

TABLE 10. Research and development expenditures, by state, performing sector, and source of funds: 2004

(Millions of current dollars)

State	Performing sector: Source of funds:	All R&D	R&D rank	Source of funds																R&D intensity ^b		
				Federal		FFRDCs			Industry			U&C ^a				Other nonprofit		GDP	rank	Percent	Rank	
				Federal	Total	Federal	Total	Federal	Industry ^d	Total	Federal	Other government	Industry	U&C	Other nonprofit	Federal ^e						
State total ^f	283,439	na	21,438	12,704	12,351	353	201,131	20,655	176,180	42,832	27,294	2,836	2,103	7,760	2,839	5,335	11,655,335	na	2.43	na		
Alabama	2,760	26	911	0	0	0	1,227	583	644	571	417	9	16	107	22	51	141,366	25	1.95	25		
Alaska	271	49	81	0	0	0	35	8	28	147	83	3	17	41	3	9	35,988	46	0.75	45		
Arizona	3,544	23	263	43	43	0	2,570	245	2,325	651	377	25	39	187	24	17	194,246	22	1.82	28		
Arkansas	514	45	41	0	0	0	287	27	259	183	94	45	10	25	8	4	82,712	33	0.62	48		
California	59,607	1	2,572	3,759	3,660	99	46,614	3,980	42,634	5,714	3,561	269	243	1,049	593	948	1,519,202	1	3.92	8		
Colorado	5,497	16	277	381	374	7	4,008	118	3,890	772	605	24	36	71	36	58	201,392	21	2.73	12		
Connecticut	7,881	11	30	0	0	0	7,177	1,717	5,460	650	469	7	25	82	67	25	182,468	23	4.32	6		
Delaware	1,182	34	3	0	0	0	1,059	14	1,045	114	81	4	3	23	4	5	52,298	39	2.26	19		
District of Columbia	2,383	27	1,641	4	4	0	182	68	114	303	240	4	8	17	35	253	77,510	35	3.07	10		
Florida	5,409	17	554	0	0	0	3,486	1,270	2,216	1,307	747	200	72	237	51	62	609,372	4	0.89	41		
Georgia	3,655	22	251	0	0	0	2,160	58	2,102	1,221	699	84	68	335	36	22	339,730	10	1.08	37		
Hawaii	490	46	80	0	0	0	131	52	78	241	191	9	21	20	0	38	50,238	41	0.98	40		
Idaho	1,006	35	27	180	168	13	681	11	670	117	65	21	5	24	2	1	43,509	43	2.31	18		
Illinois	11,300	8	120	839	792	47	8,554	267	8,286	1,708	1,066	72	53	417	100	79	533,735	5	2.12	23		
Indiana	5,130	18	77	0	0	0	4,208	232	3,976	841	365	54	55	311	56	5	229,449	16	2.24	21		
Iowa	1,625	31	47	27	27	0	963	7	956	532	306	51	30	131	15	56	110,210	30	1.47	32		
Kansas	2,169	28	31	0	0	0	1,804	D	D	333	171	46	9	93	14	2	98,927	32	2.19	22		
Kentucky	1,006	36	11	0	0	0	565	11	554	424	195	53	10	126	40	6	133,003	27	0.76	44		
Louisiana	972	37	90	0	0	0	311	19	293	568	239	114	29	135	50	4	160,186	24	0.61	49		
Maine	384	47	11	0	0	0	213	D	D	87	39	11	4	31	3	74	43,258	44	0.89	41		
Maryland	14,341	4	7,692	335	335	0	3,826	1,286	2,540	2,269	1,710	61	94	286	118	218	230,698	15	6.22	2		
Massachusetts	15,987	3	368	595	589	6	11,819	2,331	9,488	2,000	1,581	42	122	107	149	1,205	312,700	13	5.11	3		
Michigan	16,722	2	110	0	0	0	15,170	204	14,966	1,397	821	84	61	353	78	45	366,601	9	4.56	4		
Minnesota	5,992	15	51	0	0	0	5,199	261	4,938	524	314	53	22	74	61	218	224,620	17	2.67	14		
Mississippi	651	40	138	0	0	0	160	D	D	348	211	53	10	69	6	6	77,107	36	0.84	43		
Missouri	3,038	25	32	0	0	0	2,151	84	2,067	842	543	37	29	191	42	14	205,847	20	1.48	31		
Montana	295	48	62	0	0	0	70	3	67	155	97	21	6	29	1	9	27,583	48	1.07	38		
Nebraska	740	39	27	0	0	0	383	6	377	325	130	12	21	142	20	6	67,989	37	1.09	36		
Nevada	623	41	36	0	0	0	417	23	394	164	105	12	7	37	3	6	99,143	31	0.63	47		
New Hampshire	1,665	30	55	0	0	0	1,330	D	D	277	191	7	11	48	20	3	52,084	40	3.20	9		
New Jersey	12,460	7	563	75	75	1	10,993	294	10,699	806	420	59	35	219	74	24	410,306	8	3.04	11		
New Mexico	5,114	19	417	3,927	3,867	61	450	176	275	304	204	13	14	64	9	17	63,645	38	8.04	1		
New York	13,113	6	150	450	432	18	8,793	721	8,071	3,366	2,225	197	146	529	269	354	906,783	2	1.45	34		
North Carolina	6,491	14	394	0	0	0	4,565	87	4,478	1,443	933	124	152	191	43	90	323,962	12	2.00	24		
North Dakota	558	42	26	0	0	0	379	2	377	152	82	29	6	31	5	1	22,692	50	2.46	16		
Ohio	7,816	12	751	0	0	0	5,516	395	5,121	1,318	848	109	73	230	59	231	425,173	7	1.84	27		
Oklahoma	814	38	89	0	0	0	410	22	387	283	141	34	15	78	16	31	111,838	29	0.73	46		
Oregon	3,664	21	65	0	0	0	3,057	20	3,036	505	371	37	14	61	21	37	134,615	26	2.72	13		

