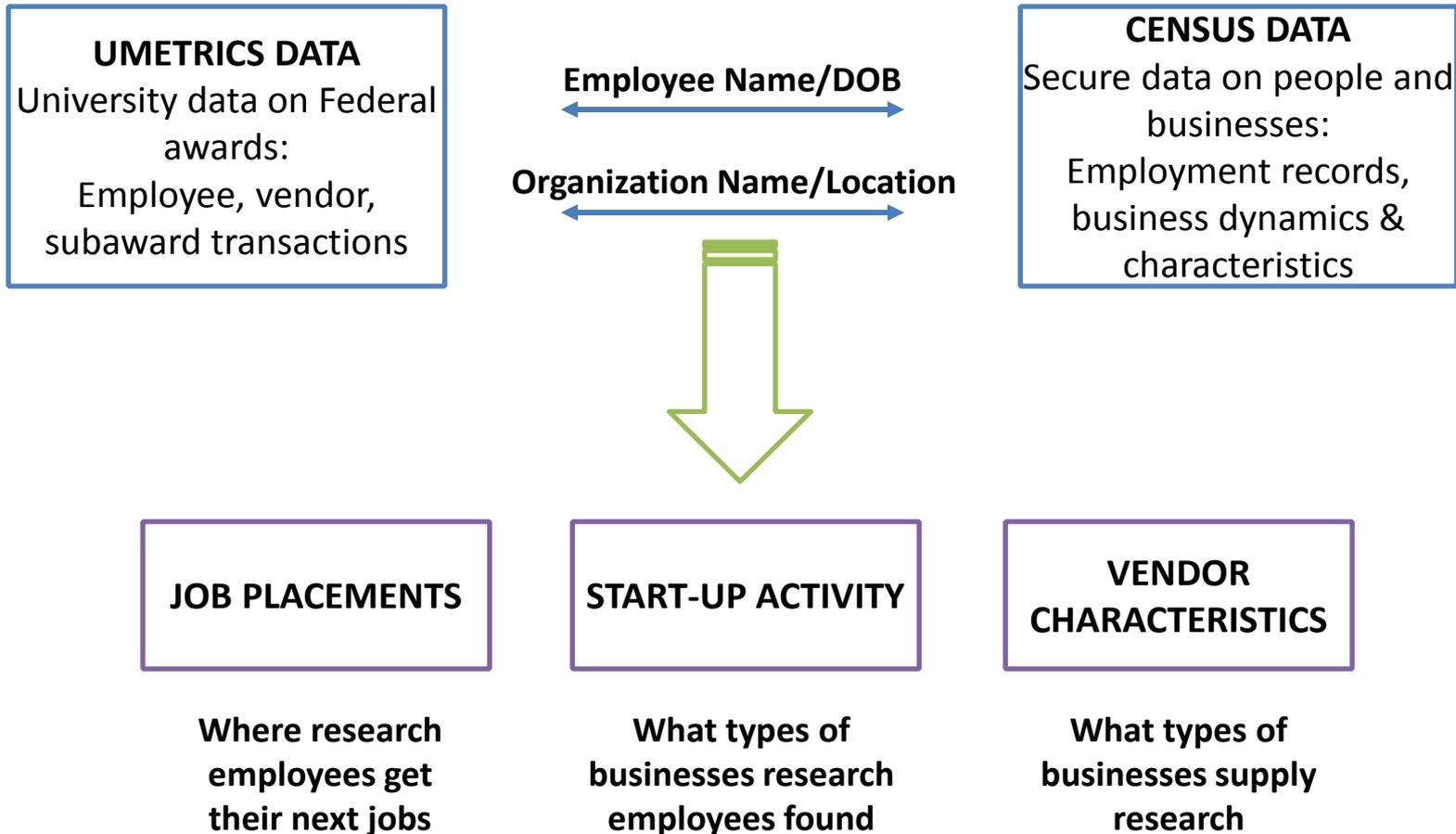


IMI – Value added of data

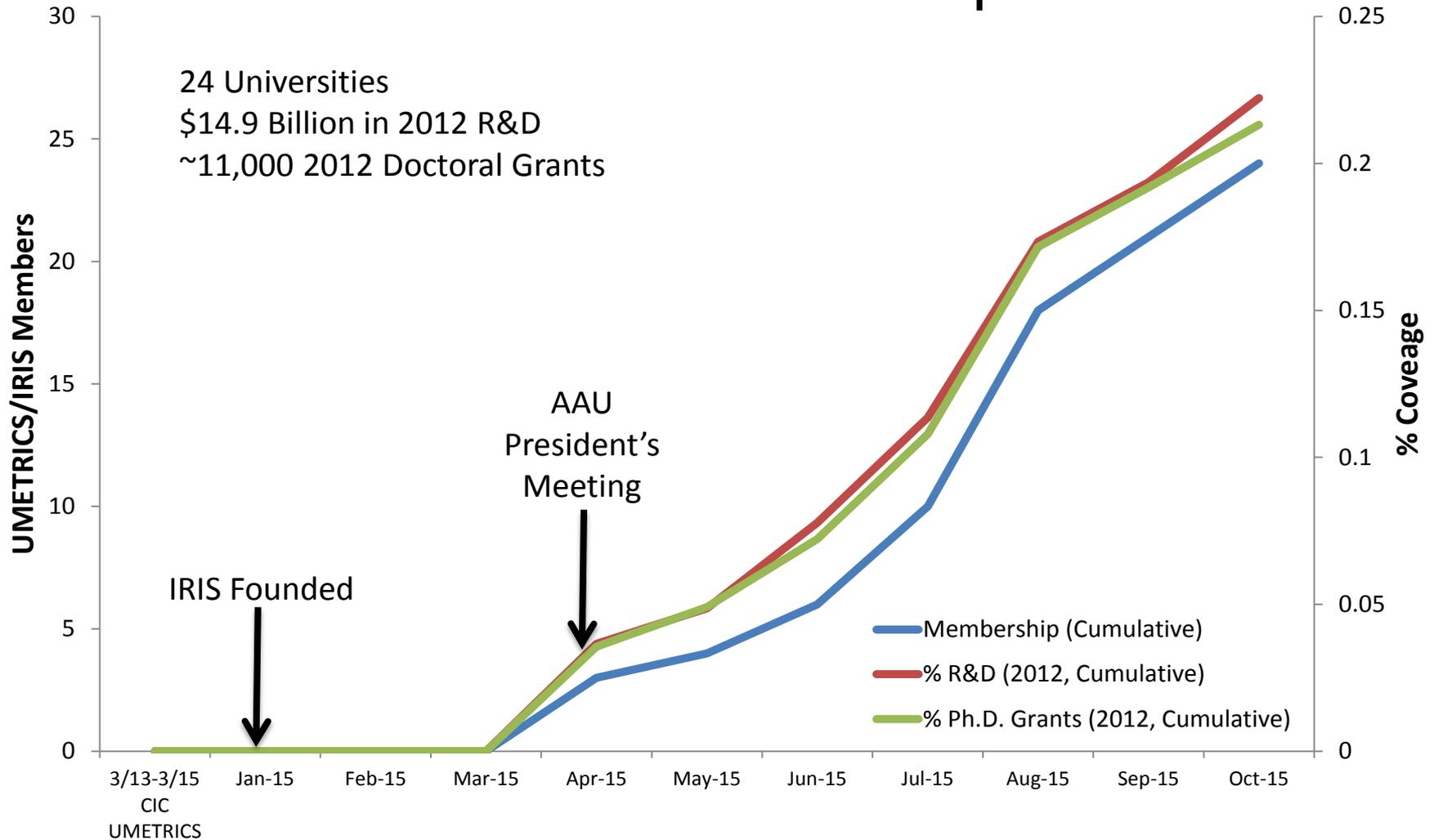
- First large scale link between investments in R&D and innovation
 - Links research inputs (purchases) and outputs (people) with business activity
- Builds on
 - New university based initiative drawing on HR and finance records of universities
 - 30 year investment at Census Bureau in measuring business dynamics
 - (Potentially) New available data on startups

Linking R&D and Innovation



Analyze by: Occupational category | Funding agency | Research area | Years since leaving university

UMETRICS/IRIS Membership Growth



59 more in stages of joining; Goal is **150** in 3-5 years; Micro data on 93% of Fed R&D Exp; Links to scientific, economic, and social outcomes; A permanent, independent resource

Developing Small Business Indicators

- Innovation is creation, transmission and adoption of ideas
- Measurement
 - People employed doing research
 - Placement of individuals (Oppenheimer – the best way to send knowledge is to wrap it up in a human being)
 - Start up of businesses
 - Purchases of research equipment and services
 - Consumer led innovation
 - Development of comparative advantage
 - Economies of scale
- Focus here on small and young businesses

Inputs – Purchases from Small & Young Businesses

Note: Data are simulated and may not represent actual values.

