West Virginia

Science and Engineering Profile

	STATE	U.S.	Rank		STATE	U.S.	Rank
Doctoral scientists,1995	1,787	453,928	43	Total R&D performance, 1995 (millions)	\$475	\$177,210	39
Doctoral engineers,1995	402	86,738	39	Industry R&D, 1995 (millions)	\$243	\$130,332	41
S&E doctorates awarded, 1996	66	27,230	41	Academic R&D, 1996 (millions)	\$55	\$22,481	47
of which, in life sciences	30%	25%		of which, in life sciences	46%	56%	
in engineering	29%	23%		in engineering	24%	16%	
in psychology	14%	13%		in environmental sciences	12%	6%	
S&E postdoctorates, 1996 in doctorate-granting institutions	25	37,019	49	Higher education current-fund expenditures, 1995 (millions)	\$848	\$182,602	41
S&E graduate students, 1996	2,341	430,631	38	Number of SBIR awards, 1990-1997	11	31,155	51
in doctorate-granting institutions				Patents issued to state residents, 1997	147	61,699	42
Population, 1997 (000s)	1,816	271,464	36	Gross state product, 1996 (billions)	\$37.2	\$7,677.4	40
Civilian labor force, 1997 (000s)	805	137,564	39	of which, agriculture	1%	2%	
				manufacturing, mining, construction	31%	23%	
Personal income per capita, 1997	\$18,957	\$25,598	50	transportation, communication, utilities	13%	8%	
				wholesale and retail trade	14%	16%	
Federal spending				finance, insurance, real estate	11%	19%	
Total expenditures, 1997 (millions)	\$10,409	\$1,405,060	37	services	17%	20%	
R&D obligations,1996 (millions)	\$254	\$66,087	31	government	14%	12%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico. Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development by Agency and Performer: Fiscal Year 1996

[Thousands of Dollars]

	Total	Federal	All FFRDCs	Industrial firms	Universities &	Other	State & local	State rank
		Intramural			Colleges	nonprofits	government	
Total, all agencies	253,880	101,957	29,776	98,016	17,553	5,251	1,327	31
Department of Agriculture	19,110	14,475	0	0	3,339	1,275	21	24
Department of Commerce	840	490	0	0	0	350	0	39
Department of Defense	16,139	1,297	0	11,786	1,230	1,826	0	41
Department of Energy	127,777	45,165	0	80,436	2,076	100	0	12
Dept. of Health & Human Services	41,191	33,518	0	0	6,730	200	743	33
Department of Interior	5,865	5,755	0	0	80	0	30	22
Department of Transportation	1,454	0	0	671	250	0	533	32
Environmental Protection Agency	0	0	0	0	0	0	0	na
Nat'l Aeronautics & Space Admin.	8,722	1,257	0	5,123	842	1,500	0	28
National Science Foundation	32,782	0	29,776	0	3,006	0	0	22
State rank	31	23	15	30	48	37	33	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable