

# Measuring the Value Chain of Innovation with the Census Bureau's Innovation Measurement Initiative

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# Innovation Measurement Initiative

- Collaborative research project between Census, University of Michigan, Ohio State, University of Chicago and NYU.
- Integrate university data on funded research grants with Census Bureau data assets
- Produce statistics consistent with the Bureau's economic and social measurement mission and directly relevant to the data provider.

# IMI Background

- Census Goals:
  - Improve measurement of small but important sector of the economy
  - Address data gaps in the measurement of innovation and its relation to economic growth
  - Learn how to collaborate with data providers to deliver data products they value
  - Prototype project that can be scaled and extended to other sectors of the economy

# IMI Background

- Innovative Aspects:
  - Collaboration with the University of Michigan’s Institute on Research in Innovation and Science (IRIS)
  - Experiment with utilizing “fat pipe” of data for a sector of the economy
    - The University data is complementary to business and household data at Census

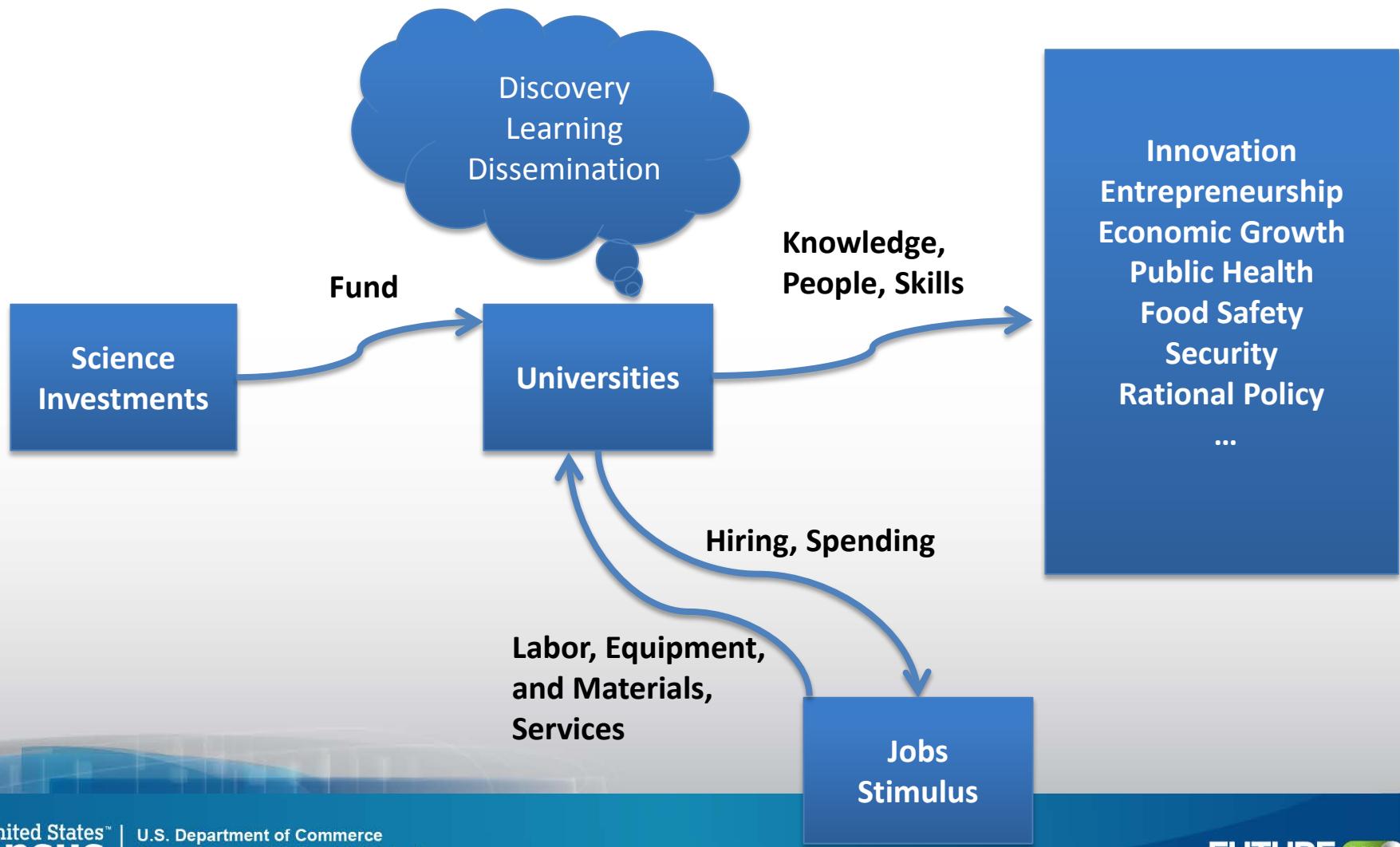
# Mashing up University Admin data and Census Bureau Data to Create New Statistics and Facilitate Research