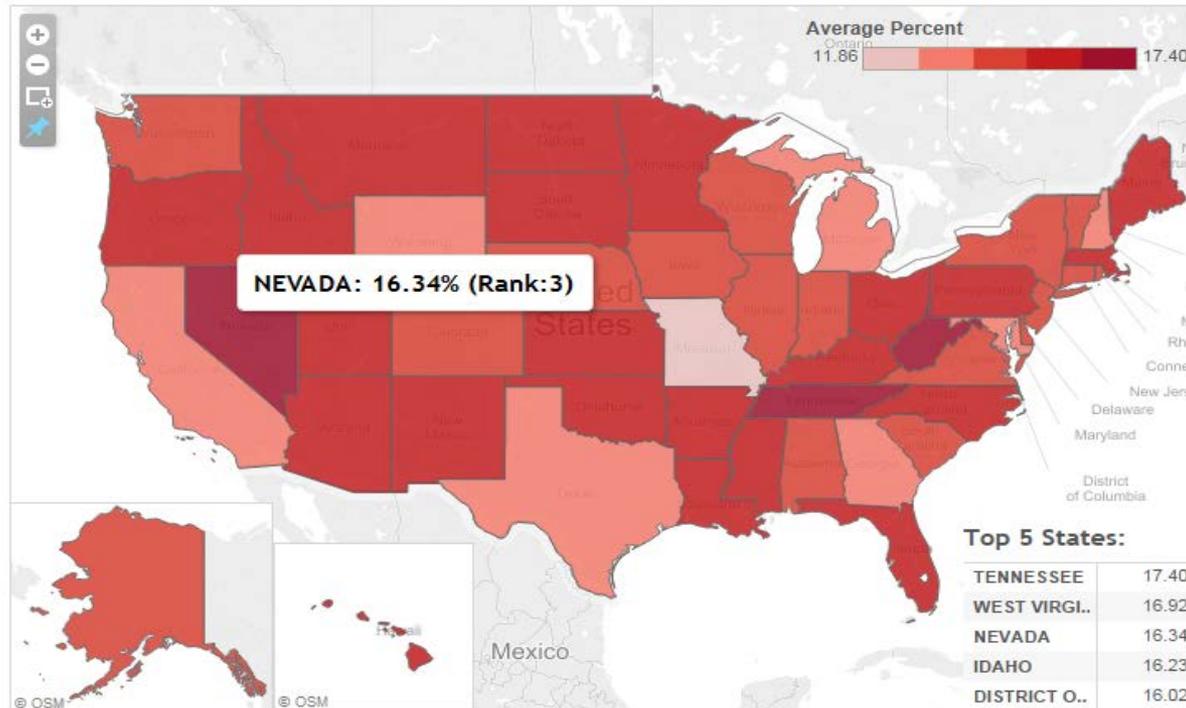
Select the Type of Business:

- Small Businesses
- Young Businesses

Chose Analysis:

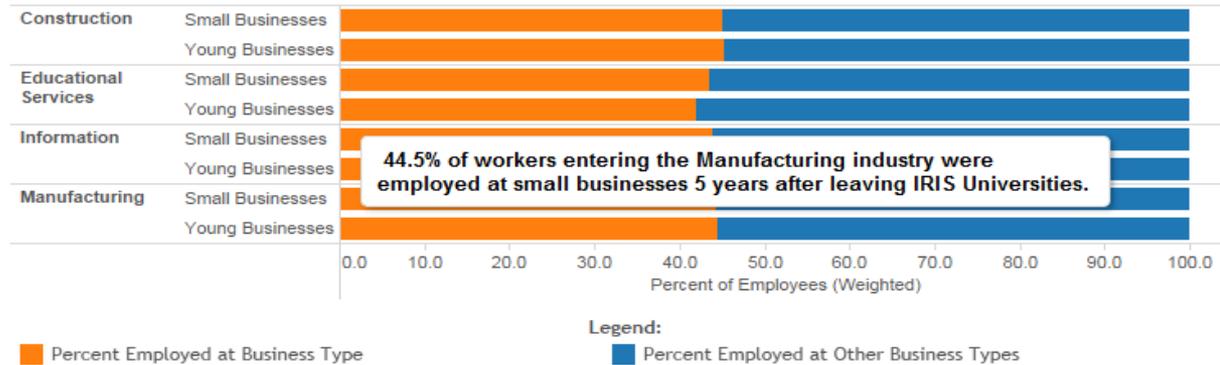
- Percentage of Dollars
- Percentage of Vendors

Between 2010 and 2015 TENNESSEE had the highest proportion of vendors in federal or non-federal grants who were small businesses, with 17.40% of establishments in that state being associated with small businesses.



Outputs: People at Small & Young Businesses

5 years since leaving IRIS universities, employees funded by federal or non-federal grants were more likely to be employed at Small Businesses compared to young businesses, with 44.19% of these employees working at these firms.



Employees funded by federal or non-federal grants were most likely to work at Young Businesses 5 years after leaving the university, with 43.90% of these employees working at these firms.

