

Science and engineering profiles, by state: 2003–04

Location	Doctoral scientists, 2003		Doctoral engineers, 2003		S&E doctorates awarded, 2004		S&E and health postdoctorates in doctorate-granting institutions, 2003	
	Total	Rank	Total	Rank	Total	Rank	Total	Rank
United States	566,330	na	118,540	na	26,275	na	46,807	na
Alabama	5,330	28	1,390 *	25	285	27	342	26
Alaska	1,250 *	49	80 **	51	18	52	0	52
Arizona	7,200	24	1,920 *	18	485	17	530	24
Arkansas	2,940	37	320 **	42	93	41	121	39
California	76,410	1	22,650	1	3,499	1	7,693	1
Colorado	13,140	15	2,580	14	466	19	1,290	10
Connecticut	10,080	18	1,800 *	19	388	22	1,272	11
Delaware	2,680	40	830 *	30	141	38	125	37
District of Columbia	6,750	26	390 *	41	298	26	124	38
Florida	16,970	12	3,730	12	991	9	1,014	14
Georgia	12,640	16	1,670 *	21	655	12	1,037	13
Hawaii	3,060	35	290 **	45	99	40	118	40
Idaho	2,500	41	520 *	37	56	45	71	46
Illinois	21,370	7	3,950	10	1,199	6	1,333	9
Indiana	8,720	20	1,540 *	24	630	15	764	19
Iowa	4,800	31	560 *	36	340	24	559	23
Kansas	4,120	34	740 *	33	260	29	340	27
Kentucky	5,130	30	570 *	35	209	33	264	31
Louisiana	5,450	27	770 *	32	313	25	380	25
Maine	2,370	43	250 **	46	30	51	32	48
Maryland	27,700	5	3,870	11	677	11	1,871	6
Massachusetts	28,030	4	5,230	4	1,481	4	5,986	2
Michigan	14,490	14	4,760	7	1,012	7	1,405	8
Minnesota	10,950	17	1,630 *	22	419	21	915	17
Mississippi	2,990	36	690 *	34	165	35	169	35
Missouri	8,910	19	1,350 *	26	438	20	931	16
Montana	2,170	44	230 **	47	59	44	105	42
Nebraska	2,740	39	300 **	44	150	37	220	32
Nevada	1,760 *	47	460 *	40	76	43	80	44
New Hampshire	2,490	42	840 *	29	91	42	187	33
New Jersey	21,370	7	5,040	5	641	14	714	20
New Mexico	6,990	25	2,510	15	191	34	116	41
New York	41,090	2	6,740	3	2,326	2	3,759	3
North Carolina	18,070	11	2,290	16	795	10	1,777	7
North Dakota	1,170 *	50	140 **	49	42	47	73	45
Ohio	19,300	10	4,660	8	992	8	1,188	12
Oklahoma	4,430	33	960 *	28	221	31	186	34
Oregon	8,290	23	1,760 *	20	274	28	274	30
Pennsylvania	26,940	6	5,030	6	1,280	5	2,395	5
Puerto Rico	1,620 *	48	200 **	48	48	46	30	49
Rhode Island	2,860	38	520 *	37	160	36	130	36
South Carolina	5,190	29	830 *	30	211	32	302	29
South Dakota	1,120 *	51	90 **	50	39	48	17	51
Tennessee	8,590	21	1,950 *	17	370	23	776	18
Texas	30,000	3	9,280	2	1,595	3	2,977	4
Utah	4,450	32	1,120 *	27	240	30	318	28
Vermont	1,970	46	320 **	42	34	49	103	43
Virginia	20,770	9	4,170	9	655	12	678	21
Washington	15,520	13	2,930	13	477	18	1,014	14
West Virginia	2,100	45	470 *	39	112	39	27	50
Wisconsin	8,490	22	1,560 *	23	514	16	631	22
Wyoming	860 *	52	60 **	52	31	50	44	47

