

TABLE 10. U.S. R&D expenditures, by state, performing sector, and funding sector: 2009  
(Millions of current dollars)

State	Performer: Funding source:	Federal		FFRDCs			Business				U&C <sup>a</sup>				Other nonprofit institutions	State, internal <sup>b</sup>	R&D intensity <sup>c</sup>						
		All R&D	R&D rank	Federal	Total	Federal	Non-federal <sup>d</sup>	Total	Own	Paid by others		Total	Federal	Other government	Business	U&C	Non-profit	Federal <sup>f</sup>	Total	GDP	GDP rank	Percent	Rank
										Non-federal <sup>e</sup>	Federal												
U.S. total <sup>g</sup>	403,803	na	30,560	15,910	NA	NA	282,393	224,920	17,900	39,573	56,939	33,433	3,808	3,196	11,884	4,617	7,097	NA	13,939,000	na	3	na	
States total <sup>g</sup>	374,911	na	30,578	15,206	14,770	436	267,151	218,809	15,662	31,490	54,802	32,491	3,640	3,186	11,179	4,305	6,855	318	13,834,699	na	3	na	
Alabama	3,936	26	1,548	0	0	0	1,562	609	74	879	762	482	45	42	156	38	54	9	164,753	26	2	21	
Alaska	300	49	78	0	0	0	71	47	10	14	133	113	3	*	0	16	12	6	45,260	46	1	49	
Arizona	6,511	17	854	57	52	5	4,682	2,830	196	1,656	873	436	64	40	264	69	38	7	245,664	18	3	15	
Arkansas	986	40	22	0	0	0	709	217	D	D	240	110	54	6	49	20	15	1	98,879	34	1	43	
California	79,671	1	2,064	4,096	3,953	143	64,939	53,569	3,341	8,029	7,406	4,227	354	506	1,376	942	1,141	25	1,828,836	1	4	6	
Colorado	6,087	19	352	477	443	35	3,960	3,370	158	432	1,058	789	47	75	94	52	230	9	244,422	20	2	18	
Connecticut	11,447	12	19	0	0	0	10,638	9,128	273	1,238	753	507	18	26	105	97	24	13	213,534	23	5	5	
Delaware	2,244	31	50	0	0	0	2,046	1,343	D	D	134	95	6	4	23	5	13	1	60,148	40	4	10	
Dist. of Columbia	4,200	25	2,847	5	5	0	672	207	27	439	326	268	5	5	30	18	350	0	98,272	35	4	8	
Florida	7,098	16	1,008	0	0	0	4,329	2,923	272	1,134	1,664	901	182	99	381	101	86	10	726,184	4	1	44	
Georgia	5,918	20	407	0	0	0	3,905	3,065	228	612	1,566	859	62	88	498	59	37	4	391,485	11	2	34	
Hawaii	671	44	102	0	0	0	240	180	22	38	300	211	17	30	32	9	25	3	64,251	39	1	40	
Idaho	1,563	33	32	388	373	16	1,015	746	246	23	121	64	25	5	24	2	5	2	53,683	43	3	12	
Illinois	12,491	10	166	920	874	46	9,188	8,363	320	505	2,113	1,233	77	70	581	152	99	5	623,128	5	2	26	
Indiana	6,457	18	228	0	0	0	5,220	4,449	471	301	1,005	435	57	94	344	76	3	1	250,562	17	3	16	
Iowa	2,608	29	59	29	29	0	1,943	1,525	143	275	563	352	52	31	97	31	13	1	133,134	30	2	28	
Kansas	2,108	32	15	0	0	0	1,616	1,258	311	46	441	199	58	28	135	22	34	2	121,589	32	2	31	
Kentucky	1,552	34	16	0	0	0	986	886	47	53	540	232	61	18	165	64	4	6	151,994	28	1	42	
Louisiana	1,175	36	71	0	0	0	416	291	22	104	671	307	115	20	165	63	12	5	202,342	24	1	50	
Maine	757	43	18	0	0	0	530	494	7	30	128	64	2	4	54	5	79	2	50,160	44	2	35	
Maryland	18,388	6	10,152	398	398	0	4,492	2,488	478	1,525	3,021	2,244	62	97	409	209	319	6	283,644	15	6	2	
Massachusetts	20,254	2	979	707	704	3	14,422	12,215	855	1,352	2,463	1,804	22	189	189	261	1,682	1	360,574	12	6	4	
Michigan	13,916	8	130	0	0	0	11,999	10,607	846	546	1,742	972	59	70	527	114	37	8	350,847	13	4	9	
Minnesota	7,928	15	56	0	0	0	6,880	6,133	241	506	758	397	63	35	181	81	232	2	257,479	16	3	11	
Mississippi	841	42	153	0	0	0	260	180	13	67	417	259	36	15	98	9	3	8	92,167	36	1	45	
Missouri <sup>h</sup>	4,416	24	62	0	0	0	3,307	3,136	171	D	1,009	629	44	49	204	83	28	9	237,364	21	2	29	
Montana	363	48	24	0	0	0	144	123	6	16	182	113	26	8	29	4	12	1	34,856	48	1	41	
Nebraska	1,034	38	29	0	0	0	602	493	75	34	394	161	12	22	170	29	9	*	85,874	37	1	38	
Nevada	842	41	35	0	0	0	619	510	19	90	182	125	11	4	39	3	6	*	124,536	31	1	48	
New Hampshire <sup>h</sup>	1,210	35	39	0	0	0	868	772	96	D	298	214	2	10	54	19	3	1	58,967	42	2	25	
New Jersey	20,222	3	801	81	81	0	18,404	16,069	1,879	456	914	479	62	42	240	91	17	4	470,358	7	4	7	
New Mexico	5,817	21	494	4,216	4,143	73	623	257	25	341	435	285	30	18	90	13	48	1	74,736	38	8	1	
New York	16,491	7	279	569	545	24	10,919	8,036	540	2,344	4,225	2,492	301	234	832	365	464	35	1,072,311	3	2	33	
North Carolina	8,111	14	260	0	0	0	5,531	4,672	580	279	2,161	1,235	228	265	353	79	117	42	411,495	9	2	27	
North Dakota	445	47	26	0	0	0	231	216	7	8	186	94	43	11	33	5	2	1	31,997	50	1	37	
Ohio	10,093	13	1,192	0	0	0	6,811	5,215	462	1,134	1,895	1,089	209	159	347	91	191	4	450,991	8	2	23	

