## Science and engineering profile: Kentucky

Characteristic State U.S. Rank Characteristi		Characteristic	State	U.S.	Rank		
Doctoral scientists, 2001	4,950	542,940	30	Total R&D performance, 2002 (millions of dollars)	1,128	255,707	36
Doctoral engineers, 2001	450	112,760	40	Industry R&D, 2002 (millions of dollars)	656	182,403	34
S&E doctorates awarded, 2002	185	24,558	33	Academic R&D, 2002 (millions of dollars)	333	36,314	30
life sciences (percent)	44	27	na	life sciences (percent)	69	59	na
engineering (percent)	15	21	na	engineering (percent)	14	15	na
social sciences (percent)	12	16	na	other sciences (percent)	5	2	na
S&E postdoctorates, 2002				Public higher education current-fund			
in doctorate-granting institutions	298	45,171	29	expenditures, 2001 (millions of dollars)	2,590	170,024	25
S&E graduate students, 2002				Number of SBIR awards, 1999-2002	54	19,383	39
in doctorate-granting institutions	4,459	482,211	32	Utility patents issued to state residents, 2002	450	86,971	32
Population, 2003 (thousands)	4,118	294,688	26	Gross state product, 2001 (billions of dollars)	120	10,206	26
Civilian labor force, 2003 (thousands)	1,956	147,569	26	agriculture (percent)	2	1	na
				manufacturing, mining, construction (percent)	32	20	na
Personal income per capita, 2003 (dollars)	26,252	31,632	43	transportation, communication, utilities (percent)	8	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)	28,880	1,896,317	23	services (percent)	17	22	na
R&D obligations, 2002 (millions of dollars)	321	83,764	36	government (percent)	14	12	na

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: Kentucky, fiscal year 2002

(Thousands of dollars)

Agency	Performer							
	Total	Federal intramural	All FFRDCs	Industrial firms	Universities and colleges	Other nonprofits	State and local government	Rank
All agencies	321,284	28,318	0	19,165	148,444	111,082	14,275	36
Department of Agriculture	14,038	1,288	0	0	12,750	0	0	39
Department of Commerce	756	0	0	756	0	0	0	47
Department of Defense	21,147	2,251	0	10,981	7,915	0	0	41
Department of Energy	3,193	0	0	308	2,885	0	0	43
Department of Health and Human Services	252,990	23,533	0	6,427	103,002	109,244	10,784	25
Department of the Interior	2,056	1,097	0	46	848	36	29	47
Department of Transportation	4,271	0	0	0	1,884	0	2,387	23
Environmental Protection Agency	1,873	0	0	0	1,664	209	0	30
National Aeronautics and Space Administration	5,557	149	0	523	2,423	1,387	1,075	39
National Science Foundation	15,403	0	0	124	15,073	206	0	40
Rank	36	44	na	44	32	11	5	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.