Science and engineering profiles, by state: 2003–04

Location	S&E and health graduate students in doctorate-granting institutions, 2003		Population, 2004		Civilian labor force, 2004		Personal income per capita, 2004	
	Total	Rank	Total (thousands)	Rank	Total (thousands)	Rank	Total (dollars)	Rank
	United States	507,247	na	297,550	na	148,769	na	33,041
Alabama	7,851	23	4,530	23	2,149	23	27,630	42
Alaska	572	52	655	48	333	50	34,085	17
Arizona	7,894	22	5,744	18	2,774	21	28,609	39
Arkansas	3,030	37	2,753	33	1,306	34	25,724	49
California	51,989	1	35,894	1	17,552	1	35,172	12
Colorado	11,061	14	4,601	22	2,522	22	36,109	10
Connecticut	5,824	27	3,504	30	1,797	28	45,506	2
Delaware	1,796	45	830	46	423	47	35,559	11
District of Columbia	9,199	17	554	51	299	51	52,101	1
Florida	24,208	6	17,397	4	8,396	4	31,460	25
Georgia	10,709	15	8,829	9	4,390	9	30,074	33
Hawaii	1,949	43	1,263	43	616	43	32,606	20
Idaho	2,262	40	1,393	40	703	41	26,839	47
Illinois	24,339	5	12,714	5	6,396	5	34,725	14
Indiana	10,063	16	6,238	14	3,170	15	30,070	34
Iowa	5,386	29	2,954	31	1,624	30	30,970	28
Kansas	6,838	26	2,736	34	1,464	31	31,003	27
Kentucky	4,540	32	4,146	26	1,974	26	27,151	45
Louisiana	7,597	24	4,516	24	2,058	24	27,219	43
Maine	734	50	1,317	41	699	42	29,973	35
Maryland	12,891	12	5,558	19	2,883	20	39,629	5
Massachusetts	25,234	4	6,417	13	3,393	13	42,102	3
Michigan	19,486	9	10,113	8	5,079	8	32,052	23
Minnesota	8,055	20	5,101	21	2,952	18	36,173	9
Mississippi	2,991	38	2,903	32	1,330	33	24,379	51
Missouri	8,520	19	5,755	17	3,031	17	30,516	32
Montana	1,445	47	927	45	483	45	27,666	41
Nebraska	3,222	36	1,747	39	985	37	32,276	21
Nevada	2,201	41	2,335	36	1,178	36	33,783	18
New Hampshire	1,719	46	1,300	42	723	40	36,676	7
New Jersey	11,566	13	8,699	10	4,388	10	41,636	4
New Mexico	4,025	34	1,903	37	912	38	26,154	48
New York	42,864	2	19,227	3	9,355	3	38,333	6
North Carolina	12,913	11	8,541	11	4,256	11	29,303	37
North Dakota	1,843	44	634	49	354	48	29,247	38
Ohio	21,100	8	11,459	7	5,885	7	31,135	26
Oklahoma	4,790	31	3,524	29	1,710	29	27,819	40
Oregon	4,869	30	3,595	28	1,856	27	30,584	31
Pennsylvania	23,028	7	12,406	6	6,275	6	33,257	19
Puerto Rico	4,409	33	3,895	27	1,371	32	12,031	52
Rhode Island	2,121	42	1,081	44	562	44	34,180	16
South Carolina	3,624	35	4,198	25	2,046	25	27,153	44
South Dakota	1,219	48	771	47	428	46	30,617	30
Tennessee	7,972	21	5,901	16	2,908	19	29,806	36
Texas	35,951	3	22,490	2	11,035	2	30,697	29
Utah	5,455	28	2,389	35	1,203	35	26,946	46
Vermont	717	51	621	50	353	49	31,737	24
Virginia	15,104	10	7,460	12	3,815	12	36,175	8
Washington	7,192	25	6,204	15	3,234	14	35,017	13
West Virginia	2,916	39	1,815	38	788	39	25,681	50
Wisconsin	8,962	18	5,509	20	3,071	16	32,063	22
Wyoming	1,002	49	507	52	282	52	34,199	15

