

Science and engineering profile: Tennessee

Characteristic	State	U.S.	Rank
Doctoral scientists, 2003	8,590	566,330	21
Doctoral engineers, 2003	1,950 *	118,540	17
S&E doctorates awarded, 2004	370	26,275	23
Life sciences (percent)	32	27	na
Psychology (percent)	23	13	na
Engineering (percent)	19	22	na
S&E and health postdoctorates in doctorate-granting institutions, 2003	776	46,807	18
S&E and health graduate students in doctorate-granting institutions, 2003	7,972	507,247	21
Population, 2004 (thousands)	5,901	297,550	16
Civilian labor force, 2004 (thousands)	2,908	148,769	19
Personal income per capita, 2004 (dollars)	29,806	33,041	36
Federal spending			
Total expenditures, 2003 (millions of dollars)	42,602	2,024,246	17
R&D obligations, 2003 (millions of dollars)	1,039	91,359	24
Total R&D performance, 2003 (millions of dollars)	2,998	277,577	24
Industry R&D, 2003 (millions of dollars)	1,507	198,244	25
Academic R&D, 2003 (millions of dollars)	600	40,055	21
Life sciences (percent)	64	59	na
Engineering (percent)	13	15	na
Physical sciences (percent)	6	8	na
Number of SBIR awards, 1999–2004	226	31,847	26
Utility patents issued to state residents, 2004	681	84,268	26
Gross state product, 2004 (billions of dollars)	218	11,744	18

\*Coefficient of variation greater than 10% but less than 25%; 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 of 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. Data on doctoral scientists and engineers include only recipients of doctoral degrees from U.S. institutions in S&E and health fields. The field percentages represent the largest three fields within the state.

Federal obligations for research and development, by agency and performer: Tennessee, FY 2003  
(Thousands of dollars)

Agency	Total	Performer						Rank
		Federal intramural	All FFRDCs	Industrial firms	Universities and colleges	Other nonprofits	State and local government	
All agencies	1,039,274	140,289	367,175	89,322	377,408	60,778	4,302	24
Department of Agriculture	23,236	10,859	0	0	12,326	0	51	33
Department of Commerce	6,531	1,151	0	1,909	3,123	348	0	23
Department of Defense	136,090	37,288	16,274	66,380	16,148	0	0	31
Department of Energy	359,002	493	344,569	4,055	9,832	53	0	7
Department of Health and Human Services	451,058	83,052	2,468	4,391	300,946	59,727	474	17
Department of the Interior	3,148	2,216	0	0	880	0	52	31
Department of Transportation	6,408	814	29	1,799	35	6	3,725	19
Environmental Protection Agency	507	45	0	70	392	0	0	41
National Aeronautics and Space Administration	23,795	4,371	3,471	9,648	6,305	0	0	22
National Science Foundation	29,499	0	364	1,070	27,421	644	0	25
Rank	24	25	5	32	19	17	31	na

FFRDC = federally funded research and development center.

na = not applicable.

NOTES: Federal R&D obligations are as reported by funding agencies. Ranks and totals are based on data for the 50 states, District of Columbia, and Puerto Rico.

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