



MEASURING OUR PROGRESS...AND MAPPING OUR COMPETITION



Washington's peers: 10 contenders in today's innovation economy

BENCHMARKING

- Massachusetts
- Washington
- Maryland
- New Jersey
- Connecticut
- Virginia
- California
- New York
- Colorado
- Utah

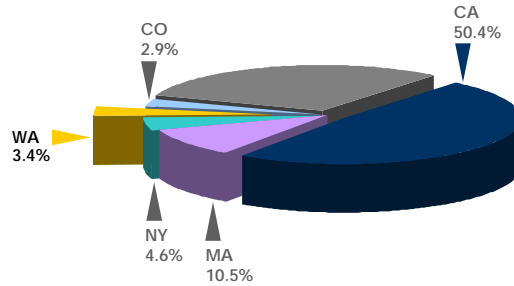




ANY WAY YOU SLICE IT, FOR OUR SIZE, WASHINGTON IS THE APPLE OF INVESTORS' EYES



Washington ranks **4th** among our peer states in share of total U.S. venture capital and share of VC investment in biotech.



STATE SHARE OF TOTAL U.S. VENTURE CAPITAL, 2008


In venture capital invested per \$1,000 state GDP, we are **3rd in the nation.**



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Percentage of U.S. total venture capital and percentage of U.S. biotech venture capital, 2008. SOURCE: PricewaterhouseCoopers/National Venture Capital Association MoneyTree(tm) Report.

Venture capital invested per \$1,000 state GDP, 2006. SOURCES: PricewaterhouseCoopers, Venture Economics, and National Venture Capital Association, MoneyTree Survey, special tabulations; Bureau of Economic Analysis, Gross Domestic Product data. Reported by: NSF, Science & Engineering Indicators 2008.




WASHINGTON'S GOT TALENT: WE ARE A LEADER IN SCIENCE & ENGINEERING EMPLOYMENT

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The Nation's S&E Top 5
(Workforce intensity, all S&E occupations)

1. Virginia
2. Massachusetts
3. Maryland
- 4. Washington**
5. Colorado



LIFE/PHYSICAL SCIENTISTS
 PEERS: 3rd
 NATION: 7th

COMPUTER SPECIALISTS
 PEERS: 6th
 NATION: 8th



ENGINEERS
 PEERS: 2nd
 NATION: 3rd

We ranked 9th in the nation in intensity of engineers in our workforce in 2003.
By 2006, we were 3rd.

Individuals in science and engineering occupations as a share of total workforce (intensity per 100,000 workers), 2006.
 SOURCES: Bureau of Labor Statistics, Occupational Employment and Wage Estimates; and Local Area Unemployment Statistics. Reported by: NSF, Science & Engineering Indicators 2008.



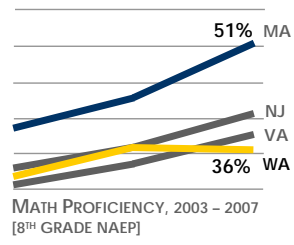
INNOVATION IS IN OUR NATURE, BUT WILL OUR KIDS THRIVE IN A COMPETITIVE ENVIRONMENT?



Our top peers are getting growing numbers of their students ready for high school math.

We are not.

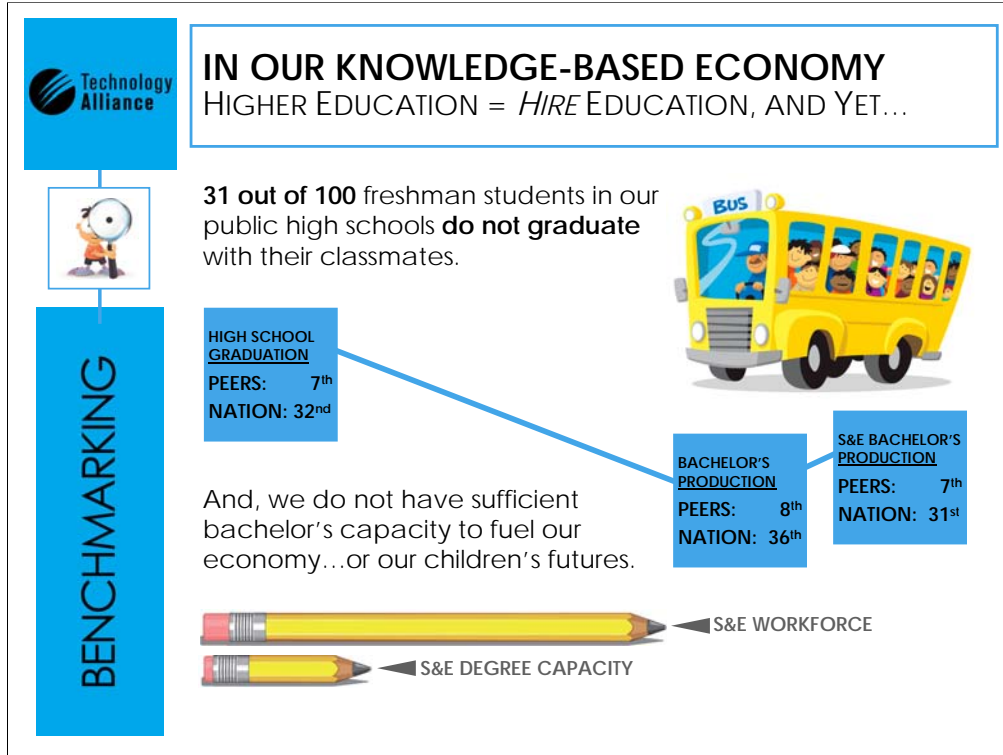
BENCHMARKING



Just 34% of our 8th grade students are proficient in reading.