TABLE 10. Research and development expenditures, by state, performing sector, and source of funds: 2004

(Millions of current dollars)

State	Performing sector: Source of funds:	All R&D	R&D rank	Federal		FFRDCs			Industry			U&C ^a				Other nonprofit		GDP	R&D intensity ^b			
				Federal	Total	Federal	Non-federal ^c	Total	Federal	Industry ^d	Total	Federal	Other government	Industry	U&C	Other nonprofit	Federal ^e		GDP	rank	Percent	Rank
Pennsylvania		10,813	10	171	58	56	2	8,005	160	7,845	2,206	1,595	99	155	227	130	373	463,752	6	2.33	17	
Rhode Island		1,840	29	260	0	0	0	1,320	D	D	192	133	7	4	43	5	68	41,844	45	4.40	5	
South Carolina		1,599	33	54	94	94	0	961	37	924	456	245	19	23	155	13	34	131,492	28	1.22	35	
South Dakota		149	50	16	0	0	0	72	3	69	57	38	11	1	6	2	4	29,699	47	0.50	50	
Tennessee		3,180	24	50	776	750	26	1,630	322	1,308	658	436	54	20	112	36	67	216,769	18	1.47	32	
Texas		14,266	5	260	17	15	1	10,992	610	10,382	2,881	1,647	355	162	411	305	117	903,208	3	1.58	30	
Utah		1,602	32	95	0	0	0	1,089	174	915	414	286	25	10	67	27	4	82,546	34	1.94	26	
Vermont		546	43	4	0	0	0	423	34	389	116	80	5	7	16	7	4	21,992	51	2.48	15	
Virginia		7,345	13	1,976	406	398	9	4,006	1,499	2,507	849	527	85	51	138	48	109	327,032	11	2.25	20	
Washington		10,936	9	222	693	629	64	8,840	146	8,694	897	706	41	50	71	29	285	253,085	14	4.32	6	
West Virginia		523	44	131	42	42	0	202	D	D	130	80	5	4	39	3	18	49,903	42	1.05	39	
Wisconsin		3,675	20	56	0	0	0	2,645	47	2,598	956	563	41	22	247	82	18	207,739	19	1.77	29	
Wyoming		98	51	8	0	0	0	23	3	21	60	23	2	3	29	3	6	24,092	49	0.40	51	
Other and unknown		7,169	na	0	0	0	0	7,169	44	7,125	0	0	0	0	0	0	0	na	na	na	na	

na=not applicable; D=data withheld to avoid disclosing operations of individual companies; FFRDC=federally funded research and development center; GDP=gross domestic product;

R&D=research and development; U&C=universities and colleges.

^aState-level U&C 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 2.9% of total R&D expenditures reported by universities and colleges in FY2004.

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

^cNonfederal sources of funds for R&D expenditures reported by FFRDCs in FY2004 included state and local governments (\$37 million), industry (\$134 million), FFRDC institutional funds (\$34 million), and other sources (\$149 million).

^dIndustry sources of funds for industry R&D expenditures include all nonfederal sources of funds for industry R&D expenditures.

^eOther sources of funds for other nonprofit institutions were unavailable by state. For 2004, total other nonprofit performance is estimated at \$12.8 billion. Industry provided an estimated \$1.2 billion to other nonprofit sector, and other nonprofit institutions provided an estimated \$6.0 billion.

^fState totals differ from U.S. totals reported elsewhere for four reasons: some R&D expenditures cannot be allocated to 1 of 50 states or District of Columbia; nonfederal sources of other nonprofit R&D expenditures could not be allocated by state; state-level U&C data have not been adjusted to eliminate double counting of funds passed through from one academic institution to another; and state-level R&D data are not converted from fiscal years to calendar years.

NOTES: Industry R&D data refer to calendar years; other R&D data refer to fiscal years but may serve as approximations to calendar-year data. "Other and unknown" category reflects reported data that could not be assigned to 1 of the 50 states or the District of Columbia. Detail may not add to total because of rounding.

SOURCES: Data were derived from National Science Foundation, Division of Science Resources Statistics (NSF/SRS), Survey of Industrial Research and Development, 2004; NSF/SRS, Survey of Research and Development Expenditures at Universities and Colleges: FY 2004; and NSF/SRS, Survey of Federal Funds for Research and Development: FY 2004. GDP data are from the U.S. Bureau of Economic Analysis, <http://www.bea.gov/beat/regional/gsp.htm>.