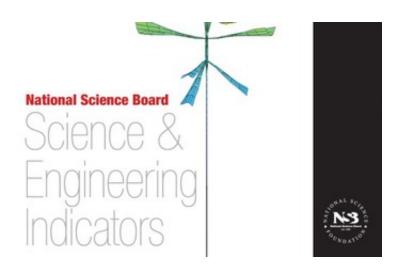


New data show how states are doing in science

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The state data tool is a supplement to the 2014 Science and Engineering Indicators report. Credit: National Science Board

The newly updated, online, interactive state data tool allows policymakers, educators and other users to discern trends in education, science and research in each of the 50 states. This free resource supplements the state data in the 2014 Science and Engineering Indicators report, the premier source of information and analysis of the nation's position in science and engineering education and research. The biennial report is published by the National Science Board, the policy making body of the National Science Foundation (NSF).

The tool features 59 state indicators of state performance in education,



the scientific workforce, research and development (R&D) investments and activities, and high-tech business. It offers tables, charts and graphs, and permits users to view and customize data in multiple ways, such as making comparisons with other states, looking at 20 year trends, and translating financial information from current into constant dollars.

"R&D and human capital are major drivers of innovation and the economy," said Dan Arvizu, chairman of the National Science Board. "This is a valuable resource for those who wish to see how their state is doing. Whether it's educational achievement, your state's workforce, or R&D investments, it's an excellent tool to see how your state stacks up. And it will inform debates over state policies and programs."

Arvizu said the tool is an especially valuable resource for educators and state <u>policymakers</u> in understanding their state's educational landscape and for corporations and economic development officials interested in a state's workforce or technology-based business potential.

The state data tool includes indicators on:

- Elementary and secondary education achievement and expenditures.
- Higher education degrees, spending, and costs.
- Workforce higher education credentials and science and engineering workers.
- Financial R&D inputs levels of R&D activities and public support.
- R&D outputs new doctorates and research activities.
- Science and technology in the economy business activities and capital investments.

State policymakers and other users can consider such factors as how their state compares with neighboring or similar states, as well as with



the national average. They can see whether their state is following national trends, such as conducting more R&D over the last decade, or moving in the opposite direction.

For most indicators, the states vary widely. For example:

- The number of science and engineering bachelor's degrees awarded in a state ranges from 9 (Alaska) to 39 (Vermont) per 1,000 individuals age 18-24.
- The share of a state's workforce employed in science and engineering occupations ranged from 2.2 percent (Mississippi) to 7.6 percent (Virginia).
- The amount of R&D performed, as a share of a state's gross domestic product (GDP), ranged from 0.3 percent (Wyoming) to 8 percent (New Mexico).

"These data can shed new light on policy discussions," Arvizu said. "If you're lagging behind neighboring <u>states</u> or the rest of the nation, it may inform your assessment of the quality of your educational system or workforce, and what you may need to do to enhance your economic position and competitiveness."

Researchers can also conduct their own analyses of the data by, for example, studying possible interrelationships among different indicators, such as <u>education</u>, R&D, and economic activity.

The <u>state data tool</u> is produced by NSF's National Center for Science and Engineering Statistics. It supplements the latest edition of <u>Science and Engineering Indicators</u>, a 600-page volume that is the most comprehensive federal information and analysis of the nation's position in <u>science</u> and <u>engineering education</u> and <u>research</u>. The Indicators report was released in February 2014.



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