Science and engineering profile: Virginia

Characteristic	State	U.S.	Rank	Characteristic	State	U.S.	Rank
Doctoral scientists, 2001	16,960	542,940	10	Total R&D performance, 2002 (millions of dollars)	5,895	255,707	13
Doctoral engineers, 2001	3,400	112,760	11	Industry R&D, 2002 (millions of dollars)	2,920	182,403	18
S&E doctorates awarded, 2002	603	24,558	13	Academic R&D, 2002 (millions of dollars)	694	36,314	16
engineering (percent)	24	21	na	life sciences (percent)	53	59	na
life sciences (percent)	22	27	na	engineering (percent)	21	15	na
social sciences (percent)	18	16	na	environmental sciences (percent)	8	6	na
S&E postdoctorates, 2002				Public higher education current-fund			
in doctorate-granting institutions	707	45,171	20	expenditures, 2001 (millions of dollars)	4,416	170,024	10
S&E graduate students, 2002				Number of SBIR awards, 1999-2002	1,076	19,383	3
in doctorate-granting institutions	14,549	482,211	10	Utility patents issued to state residents, 2002	1,160	86,971	23
Population, 2003 (thousands)	7,386	294,688	12	Gross state product, 2001 (billions of dollars)	273	10,206	13
Civilian labor force, 2003 (thousands)	3,773	147,569	12	agriculture (percent)	1	1	na
				manufacturing, mining, construction (percent)	17	20	na
Personal income per capita, 2003 (dollars)	33,671	31,632	13	transportation, communication, utilities (percent)	8	8	na
				wholesale and retail trade (percent)	14	16	na
Federal spending				finance, insurance, real estate (percent)	19	20	na
Total expenditures, 2002 (millions of dollars)	74,537	1,896,317	6	services (percent)	24	22	na
R&D obligations, 2002 (millions of dollars)	5,756	83,764	3	government (percent)	18	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: 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	5,756,339	1,842,918	316,506	3,136,106	377,993	75,618	7,198	3
Department of Agriculture	15,866	1,032	0	0	12,973	1,861	0	38
Department of Commerce	19,420	4,122	0	12,331	2,262	705	0	12
Department of Defense	4,360,759	1,437,951	206,821	2,654,474	55,637	5,876	0	2
Department of Energy	88,421	6,200	67,263	5,349	7,858	1,751	0	12
Department of Health and Human Services	318,593	53,587	550	52,931	207,156	3,958	411	21
Department of the Interior	97,981	95,741	0	122	1,869	0	249	2
Department of Transportation	42,754	7,674	223	26,469	1,896	1,738	4,754	4
Environmental Protection Agency	12,654	757	0	4,468	1,184	6,105	140	9
National Aeronautics and Space Administration	674,841	232,786	0	374,553	28,798	37,192	1,512	3
National Science Foundation	125,050	3,068	41,649	5,409	58,360	16,432	132	7
Rank	3	4	6	2	18	16	20	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.