Science and engineering profile: West Virginia

Characteristic	State	U.S.	Rank	Characteristic	State	U.S.	Rank
Doctoral scientists, 2001	1,980	542,940	44	Total R&D performance, 2002 (millions of dollars)	542	255,707	41
Doctoral engineers, 2001	380	112,760	41	Industry R&D, 2002 (millions of dollars)	264	182,403	40
S&E doctorates awarded, 2002	81	24,558	40	Academic R&D, 2002 (millions of dollars)	97	36,314	45
life sciences (percent)	28	27	na	life sciences (percent)	55	59	na
engineering (percent)	25	21	na	engineering (percent)	30	15	na
psychology (percent)	23	13	na	environmental sciences (percent)	6	6	na
S&E postdoctorates, 2002				Public higher education current-fund			
in doctorate-granting institutions	31	45,171	47	expenditures, 2001 (millions of dollars)	916	170,024	37
S&E graduate students, 2002				Number of SBIR awards, 1999-2002	36	19,383	46
in doctorate-granting institutions	2,798	482,211	38	Utility patents issued to state residents, 2002	151	86,971	44
Population, 2003 (thousands)	1,810	294,688	38	Gross state product, 2001 (billions of dollars)	42	10,206	42
Civilian labor force, 2003 (thousands)	787	147,569	39	agriculture (percent)	1	1	na
				manufacturing, mining, construction (percent)	25	20	na
Personal income per capita, 2003 (dollars)	24,379	31,632	49	transportation, communication, utilities (percent)	11	8	na
				wholesale and retail trade (percent)	16	16	na
Federal spending				finance, insurance, real estate (percent)	12	20	na
Total expenditures, 2002 (millions of dollars)	13,361	1,896,317	37	services (percent)	20	22	na
R&D obligations, 2002 (millions of dollars)	254	83,764	42	government (percent)	17	12	na

na = not applicable.

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 the estimates of industry R&D and of doctoral scientists and engineers varies by state, because the sample allocation was not based on geography. The rankings do not take into account the margin of error of estimates from sample surveys.
Data on graduate students, doctoral scientists, doctoral engineers, and postdoctorates include all graduate degree (except M.D.) candidates and recipients in S&E fields, including health fields.
Data on S&E doctorates awarded do not include health fields.

Federal obligations for research and development by agency and performer: West Virginia, fiscal year 2002

(Thousands of dollars)

Agency	Performer							Rank
	Total	Federal intramural	All FFRDCs	Industrial firms	Universities and colleges	Other nonprofits	State and local government	
All agencies	254,239	101,901	0	56,088	56,701	34,517	5,032	42
Department of Agriculture	33,969	25,360	0	0	7,485	1,089	35	21
Department of Commerce	3,358	264	0	64	1,958	0	1,072	30
Department of Defense	40,957	2,969	0	33,126	2,094	2,768	0	37
Department of Energy	86,061	58,810	0	13,568	10,979	2,654	50	13
Department of Health and Human Services	32,037	8,236	0	2,933	18,071	677	2,120	46
Department of the Interior	6,641	6,252	0	0	214	0	175	21
Department of Transportation	2,940	10	0	0	1,350	0	1,580	33
Environmental Protection Agency	0	0	0	0	0	0	0	na
National Aeronautics and Space Administration	42,676	0	0	5,997	9,450	27,229	0	15
National Science Foundation	5,600	0	0	400	5,100	100	0	50
Rank	42	31	na	36	45	28	29	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.