Science and engineering profile: Arizona

Characteristic	State	U.S.	Rank
Doctoral scientists, 2003	7,200	566,330	24
Doctoral engineers, 2003	1,920 *	118,540	18
S&E doctorates awarded, 2004	485	26,275	17
Engineering (percent)	22	22	na
Life sciences (percent)	22	27	na
Social sciences (percent)	18	16	na
S&E and health postdoctorates in doctorate-granting institutions, 2003	530	46,807	24
S&E and health graduate students in doctorate-granting institutions, 2003	7,894	507,247	22
Population, 2004 (thousands)	5,744	297,550	18
Civilian labor force, 2004 (thousands)	2,774	148,769	21
Personal income per capita, 2004 (dollars)	28,609	33,041	39
Federal spending			
Total expenditures, 2003 (millions of dollars)	37,801	2,024,246	18
R&D obligations, 2003 (millions of dollars)	1,857	91,359	16
Total R&D performance, 2003 (millions of dollars)	3,578	277,577	22
Industry R&D, 2003 (millions of dollars)	2,605	198,244	21
Academic R&D, 2003 (millions of dollars)	618	40,055	20
Life sciences (percent)	48	59	na
Physical sciences (percent)	21	8	na
Engineering (percent)	17	15	na
Number of SBIR awards, 1999–2004	613	31,847	13
Utility patents issued to state residents, 2004	1,621	84,268	18
Gross state product, 2004 (billions of dollars)	200	11,744	22

<sup>\*</sup>Coefficient of variation greater than 10% but less than 25%; na = not applicable; S&E = science and engineering; 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 estimates of industry R&D and of doctoral scientists and engineers varies by state, because sample allocation was not based on geography. Rankings do not take into account the margin of error of estimates from sample surveys. Data on doctoral scientists and engineers include only recipients of doctoral degrees from U.S. institutions in S&E and health fields. The field percentages represent the largest three fields within the state.

Federal obligations for research and development, by agency and performer: Arizona, FY 2003 (Thousands of dollars)

	Performer							
		Federal		Industrial	Universities	Other	State and local	
Agency	Total	intramural	All FFRDCs	firms	and colleges	nonprofits	government	Rank
All agencies	1,856,783	291,321	57,230	1,231,254	251,192	19,196	6,590	16
Department of Agriculture	30,318	19,945	0	100	10,240	33	0	24
Department of Commerce	2,911	552	0	1,240	1,119	0	0	32
Department of Defense	1,429,719	223,971	0	1,184,092	18,448	213	2,995	10
Department of Energy	6,291	0	0	0	6,291	0	0	38
Department of Health and Human Services	184,004	33,027	0	9,617	126,019	14,707	634	27
Department of the Interior	14,194	10,207	0	1,176	2,532	24	255	9
Department of Transportation	4,875	0	0	1,567	881	40	2,387	26
Environmental Protection Agency	173	0	0	0	0	0	173	49
National Aeronautics and Space Administration	60,060	3,619	0	31,322	21,658	3,315	146	12
National Science Foundation	124,238	0	57,230	2,140	64,004	864	0	8
Rank	16	19	12	9	26	29	19	na

FFRDC = federally funded research and development center.

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.

na = not applicable.