Science and engineering profile: West Virginia

Characteristic	State	U.S.	Rank
Doctoral scientists, 2003	2,100	566,330	45
Doctoral engineers, 2003	470 *	118,540	39
S&E doctorates awarded, 2004	112	26,275	39
Life sciences (percent)	35	27	na
Psychology (percent)	26	13	na
Engineering (percent)	16	22	na
S&E and health postdoctorates in doctorate-granting institutions, 2003	27	46,807	50
S&E and health graduate students in doctorate-granting institutions, 2003	2,916	507,247	39
Population, 2004 (thousands)	1,815	297,550	38
Civilian labor force, 2004 (thousands)	788	148,769	39
Personal income per capita, 2004 (dollars)	25,681	33,041	50
Federal spending			
Total expenditures, 2003 (millions of dollars)	14,226	2,024,246	37
R&D obligations, 2003 (millions of dollars)	367	91,359	35
Total R&D performance, 2003 (millions of dollars)	538	277,577	42
Industry R&D, 2003 (millions of dollars)	219	198,244	44
Academic R&D, 2003 (millions of dollars)	121	40,055	45
Life sciences (percent)	57	59	na
Engineering (percent)	29	15	na
Physical sciences (percent)	6	8	na
Number of SBIR awards, 1999–2004	83	31,847	40
Utility patents issued to state residents, 2004	100	84,268	45
Gross state product, 2004 (billions of dollars)	49	11,744	43

*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: West Virginia, FY 2003
(Thousands of dollars)

	Performer							
Agency	Total	Federal intramural	All FFRDCs	Industrial firms	Universities and colleges	Other nonprofits	State and local government	Rank
All agencies	367,393	124,961	0	160,289	49,699	30,165	2,279	35
Department of Agriculture	33,318	24,810	0	7	7,090	1,403	8	22
Department of Commerce	2,527	0	0	67	2,460	0	0	34
Department of Defense	80,692	13,956	0	60,060	3,677	2,999	0	34
Department of Energy	156,756	59,107	0	92,719	3,655	1,275	0	10
Department of Health and Human Services	40,748	22,403	0	639	16,695	59	952	45
Department of the Interior	5,153	4,640	0	0	278	0	235	22
Department of Transportation	2,863	0	0	994	785	0	1,084	35
Environmental Protection Agency	991	45	0	0	946	0	0	38
National Aeronautics and Space Administration	41,449	0	0	5,116	11,914	24,419	0	14
National Science Foundation	2,896	0	0	687	2,199	10	0	52
Rank	35	29	na	28	48	23	40	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.