Science and engineering profiles, by state: 2003–04

Location	Total federal expenditures, 2003		Federal R&D obligations, 2003		Total R&D performance, 2003		Industry R&D, 2003	
	Total (millions of dollars)	Rank	Total (millions of dollars)	Rank	Total (millions of dollars)	Rank	Total (millions of dollars)	Rank
United States	2,024,246	na	91,359	na	277,577	na	198,244	na
Alabama	36,871	19	2,933	8	2,543	27	999	30
Alaska	7,944	45	246	39	321	48	36	51
Arizona	37,801	18	1,857	16	3,578	22	2,605	21
Arkansas	18,340	33	140	46	509	43	270	42
California	219,706	1	17,410	1	59,664	1	47,142	1
Colorado	28,874	25	1,612	19	5,012	17	3,544	17
Connecticut	28,595	26	2,068	14	6,548	13	5,834	11
Delaware	5,061	50	91	50	1,414	35	1,298	27
District of Columbia	34,750	21	2,916	9	2,686	26	235	43
Florida	113,341	4	2,522	11	5,172	16	3,181	18
Georgia	51,910	12	1,514	21	3,923	20	2,108	22
Hawaii	11,269	40	350	37	438	45	133	47
Idaho	8,654	43	216	41	1,209	36	745	34
Illinois	73,020	7	1,900	15	11,045	8	8,319	8
Indiana	35,525	20	561	28	4,487	19	3,658	16
Iowa	17,550	35	465	31	1,451	34	833	33
Kansas	18,208	34	190	42	2,024	28	1,675	24
Kentucky	31,153	23	232	40	1,014	37	601	35
Louisiana	31,646	22	442	32	954	39	295	41
Maine	9,966	42	145	45	372	47	200	46
Maryland	57,646	10	7,804	2	10,162	9	3,998	15
Massachusetts	51,265	14	5,157	4	15,638	3	11,094	4
Michigan	57,870	9	1,673	18	16,884	2	15,241	2
Minnesota	27,580	28	861	25	5,842	15	5,003	12
Mississippi	21,741	30	1,174	23	1,519	32	1,021	29
Missouri	43,874	15	1,270	22	2,731	25	1,742	23
Montana	7,092	47	130	47	247	49	65	49
Nebraska	11,000	41	146	44	710	40	363	38
Nevada	11,637	39	409	34	579	41	383	37
New Hampshire	7,349	46	363	36	1,664	30	1,349	26
New Jersey	53,679	11	1,786	17	12,795	6	11,401	3
New Mexico	18,736	32	2,850	10	4,977	18	349	40
New York	137,898	3	3,973	6	13,031	5	8,556	7
North Carolina	51,766	13	1,611	20	6,343	14	4,424	13
North Dakota	5,726	49	102	49	382	46	216	45
Ohio	69,902	8	2,396	12	8,583	11	6,260	10
Oklahoma	25,254	29	274	38	968	38	577	36
Oregon	21,253	31	480	30	3,572	23	2,973	19
Pennsylvania	90,350	5	3,788	7	9,944	10	7,091	9
Puerto Rico	14,661	36	112	48	na	na	na	na
Rhode Island	8,036	44	523	29	1,757	29	1,203	28
South Carolina	28,038	27	412	33	1,616	31	976	32
South Dakota	6,202	48	55	51	149	50	75	48
Tennessee	42,602	17	1,039	24	2,998	24	1,507	25
Texas	140,451	2	4,757	5	14,785	4	11,057	5
Utah	13,500	38	650	27	1,506	33	996	31
Vermont	4,443	51	182	43	492	44	360	39
Virginia	82,454	6	6,213	3	7,582	12	4,152	14
Washington	43,368	16	2,292	13	11,469	7	9,222	6
West Virginia	14,226	37	367	35	538	42	219	44
Wisconsin	30,237	24	657	26	3,642	21	2,623	20
Wyoming	4,226	52	41	52	113	51	37	50

