Science and engineering profile: Ohio

| Characteristic | State | U.S. | Rank | Characteristic | State | U.S. | Rank |
|--|--------|-----------|------|--|-------|---------|------|
| Doctoral scientists, 2001 | 18,580 | 542,940 | 9 | Total R&D performance, 2002 (millions of dollars) | 8,310 | 255,707 | 11 |
| Doctoral engineers, 2001 | 4,780 | 112,760 | 5 | Industry R&D, 2002 (millions of dollars) | 6,230 | 182,403 | 10 |
| S&E doctorates awarded, 2002 | 987 | 24,558 | 7 | Academic R&D, 2002 (millions of dollars) | 1,117 | 36,314 | 10 |
| engineering (percent) | 27 | 21 | na | na life sciences (percent) | | 59 | na |
| life sciences (percent) | 26 | 27 | na | engineering (percent) | 22 | 15 | na |
| physical sciences (percent) | 16 | 13 | na | physical sciences (percent) | 7 | 8 | na |
| S&E postdoctorates, 2002 | | | | Public higher education current-fund | | | |
| in doctorate-granting institutions | 1,090 | 45,171 | 13 | expenditures, 2001 (millions of dollars) | 6,434 | 170,024 | 6 |
| S&E graduate students, 2002 | | | | Number of SBIR awards, 1999-2002 | 733 | 19,383 | 8 |
| in doctorate-granting institutions | 20,202 | 482,211 | 8 | Utility patents issued to state residents, 2002 | 3,329 | 86,971 | 9 |
| Population, 2003 (thousands) | 11,436 | 294,688 | 7 | Gross state product, 2001 (billions of dollars) | 374 | 10,206 | 7 |
| Civilian labor force, 2003 (thousands) | 5,915 | 147,569 | 7 | agriculture (percent) | 1 | 1 | na |
| | | | | manufacturing, mining, construction (percent) | 26 | 20 | na |
| Personal income per capita, 2003 (dollars) | 29,944 | 31,632 | 25 | transportation, communication, utilities (percent) | 7 | 8 | na |
| | | | | wholesale and retail trade (percent) | 17 | 16 | na |
| Federal spending | | | | finance, insurance, real estate (percent) | 18 | 20 | na |
| Total expenditures, 2002 (millions of dollars) | 65,976 | 1,896,317 | 8 | services (percent) | 20 | 22 | na |
| R&D obligations, 2002 (millions of dollars) | 2,103 | 83,764 | 12 | government (percent) | 11 | 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: Ohio, 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 | 2,103,409 | 742,602 | 0 | 568,354 | 564,308 | 219,915 | 8,230 | 12 | |
| Department of Agriculture | 25,527 | 9,669 | 0 | 0 | 14,981 | 857 | 20 | 28 | |
| Department of Commerce | 8,044 | 251 | 0 | 2,506 | 527 | 4,256 | 504 | 21 | |
| Department of Defense | 902,591 | 395,865 | 0 | 419,872 | 55,019 | 31,835 | 0 | 14 | |
| Department of Energy | 14,666 | 0 | 0 | 2,862 | 11,098 | 706 | 0 | 27 | |
| Department of Health and Human Services | 702,024 | 129,786 | 0 | 21,097 | 399,559 | 149,008 | 2,574 | 10 | |
| Department of the Interior | 3,709 | 2,821 | 0 | 6 | 427 | 213 | 242 | 34 | |
| Department of Transportation | 31,593 | 14,100 | 0 | 10,278 | 846 | 1,992 | 4,377 | 5 | |
| Environmental Protection Agency | 55,910 | 36,093 | 0 | 13,822 | 1,314 | 4,431 | 250 | 2 | |
| National Aeronautics and Space Administration | 296,694 | 154,010 | 0 | 93,606 | 22,655 | 26,160 | 263 | 7 | |
| National Science Foundation | 62,651 | 7 | 0 | 4,305 | 57,882 | 457 | 0 | 19 | |
| Rank | 12 | 7 | na | 17 | 11 | 8 | 16 | 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.