

TABLE B-17. Research and development expenditure, by state, performing sector, and source of funds: 2001

(Millions of current dollars)

State:	Performing sector:		Federal		Industry		FFRDCs		U&C ³					Other nonprofit institutions		Non-profit		R&D intensity ^e			
	Funding sector:	All R&D	Rank	Federal	Total	Federal	Industry ^b	Total ^c	Total	Federal	Non-Federal	Industry	U&C	Non-profit	Total ^c	Federal ^d	Total ^c	GSP	rank	Percent	Rank
U.S. total		274,211	na	21,048	198,505	16,899	181,606	2,020	33,518	19,654	2,382	2,177	6,778	2,528	6,225	5,302	2,192	10,137,190		2.71	na
Alabama		2,251	27	870	905	176	729	0	445	313	5	22	85	21	0	30	0	121,490	25	1.85	27
Alaska		297	48	99	68	2	66	0	116	58	3	29	25	0	0	14	0	28,581	46	1.04	41
Arizona		3,048	23	235	2,257	232	2,025	0	501	266	14	30	170	21	37	18	0	160,687	23	1.90	26
Arkansas		451	43	52	254	5	249	0	141	64	37	8	23	9	0	4	0	67,913	34	0.66	47
California		50,959	1	2,259	40,430	3,648	36,782	0	4,422	2,527	255	262	954	423	3,001	750	97	1,359,265	1	3.75	9
Colorado		4,313	18	266	3,082	579	2,503	0	573	439	22	30	57	26	120	65	207	173,772	21	2.48	17
Connecticut		5,311	16	93	4,686	110	4,576	0	499	328	15	24	76	55	0	33	0	166,165	22	3.20	13
Delaware		1,316	34	3	1,232	10	1,222	0	80	44	5	5	17	10	0	1	0	40,509	42	3.25	12
District of Columbia		2,543	26	1,819	242	78	164	0	228	192	3	13	4	16	0	246	7	64,459	36	3.94	8
Florida		5,642	13	865	3,755	736	3,019	0	997	468	114	92	277	46	0	24	0	491,488	4	1.15	36
Georgia		3,236	22	310	1,912	57	1,855	0	989	473	79	97	297	44	0	25	0	299,874	10	1.08	38
Hawaii		358	47	70	93	14	79	0	157	98	33	7	19	0	0	38	0	43,710	40	0.82	45
Idaho		1,259	35	22	884	3	881	271	83	34	18	7	22	1	0	0	0	36,905	45	3.41	10
Illinois		10,472	9	79	8,232	749	7,483	0	1,281	742	83	59	312	86	789	91	0	475,541	5	2.20	22
Indiana		4,235	19	56	3,583	63	3,520	0	584	248	46	42	204	46	0	12	0	189,919	16	2.23	20
Iowa		1,324	33	40	817	21	796	0	440	219	60	35	104	22	23	5	0	90,942	30	1.46	32
Kansas		1,597	28	25	1,299	D	D	0	269	115	45	13	74	22	0	5	0	87,196	31	1.83	29
Kentucky		951	36	13	636	8	628	0	297	120	41	14	101	21	0	4	0	120,266	26	0.79	46
Louisiana		827	38	74	316	13	303	0	432	183	85	26	100	39	0	4	0	148,697	24	0.56	50
Maine		389	46	9	249	49	200	0	68	25	9	4	26	5	0	62	0	37,449	43	1.04	40
Maryland		11,379	7	5,435	3,682	1,119	2,563	187	1,645	1,196	60	72	211	106	0	430	0	195,007	15	5.84	2
Massachusetts		14,665	3	363	11,240	1,813	9,427	0	1,577	1,140	38	156	80	162	380	1,105	0	287,802	11	5.10	3
Michigan		15,533	2	119	14,283	117	14,166	0	1,107	622	67	66	278	75	0	24	0	320,470	9	4.85	4
Minnesota		5,010	17	33	4,355	207	4,148	0	469	268	59	27	82	34	0	153	0	188,050	17	2.66	16
Mississippi		650	39	181	219	7	212	0	242	146	39	8	48	1	0	8	0	67,125	35	0.97	43
Missouri		2,550	25	43	1,792	142	1,650	0	679	410	25	38	164	41	0	36	0	181,493	19	1.40	34
Montana		239	49	44	70	3	67	0	108	57	20	9	21	1	0	17	0	22,635	48	1.06	39
Nebraska		580	40	26	306	9	297	0	242	77	7	18	128	13	0	6	0	56,967	37	1.02	42
Nevada		444	44	34	290	8	282	0	116	69	10	5	28	4	0	4	0	79,220	32	0.56	49
New Hampshire		1,587	29	43	1,339	D	D	0	197	115	12	12	43	15	0	8	0	47,183	39	3.36	11
New Jersey		11,392	6	524	10,164	207	9,957	0	610	270	52	34	173	81	76	19	0	365,388	8	3.12	14
New Mexico		3,947	20	494	231	95	136	1,599	274	186	12	12	56	9	1,333	16	0	55,426	38	7.12	1
New York		14,422	4	271	10,884	994	9,890	0	2,476	1,566	128	130	414	239	0	337	455	826,488	2	1.75	30

See explanatory information and SOURCE at end of table.

