

**OVERVIEW:** Research and development is a critical contributor to innovation and long-term economic growth, and the United States has a long history of being a global leader. According to a new collaborative report from The Council of State Governments and Elsevier—"America's Knowledge Economy: A State-by-State Review"—the United States published more than 536,000 publications in 2013. Predictably, states with larger populations also tended to publish more. For example, California and New York were the top two producers from 2004 to 2013. From 2004 to 2013, a big chunk of United States publications—more than one-quarter—focused on the field of medicine. Over the same period, Massachusetts and California produced the most impactful research—also called field-weighted citation impact—among all states. This brief offers a state-specific snapshot of data pulled from the report. To read the full report, visit [www.csg.org/knowledgeeconomy](http://www.csg.org/knowledgeeconomy).

## 2.99 PUBLICATIONS

PER 1,000 RESIDENTS, 2013

U.S. Average: 1.70 publications per 1,000 residents

## FIELD-WEIGHTED CITATION IMPACT, 2004–13

**1.75** Cited 75% more than  
global average

### COMPARATIVE ADVANTAGE IN RESEARCH

## BUSINESS, MANAGEMENT, & ACCOUNTING

Ranked 5th among all states in terms of research  
impact and cited **25% more** than the U.S. average.



## MARYLAND

### TOP COLLABORATING STATE, 2004–13

23,005 collaborations (6.9% of all of Pennsylvania's publications)

