In 2012, 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: (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 U&C 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: 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, National Patterns of R&D Resources (annual series), Business R&D and Innovation Survey, Survey of Research and Development Expenditures at Universities and Colleges, Survey of Federal Funds for Research and Development, and Survey of State Government Research and Development. State GDP data are from the U.S. Bureau of Economic Analysis, <http://www.bea.gov>, accessed 11 February 2015.