8th grade reading assessment, 2007, and mathematics assessment, 2003-2007. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).



Public High school graduation rates, 2006. Source: Tom Mortenson, Postsecondary Opportunity. Reported by: National Center for Higher Education Management Systems (NCEMS).

Bachelor's degrees granted as a percentage of the 18-24 year old population, 2005. SOURCES: National Center for Education Statistics, Integrated Postsecondary Education Data System (various years); Census Bureau, 2000 Decennial Census; and Population Estimates Program (various years). Reported by: NSF Science and Engineering Indicators 2008.

Bachelor's degrees granted in natural sciences and engineering as a percentage of the 18-24 year old population, 2005. SOURCES: National Center for Education Statistics, Integrated Postsecondary Education Data System (various years); Census Bureau, 2000 Decennial Census; and Population Estimates Program (various years). Reported by: NSF Science and Engineering Indicators 2008.



YES, SIZE DOES MATTER: GRADUATE EDUCATION + ACADEMIC RESEARCH = ECONOMIC DEVELOPMENT

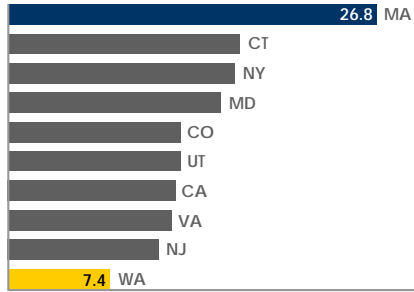


Strong graduate programs fuel university research and an entrepreneurial economy.

We rank last among our peers in size and strength of S&E graduate education.

S&E PhDs AWARDED
PEERS: 10th
NATION: 27th

BENCHMARKING



S&E GRADUATE PARTICIPATION RATE, 2005 [PER 1,000 AGE 25-34]

S&E GRADUATE PARTICIPATION
PEERS: 10th
NATION: 46th



Science and engineering PhD's awarded per 100,000 individuals 25-34 years old, 2005.

SOURCES: National Science Foundation, Division of Science Resources Statistics, Survey of Earned Doctorates and Survey of Doctorate Recipients. Reported by: NSF Science and Engineering Indicators 2008.

Science and engineering graduate students per 1,000 25-34 year olds, 2005.

SOURCES: National Science Foundation, Division of Science Resources Statistics, Survey of Graduate Students and Postdoctorates in Science and Engineering; and Census Bureau, Population Estimates Program (various years). Reported by: NSF Science and Engineering Indicators 2008.



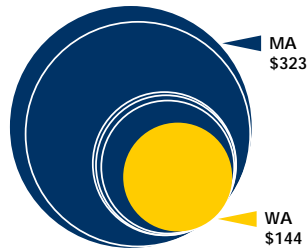
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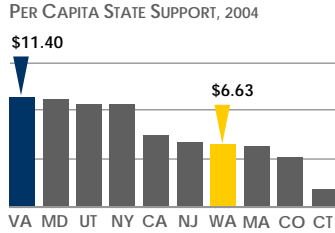
Relative to other top tech states, the size of Washington's academic research is small.

We must take good care of what we have.

BENCHMARKING



ACADEMIC RESEARCH PER CAPITA, 2005 [TOP 5 PEERS & WASHINGTON]



STATE SUPPORT
PEERS: 7th
NATION: 35th

ACADEMIC RESEARCH
PEERS: 8th
NATION: 25th

Academic expenditures on research and development, 2005. SOURCES: National Science Foundation, Division of Science Resources Statistics, Academic Research and Development Expenditures (various years). Reported by: NSF, Science & Engineering Indicators 2008.

Non-federal government funding for university and college research and development, 2004. SOURCES: National Science Foundation, Division of Science Resources Statistics, Survey of Industrial Research and Development (various years). Reported by: NSF, Science & Engineering Indicators 2008.

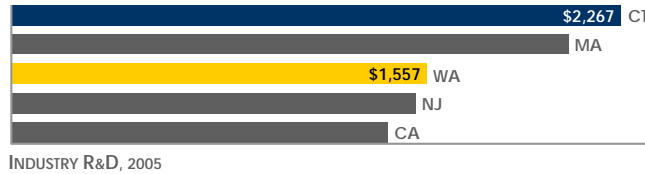
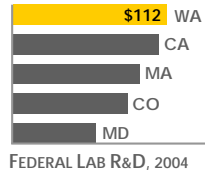


WASHINGTON'S SECRET SAUCE: OUR ROBUST FEDERAL, NON-PROFIT & PRIVATE SECTOR R&D



We are one of the **top 5 states in the nation** in non-academic research and development activity, on a per capita basis.

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Federally funded research development centers (FFRDC's) expenditures on research and development, 2004. SOURCES: National Science Foundation, Division of Science Resources Statistics, Survey of Industrial Research and Development (various years). Reported by: NSF, Science & Engineering Indicators 2008.

Non-profit expenditures on research and development, 2004. SOURCES: National Science Foundation, Division of Science Resources Statistics, Survey of Industrial Research and Development (various years). Reported by: NSF, Science & Engineering Indicators 2008.

Industry expenditures on research and development, 2005. SOURCES: National Science Foundation, Division of Science Resources Statistics, Survey of Industrial Research and Development (various years). Reported by: NSF, Science & Engineering Indicators 2008.



PUT THE PEDAL TO THE METAL: IT'S A RACE, AND WASHINGTON SHOULD BE IN IT TO WIN IT



BENCHMARKING



- ▶ High-impact **bachelor's capacity**
- ▶ Science and engineering **graduate education**



- ▶ **K-12** achievement & alignment
- ▶ Support for **academic research**



- ▶ Talented **workforce**
- ▶ Active **investment** community
- ▶ Strong **federal & private R&D**