- University data:
  - Sourced from University of Michigan's IRIS-UMETRICS
  - Covers sponsored research projects
  - Data on individuals paid on grants
    - Faculty, staff, postdocs, grad students and undergrads
  - Contracts and Transactions to obtain:
    - Equipment, supplies and services

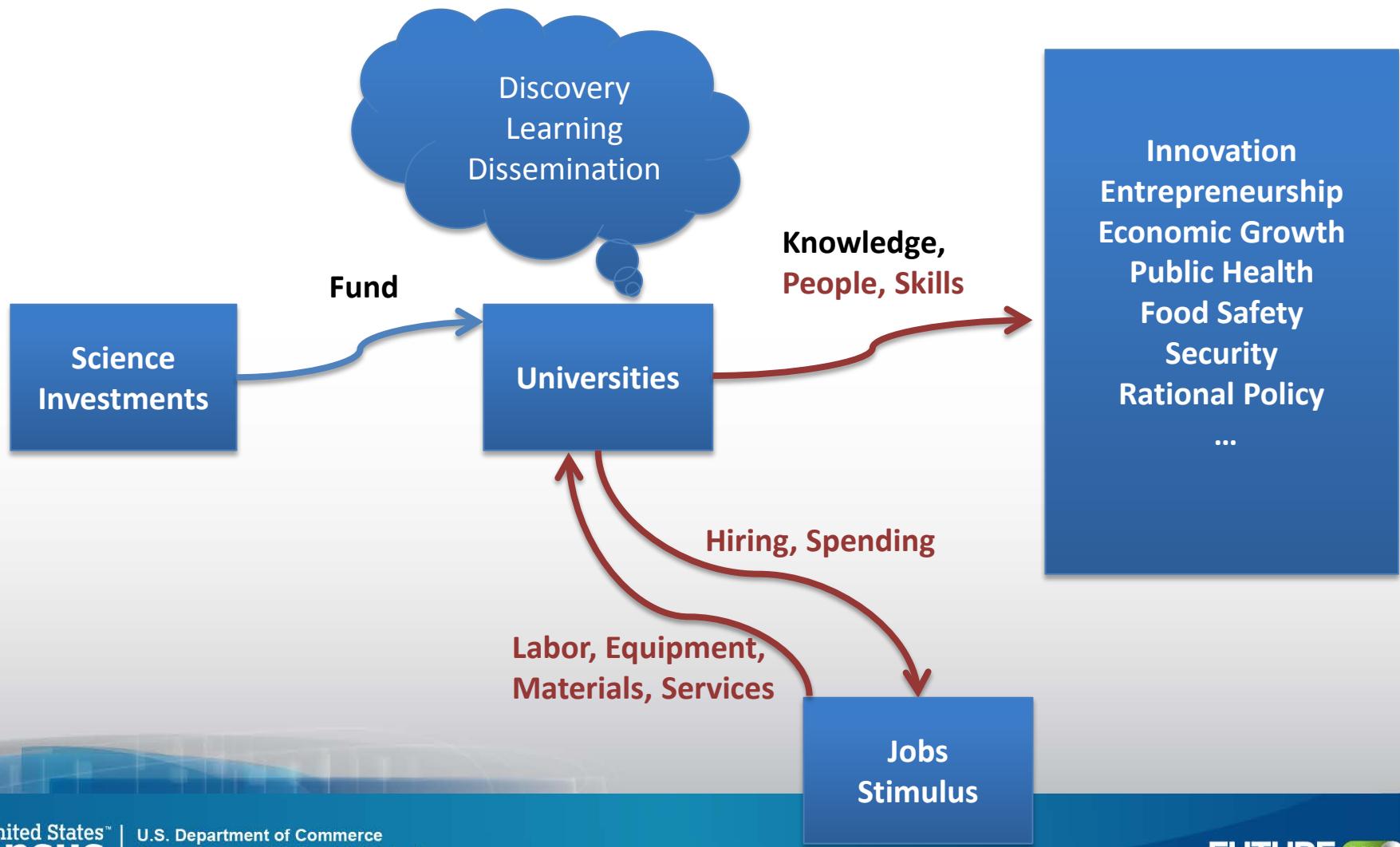
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- Key Census Datasets
  - Business Register – Employer and Nonemployer
    - Used for Matching business records
  - PVS System
    - Used for Matching person records
  - LBD
    - Data underlying the Business Dynamics Statistics
  - LEHD
    - Data underlying the Quarterly Workforce Indicators