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(Millions of current dollars)

State:	Performing sector: Funding sector:	All R&D	R&D Rank	Federal		Industry		FFRDCs		U&C ³				Other nonprofit institutions		Non-profit FFRDCs		R&D intensity ^e			
				Federal	Total	Federal	Industry ^b	Total ^c	Total	Federal	Non-Federal	U&C	Non-profit	Total ^c	Federal ^d	Total ^c	GSP	rank	Percent	Rank	
North Carolina		5,825	12	441	4,138	70	4,068	0	1,137	655	121	168	153	41	0	109	0	275,615	12	2.11	24
North Dakota		461	42	28	347	1	346	0	85	31	1	6	42	4	0	2	0	19,005	51	2.43	18
Ohio		8,790	11	907	6,694	783	5,911	0	996	561	80	86	193	76	0	194	0	373,708	7	2.35	19
Oklahoma		872	37	54	543	14	529	0	255	96	41	17	88	13	0	20	0	93,855	29	0.93	44
Oregon		5,447	15	82	4,962	19	4,943	0	366	255	41	15	36	19	0	38	0	120,055	27	4.54	6
Pennsylvania		11,156	8	178	8,967	122	8,845	0	1,688	1,145	52	163	209	120	37	286	0	408,373	6	2.73	15
Rhode Island		1,579	30	254	1,134	D	D	0	143	102	6	2	30	4	0	49	0	36,939	44	4.28	7
South Carolina		1,447	32	55	921	17	904	87	361	169	30	23	131	8	0	22	0	115,204	28	1.26	35
South Dakota		141	50	21	87	2	85	0	32	16	9	0	4	3	0	1	0	24,251	47	0.58	48
Tennessee		2,651	24	101	1,503	154	1,349	0	423	265	44	22	57	36	0	43	581	182,515	18	1.45	33
Texas		12,722	5	527	9,839	185	9,654	0	2,244	1,231	228	177	369	240	0	97	15	763,874	3	1.67	31
Utah		1,495	31	82	1,069	168	901	0	338	213	21	15	55	34	0	5	0	70,409	33	2.12	23
Vermont		423	45	5	339	7	332	0	77	50	4	6	12	4	0	2	0	19,149	50	2.21	21
Virginia		5,544	14	1,540	2,957	680	2,277	0	611	345	70	50	110	37	102	93	241	273,070	13	2.03	25
Washington		10,372	10	179	8,691	555	8,136	0	707	489	19	48	129	23	0	233	562	222,950	14	4.65	5
West Virginia		466	41	111	211	6	205	0	79	36	3	7	29	5	34	31	0	42,368	41	1.10	37
Wisconsin		3,249	21	41	2,469	22	2,447	0	729	386	40	23	207	72	0	11	0	177,354	20	1.83	28
Wyoming		82	51	8	28	1	27	0	42	20	2	3	16	1	0	5	0	20,418	49	0.40	51
Other and unknown		9,950	na	47	9,819	785	9,034	0	71	50	5	2	13	1	11	13	0	NA	NA	NA	NA
Adjustment		8,364	na	1,520	0	0	0	(124)	795	463	67	(57)	225	98	281	454	27	NA	NA	NA	NA

na not applicable; D data withheld to avoid disclosing operations of individual companies; NA not available; FFRDC federally funded research and development center; GSP gross state product;

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

^a Adjustments have been made to R&D expenditures reported by universities to eliminate double counting of funds passed through from one academic institution to another at national level. State-level university R&D data have not been adjusted to correct for this double counting.

^b Industry sources of industry R&D expenditures include all non-Federal sources of industry R&D expenditures.

^c Includes all R&D expenditures of FFRDCs; over 90 percent of these expenditures are federally funded.

^d Other sources of support for nonprofit institutions were unavailable by state. For 2001, total nonprofit performance is estimated at \$10.7 billion. Industry provided an estimated \$1.1 billion to nonprofit sector, and nonprofit institutions provided an estimated \$4.3 billion. These non-Federal support amounts are included in total R&D column for U.S total and in other and unknown. For these two columns, amounts under all R&D are greater than sum of components to right, because those components do not include non-Federal support to nonprofit organizations.

^e R&D intensity is ratio of total R&D performed in a state to GSP.

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 a geographic location. "Adjustment" category reflects difference in state totals (and other and unknown) when reported on a fiscal-year basis and U.S. totals that have been adjusted to calendar-year estimates.

SOURCES: Data were derived from National Science Foundation, Division of Science Resources Statistics (NSF/SRS), Survey of Industrial Research and Development, 2001; NSF/SRS, Survey of Research and Development Expenditures at Universities and Colleges: FY 2001; and NSF/SRS, Survey of Federal Funds for Research and Development: FY 2001. GSP data are from the U.S. Bureau of Economic Analysis,

<http://www.bea.gov/bea/regional/gsp.htm>, 2003.