Science and engineering profiles, by state: 2003–04

Location	Academic R&D, 2003		Number of SBIR awards, 1999–2004		Utility patents issued to state residents, 2004		Gross state product, 2004	
	Total (millions of dollars)	Rank	Total	Rank	Total	Rank	Total (billions of dollars)	Rank
United States	40,055	na	31,847	na	84,268	na	11,744	na
Alabama	558	23	592	14	375	35	140	25
Alaska	141	43	19	51	39	51	34	47
Arizona	618	20	613	13	1,621	18	200	22
Arkansas	183	40	71	45	132	43	81	34
California	5,363	1	6,476	1	19,488	1	1,551	1
Colorado	695	19	1,587	5	2,099	13	200	21
Connecticut	595	22	545	16	1,577	19	186	23
Delaware	105	48	131	30	342	38	54	40
District of Columbia	263	36	113	36	75	48	77	36
Florida	1,205	11	745	12	2,456	11	599	4
Georgia	1,176	12	336	23	1,326	20	343	10
Hawaii	185	39	119	33	76	47	50	42
Idaho	105	47	75	44	1,785	15	44	44
Illinois	1,614	7	484	18	3,162	6	522	5
Indiana	726	18	192	27	1,280	22	228	16
Iowa	499	26	78	43	658	27	111	29
Kansas	310	32	113	36	448	30	99	32
Kentucky	378	30	80	42	407	33	136	26
Louisiana	524	24	83	40	343	37	153	24
Maine	75	50	117	34	134	42	43	45
Maryland	2,031	4	1,630	4	1,313	21	228	15
Massachusetts	1,822	6	4,462	2	3,672	5	318	13
Michigan	1,388	9	581	15	3,757	4	372	9
Minnesota	517	25	439	19	2,754	10	224	17
Mississippi	324	31	68	46	135	41	76	37
Missouri	807	15	154	29	768	24	203	20
Montana	141	42	166	28	119	44	27	49
Nebraska	301	34	55	48	191	40	68	38
Nevada	155	41	102	38	410	32	100	31
New Hampshire	252	37	386	21	626	28	52	41
New Jersey	747	17	929	10	2,957	7	416	8
New Mexico	307	33	531	17	370	36	61	39
New York	3,090	2	1,241	7	5,846	3	897	2
North Carolina	1,395	8	420	20	1,794	14	336	11
North Dakota	134	44	42	49	53	49	23	51
Ohio	1,269	10	1,209	8	2,889	8	420	7
Oklahoma	295	35	127	31	447	31	108	30
Oregon	437	27	385	22	1,725	16	128	28
Pennsylvania	2,013	5	1,127	9	2,883	9	468	6
Puerto Rico	78	49	7	52	19	52	79	35
Rhode Island	187	38	117	34	309	39	42	46
South Carolina	435	28	120	32	524	29	136	27
South Dakota	50	52	34	50	82	46	29	48

Science and engineering profiles, by state: 2003–04

Location	Academic R&D, 2003		Number of SBIR awards, 1999–2004		Utility patents issued to state residents, 2004		Gross state product, 2004	
	Total (millions of dollars)	Rank	Total	Rank	Total	Rank	Total (billions of dollars)	Rank
Tennessee	600	21	226	26	681	26	218	18
Texas	2,766	3	1,309	6	5,930	2	884	3
Utah	385	29	296	25	683	25	83	33
Vermont	107	46	91	39	400	34	22	52
Virginia	776	16	1,798	3	1,077	23	329	12
Washington	870	14	757	11	2,221	12	262	14
West Virginia	121	45	83	40	100	45	49	43
Wisconsin	881	13	325	24	1,658	17	212	19
Wyoming	60	51	61	47	52	50	24	50

*Coefficient of variation greater than 10% but less than 25%; **Coefficient of variation 25% or greater; na = not applicable; S&E = science and engineering; SBIR = small business innovation research.

NOTES: Rankings and totals are based on data for the 50 states, District of Columbia, and Puerto Rico. Reliability of estimates of industry R&D and doctoral scientists and engineers varies by state, because sample allocation was not based on geography. Rankings do not take into account the margin of error of estimates from sample surveys. The data source for Puerto Rico's personal income per capita and gross state product was the Puerto Rico Affairs Administration, Washington, DC. Data on doctoral scientists and engineers include only recipients of doctoral degrees from U.S. institutions in S&E and health fields.

SOURCES: Prepared by the National Science Foundation/Division of Science Resource Statistics. Data compiled from numerous sources; see the section, Data Sources for Science and Engineering State Profiles.