

**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).

**2.39 PUBLICATIONS**

**PER 1,000 RESIDENTS, 2013**

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

**FIELD-WEIGHTED CITATION  
IMPACT, 2004–13**

**1.94** Cited 94% more than  
global average

**MOST IMPACTFUL RESEARCH FIELD**

**COMPUTER SCIENCE**

**Ranked 2<sup>nd</sup> among all states in terms of research impact**  
and cited 33% more than the U.S. average.



**MASSACHUSETTS**

**TOP COLLABORATING  
STATE, 2004–13**

53,148 collaborations (6.4% of all of California's publications)

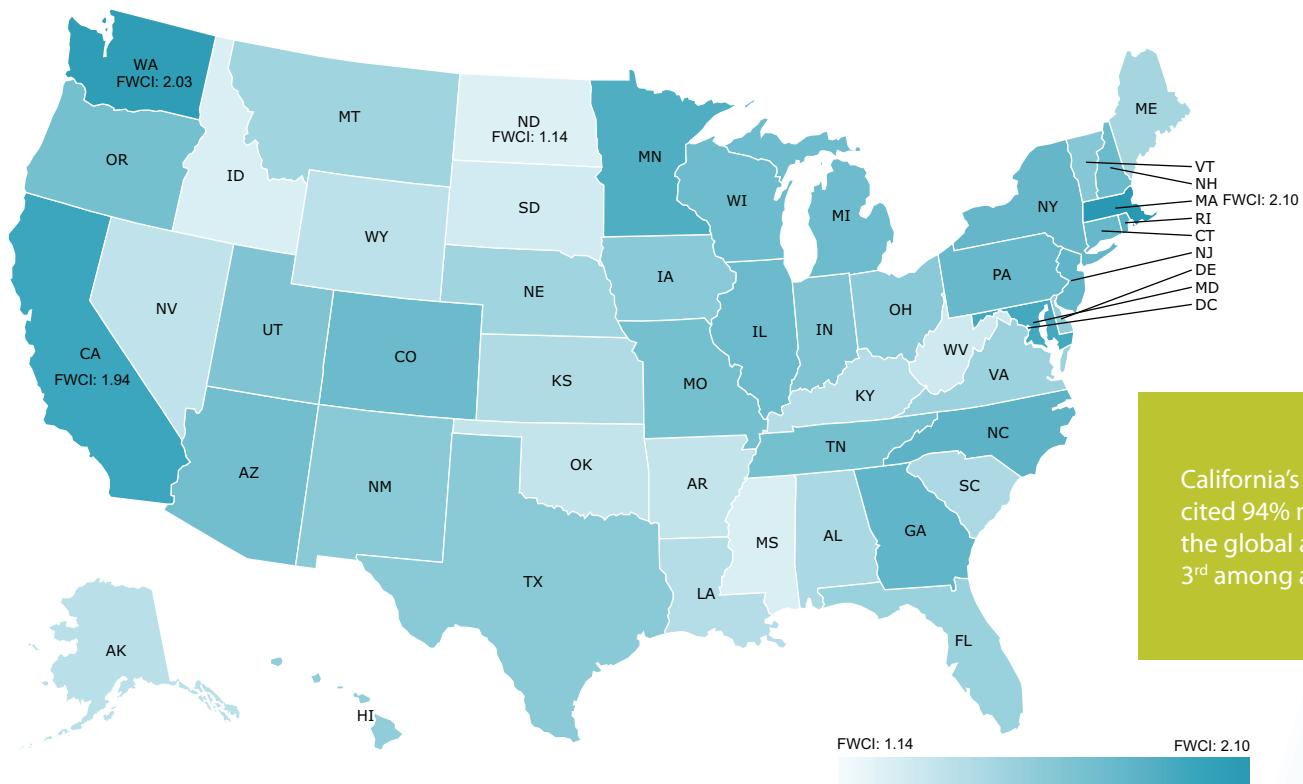
**CRITICAL MASS OF RESEARCH AND INNOVATION, 2004–13**

**California researchers and inventors account for 17% of all  
U.S. research publications and 25.1% of all U.S. patents granted.**

**RESEARCH STRENGTHS IN PHYSICAL SCIENCES AND ENGINEERING, 2004–13**

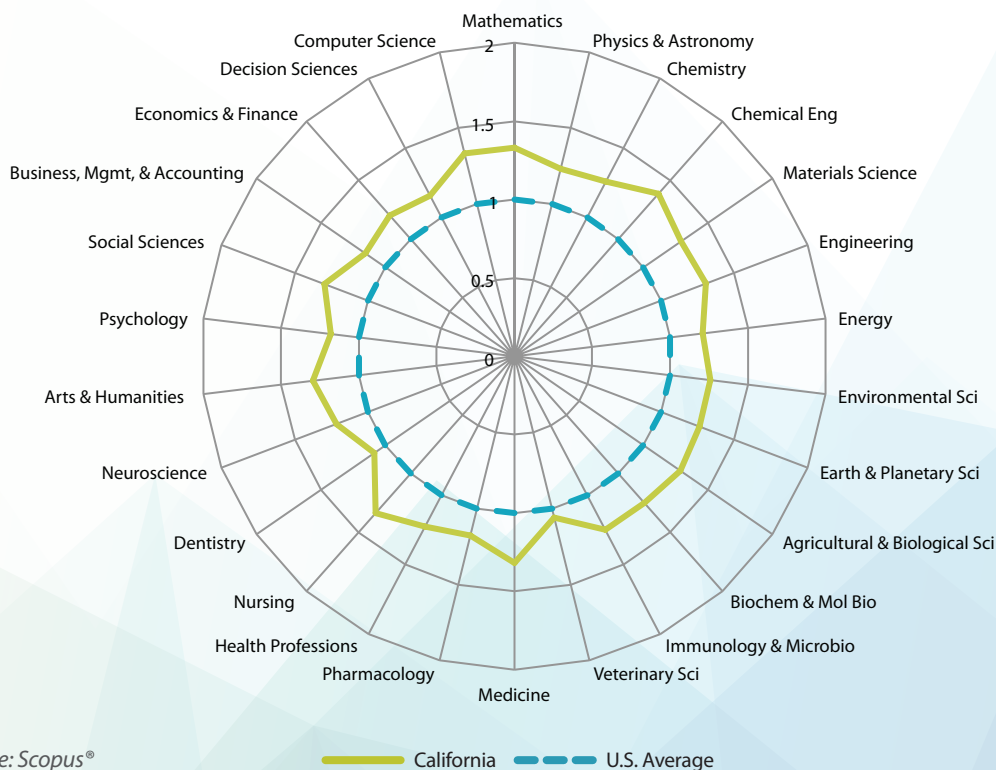
**1<sup>st</sup> among all states in relative impact of research in chemistry, materials science,  
and engineering 2<sup>nd</sup> among all states in relative impact of research in mathematics  
and chemical engineering.**

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



Source: Scopus®

## Impact Across Research Fields, 2004–13



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

Source: Scopus®