## 4<sup>TH</sup> AMONG ALL STATES

## \$31.6 BILLION

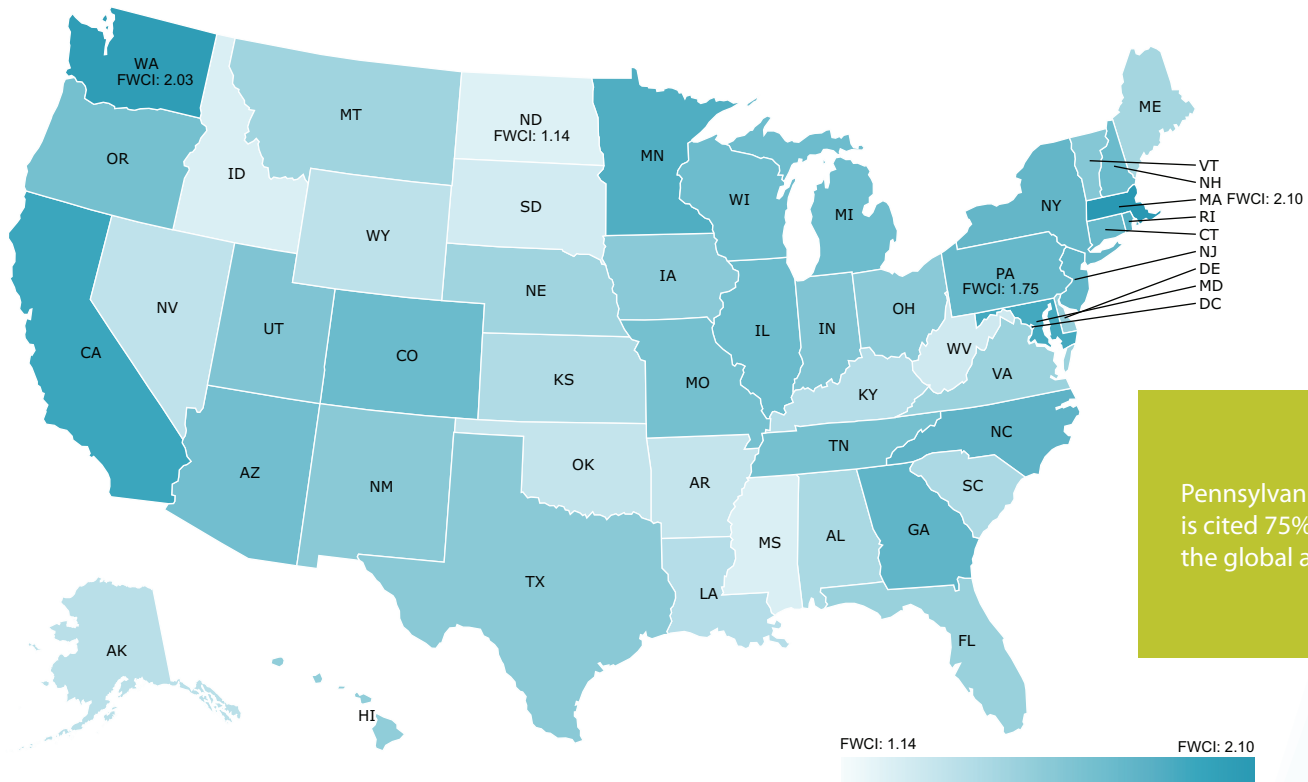
### RESEARCH STRENGTH IN AGRICULTURAL & BIOLOGICAL SCIENCES

### RESEARCH STRENGTH IN EARTH & PLANETARY SCIENCE

## 8<sup>TH</sup> AMONG ALL STATES

in terms of relative impact of research and  
cited **22% more** than the U.S. average.

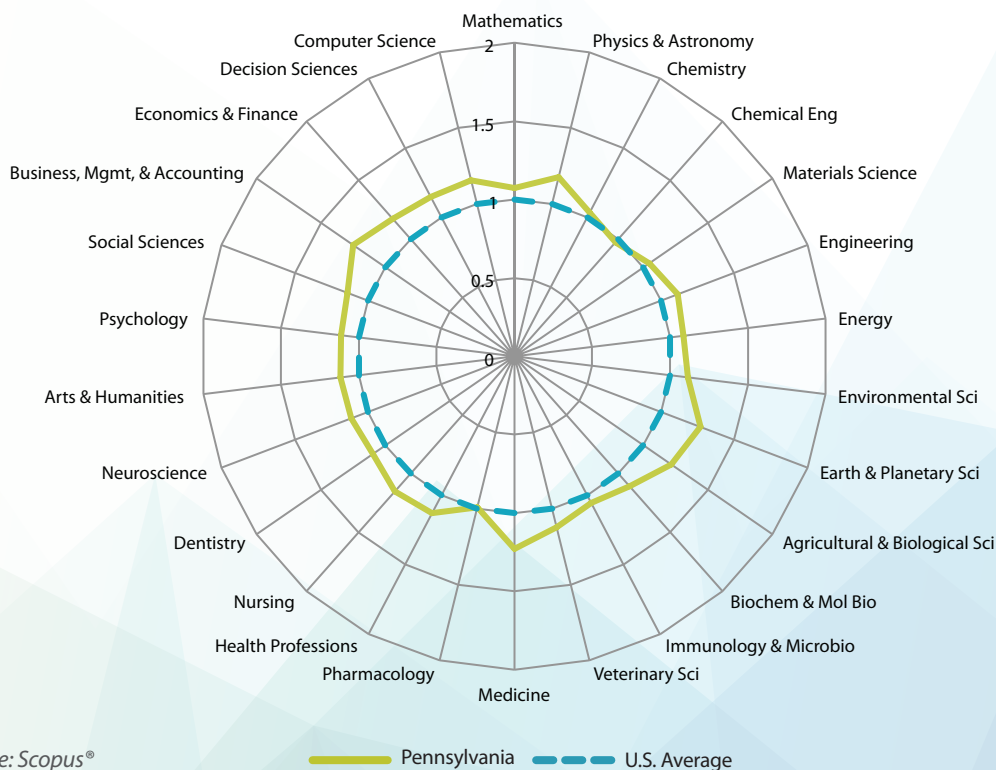
## Field-weighted citation impact (FWCI) for U.S. States (2004–13)



Pennsylvania's research is cited 75% more than the global average.

Source: Scopus®

## Impact Across Research Fields, 2004–13



The field-weighted citation impact of Pennsylvania's research is above the U.S. average in most areas.

Source: Scopus®