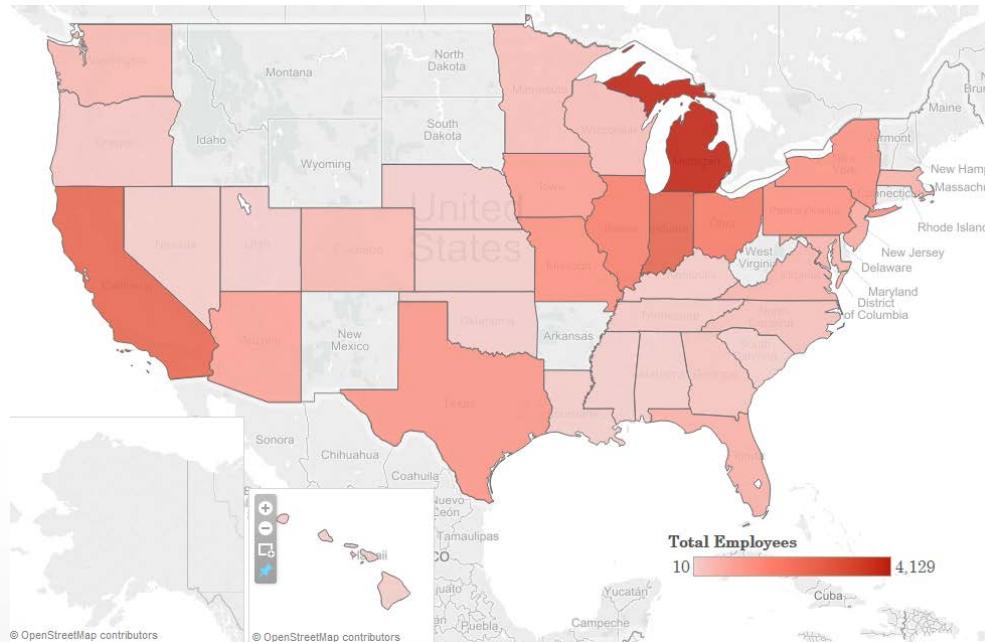
# Framework



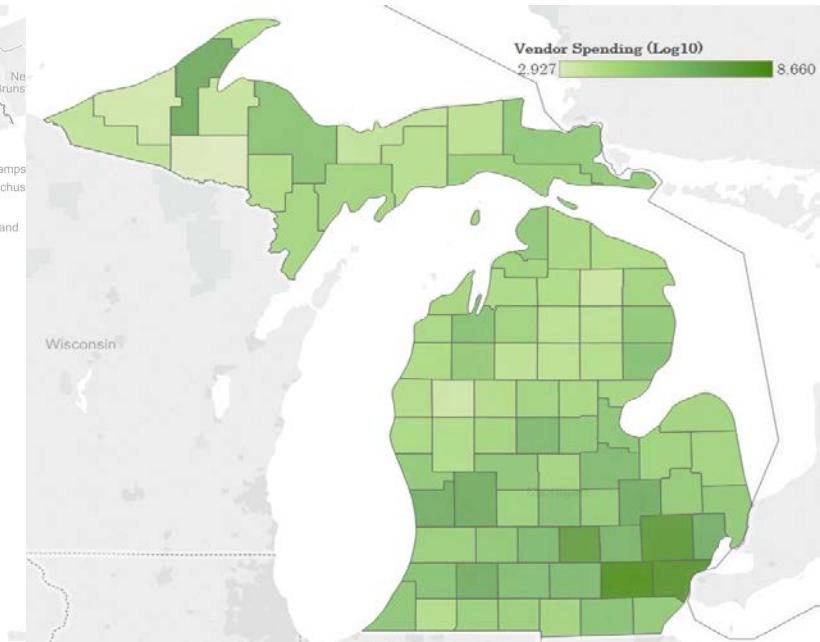
# Framework



# Example for universities in Michigan



Flow of human capital  
into the economy



Locations of businesses  
providing purchased  
capital, materials, supplies  
and services