



National Science Board

Science and Engineering Indicators

2018



MONTANA

According to the latest data released by the National Science Board in its 2018 Science and Engineering Indicators report, the United States leads in a number of science and engineering (S&E) measures. For example, the U.S. invests the most in research and development, attracts the most venture capital, awards the most advanced degrees, and provides the most business, financial, and information services.

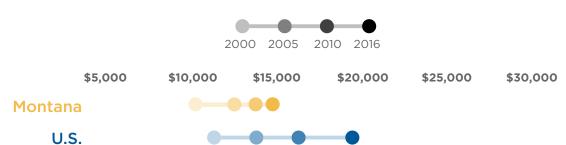
A state's S&E performance helps fuel its and the nation's economy. Four benchmarks of Montana's S&E performance are highlighted here: the cost of public higher education, the size of the STEM workforce, investment in research and development, and venture capital funding.

Rising Cost of a Bachelor's Degree

A bachelor's degree is one of several entry points to higher paying jobs associated with science, engineering, and many technical occupations.

Nationally, 31% of the total U.S. workforce has a bachelor's degree or higher. In contrast, 75% of workers in S&E occupations have a bachelor's degree or higher.

Average annual in-state cost of a public 4-year institution (Adjusted for inflation to 2016 dollars)

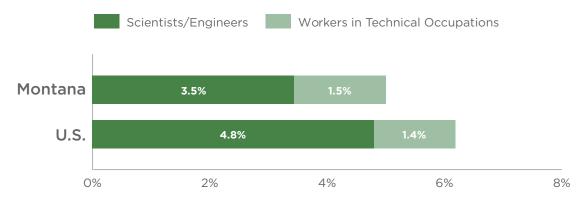


Source: National Center for Education Statistics, Digest of Education Statistics

STEM Workforce: People Working in STEM Occupations

Nationally, about 1 in 16 workers (6.2% or 8.7 million) have occupations as scientists or engineers (4.8%), or technical workers (1.4%). The STEM workforce is larger still when defined as either those who hold a bachelor's degree or higher in S&E (23.2 million) or those who use technical expertise in S&E in their jobs (19.4 million).





Source: U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics Survey

Real Change in Research & Development Performed

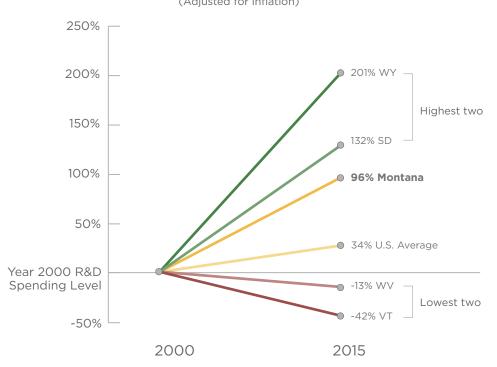
Research and development (R&D) spending is a driver of innovation. Investing in science and technology today has ripple-effect benefits throughout the economy over the long term.

Annual state performance in R&D varies considerably, from \$253 million (WY) to \$125 billion (CA). Montana is one of 12 states that performs less than \$1 billion per year in R&D. In this figure, Montana's percent change in R&D spending is compared to the two highest and the two lowest states within this group.

Total 2015 Research and Development Performed

MT \$459M **U.S.** \$495.1B

Percent change in R&D spending: 2000 to 2015 (Adjusted for inflation)



Source: NSF, National Center for Science and Engineering Statistics, National Patterns of R&D Resources

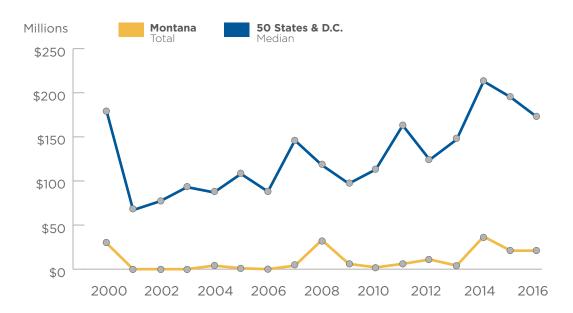
Venture Capital Investment

Venture capital investment supports U.S. businesses that take on the risk of developing and commercializing cutting-edge, emerging technologies. States with high values are successful at attracting venture capital to fuel new kinds of business, and ultimately, expand economic growth.

Total 2016 Venture Capital Investment

MT \$21M **U.S.** \$70.3B

Total annual venture capital investment: 2000 to 2016 (Adjusted for inflation to 2016 dollars)



Source: Pitchbook Venture Capital and Private Equity Database