The Impact of American University Research Spending

America's leading research universities generate groundbreaking scientific knowledge. Their research also plays a substantial and immediate role in the U.S. economy. The Institute for Research on Innovation and Science (IRIS), using detailed spending data from 400,000 funded research projects at 33 universities representing more than 41% of all university research and development spending in the country, estimates that in fiscal years 2018-2019, **all U.S. universities**:

- Spent nearly \$14 billion of direct cost research dollars on goods and services in all 435 congressional districts to support on-campus research activities
- Of that amount, approximately \$3.7 billion was spent with businesses in the same state as
 the university that conducted the research
- More than \$2.5 billion was spent in purchases from manufacturing firms, a figure equivalent to \$203 per employee (based on BLS estimates of 2018 employment)

This map shows the nationwide distribution, by congressional district, of research purchases from 33 of America's leading research universities (represented by red dots) that are members of the Institute for Research on Innovation and Science (IRIS). IRIS members account for more than 41% of total U.S. academic research and development spending.



The U.S. Research University Workforce

Using IRIS data, we estimate that **all American universities** used research funds to pay **more than 560,000 people** on campuses across the country:

- More than 300,000 (53%) are students or trainees
- Fewer than 1 in 5 (17%) are faculty members

University research pays more people across the country than (according to BLS 2018 statistics):

- Aerospace manufacturing (509,400)
- Utilities (554,600)
- Airlines (501,300)
- Motion Pictures (436,300)



In 44 states

a research university is one of the 5 largest employers

In 24 states

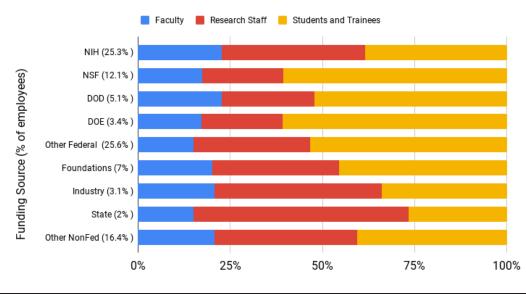
a research university is the largest employer

In **30** states

multiple research universities are among the 10 largest employers

Source: Infogroup, IRIS research

Structure of the American Academic Research Workforce



This chart shows the percentages of students and trainees, professional staff, and faculty members paid by research funding from a variety of sources.

Source: IRIS

Data compiled by the Institute for Research on Innovation and Science



(IRIS), a national consortium of research universities that produces reports and data to help understand, explain and improve higher education and research.

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