

## Science and Engineering Profile: Virginia

Characteristic	State	U.S.	Rank	Characteristic	State	U.S.	Rank
Doctoral scientists, 2001 <sup>1</sup> .....	16,960	542,940	10	Total R&D performance, 2000 (millions).....	\$5,069	\$244,855	12
Doctoral engineers, 2001 <sup>1</sup> .....	3,400	112,770	11	Industry R&D, 2000 (millions).....	\$2,718	\$187,544	16
S&E doctorates awarded, 2001 <sup>1</sup> .....	628	25,509	13	Academic R&D, 2001 (millions).....	\$611	\$32,716	16
of which, in engineering.....	27%	22%		of which, in life sciences.....	52%	59%	
in life sciences.....	21%	26%		in engineering.....	22%	15%	
in social sciences.....	16%	16%		in environmental sciences.....	10%	6%	
S&E postdoctorates, 2001 <sup>1</sup>				Public higher education current-fund			
in doctorate-granting institutions.....	646	42,899	21	expenditures, 2000 (millions).....	\$4,086	\$152,068	10
S&E graduate students, 2001 <sup>1</sup>				Number of SBIR awards, 1999-2001.....	743	13,650	3
in doctorate-granting institutions.....	13,903	452,411	10	Utility patents issued to state residents, 2001.....	1,115	87,605	23
Population, 2002 (thousands).....	7,294	292,228	12	Gross state product, 2000 (billions).....	\$261	\$10,003	13
Civilian labor force, 2002 (thousands).....	3,735	146,712	12	of which, agriculture.....	1%	1%	
Personal income per capita, 2001.....	\$32,431	\$30,472	13	manufacturing, mining, construction.....	17%	22%	
Federal spending				transportation, communication, utilities.....	9%	8%	
Total expenditures, 2001 (millions).....	\$71,257	\$1,753,011	6	wholesale and retail trade.....	14%	16%	
R&D obligations, 2001 (millions).....	\$4,810	\$78,006	3	finance, insurance, real estate.....	18%	19%	
				services.....	24%	22%	
				government.....	18%	12%	

<sup>1</sup>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. Data on S&E doctorates awarded do not include health fields.

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.

### Federal Obligations for Research and Development by Agency and Performer: Virginia, Fiscal Year 2001

Agency	Performer							State rank, total
	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	
	[In thousands of dollars]							
Total, all agencies.....	4,809,863	1,540,051	255,612	2,553,434	359,145	92,596	9,025	3
Department of Agriculture.....	14,634	905	0	0	12,449	1,280	0	38
Department of Commerce.....	12,884	2,274	0	7,085	3,134	391	0	17
Department of Defense.....	3,629,394	1,185,907	184,242	2,182,019	64,229	12,984	13	2
Department of Energy.....	89,957	5,345	66,182	5,561	10,840	2,029	0	12
Dept. of Health & Human Services.....	253,135	17,415	546	23,148	188,627	22,312	1,087	21
Department of the Interior.....	107,571	103,213	0	2,212	1,760	0	386	1
Department of Transportation.....	39,943	2,741	4,021	23,169	1,095	5,728	3,189	4
Environmental Protection Agency.....	8,904	916	0	2,973	748	4,128	139	15
National Aeronautics and Space Admin....	577,333	216,978	0	300,088	29,354	26,826	4,087	4
National Science Foundation.....	76,108	4,357	621	7,179	46,909	16,918	124	14
State rank, total.....	3	4	6	3	18	12	12	na

KEY: FFRDC = federally funded research and development center; SBIR = small business innovation research; 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".