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	Funding source:	All R&D	R&D rank	Federal	Total	Federal	Non-federal <sup>d</sup>	Total	Own	Paid by others		Total	Other			Federal <sup>f</sup>	Total	GDP	GDP rank	Percent	Rank			
										federal <sup>e</sup>	Federal		govern-ment	Busi-ness	U&C							Non-profit		
Oklahoma	1,003	39	120	0	0	0	0	509	429	26	54	336	146	52	26	99	14	35	3	140,661	29	1	46	
Oregon	4,864	23	97	0	0	0	0	4,080	3,890	97	93	637	443	52	24	81	37	45	6	171,601	25	3	13	
Pennsylvania	13,479	9	368	89	81	8	8	9,989	8,951	641	397	2,722	1,832	129	203	386	172	308	3	537,223	6	3	17	
Rhode Island	1,152	37	359	0	0	0	0	460	397	10	53	246	152	9	7	73	6	87	0	47,738	45	2	20	
South Carolina	2,276	30	190	130	130	0	0	1,254	1,075	44	135	612	294	23	33	232	30	66	24	156,644	27	1	36	
South Dakota	263	50	10	0	0	0	0	143	104	15	24	102	56	17	5	15	10	7	*	37,022	47	1	47	
Tennessee	3,925	27	252	1,259	1,217	42	42	1,487	1,274	101	112	833	558	56	21	144	53	94	*	244,995	19	2	32	
Texas	20,027	4	521	17	16	1	1	15,307	12,020	1,244	2,044	3,984	2,009	503	253	802	417	193	5	1,129,537	2	2	30	
Utah	2,733	28	135	0	0	0	0	2,083	1,250	70	764	500	294	34	22	126	25	4	11	112,300	33	2	19	
Vermont	551	46	5	0	0	0	0	418	391	6	21	125	95	*	3	20	7	1	1	24,247	51	2	22	
Virginia	11,449	11	3,381	681	663	17	17	6,159	3,093	289	2,777	1,088	629	124	51	216	68	130	9	404,955	10	3	14	
Washington	19,313	5	252	1,087	1,064	23	23	16,471	15,968	250	252	1,084	727	67	86	163	40	413	7	331,861	14	6	3	
West Virginia	658	45	120	0	0	0	0	349	247	8	94	174	92	8	5	67	3	12	3	59,601	41	1	39	
Wisconsin	4,930	22	89	0	0	0	0	3,616	3,063	396	156	1,204	663	47	24	343	128	15	5	235,681	22	2	24	
Wyoming	141	51	10	0	0	0	0	47	35	4	8	78	29	4	1	42	1	2	5	34,157	49	0	51	
U.S. undistributed <sup>d</sup>	7,970	na	0	0	0	0	0	7,970	6,111	D	D	0	0	0	0	0	0	0	0	0	0	na	na	na
Puerto Rico <sup>j</sup>	NA	na	7	15	14	1	1	NA	NA	NA	NA	105	75	4	8	19	*	*	NA	95,210	na	NA	na	
Other <sup>k</sup>	164	na	135	0	0	0	0	0	0	0	0	28	21	3	3	0	0	*	na	na	na	na	na	

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

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

<sup>a</sup> State-level university R&D data have not been adjusted to eliminate double counting of funds passed through from one academic institution to another. At the national level, funds passed through to educational subrecipients account for 3.4% of total R&D expenditures reported by universities and colleges in FY 2009.

<sup>b</sup> Internal performers include state agency and department employees, as well as services performed by others in support of an internal R&D project.

<sup>c</sup> R&D intensity is ratio of total R&D performed in a state to its GDP.

<sup>d</sup> Nonfederal sources of R&D expenditures reported by FFRDCs in FY 2009 included state and local governments (\$31 million), business (\$190 million), FFRDC institutional funds (\$46 million), and other sources (\$169 million).

<sup>e</sup> R&D paid for by nonfederal sources includes funding from other companies located inside (\$9.6 billion) or outside (\$7.6 billion) the U.S., foreign government agencies and laboratories (\$59 million), other organizations located inside (\$363 million) or outside (\$68 million) the United States.

<sup>f</sup> Other sources of support for nonprofit institutions were unavailable by state. In 2009, total nonprofit performance is estimated at \$18.0 billion. Business provided an estimated \$1.3 billion to the nonprofit sector, and nonprofit institutions provided an estimated \$9.6 billion.

<sup>g</sup> 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.

<sup>h</sup> Figures for All R&D and Business total are lower-bound estimates due to suppression of some industry detail.

<sup>i</sup> Reported data that could not be assigned to 1 of the 50 states or the District of Columbia.

<sup>j</sup> Data on business R&D performance in Puerto Rico are not collected.

<sup>k</sup> Includes R&D expenditures reported for outlying areas (Guam, Virgin Islands) and offices abroad, but excluding Puerto Rico.

NOTE: Business 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]; NSF/NCSES, Business Research and Development and Innovation Survey; NSF/NCSES, Survey of Research and Development Expenditures at Universities and Colleges; NSF/NCSES, Survey of Federal Funds for Research and Development; NSF/NCSES, Survey of State Government Research and Development. State GDP data are from the U.S. Bureau of Economic Analysis, <http://www.bea.gov>, accessed 27 November 2012. All NSF/NCSES reports available at <http://www.nsf.gov/statistics/>.