Federal Statistical Research Data Centers (FSRDC)

Briefing for Federal Economic Statistics Advisory
Committee
December 9, 2016
Barbara Downs and Lucia Foster
Center for Economic Studies



What is an RDC?

- A research data center (RDC) is a secure access system that enables qualified researchers on approved projects to conduct statistical research using microlevel data to benefit the data-owning agency.
- The current mode of access is via one of 24 secure physical locations in the U.S.
- Confidentiality/Security
 - Title 13 (Census Bureau), Title 15 (NCHS) and Title 26 (IRS) U.S. Code
 - Privacy Act
 - Confidential Information Protection Statistical Efficiency Act (CIPSEA)
 - Census Bureau Special Sworn Status
 - Physical security of locations through multiple means

Motivation/Mission

- Importance of government statistics:
 - "Statistical information is key to an informed citizenry; an informed citizenry is key to a functioning democracy"
 - To be useful, the statistical information must be credible, nonpartisan, and relevant to key questions about the welfare of the society.

 -- Robert Groves, October 27, 2010
- How the FSRDC partnership supports this:
 - Increased transparency
 - Educating future users of statistical data
 - Continual improvements in existing data
 - Identifying data gaps, creating new information

Vision

- Extend these benefits to all statistical agencies by housing their data and partnering with them.
- Provide a mechanism for cross-agency research to answer complex questions.
- Increase scientific rigor by developing a process for replication studies.
- Promote a more robust educational component with a focus on underserved research communities.
- Use FSRDC infrastructure to help Puerto Rico improve its statistical system.

Vision (continued)

- These five points were part of a vision memo from CES to Tom Mesenbourg while he was acting in the capacity of Director of the Census Bureau in 2013.
- The vision memo was also shared with OMB and became the backbone for the discussions leading to the rebranding of the network to the Federal Statistical RDC network.

Benefits to Census from our FSRDC Users

- Use existing Census Bureau data to:
 - Provide new insights: Syverson (productivity)
 - Suggest improvements: Kehrig (capital stock in productivity)
 - Develop new products: Davis and Haltiwanger (gross job flows)
- Combine Census Bureau data with other data for new insights:
 - Maksimovic and Phillips (firm organization)
- Propose new content on existing Census Bureau instruments:
 - Hueth (cooperatives)
- Propose new instruments:
 - Bloom, Brynjolfsson, and Van Reenen (MOPS)
 - Robb (ASE)



Brief History of FSRDCs

- Program created: Census Bureau creates program at HQ in mid-1980's for access to business data.
- Adding Institutional Partners
 - First remote location added in 1994
 - 24 locations as of 2016
- Adding infrastructure
 - Census-NSF partnership establishes formal RDC location application criteria and procedures in 1998
- Adding Federal Partners
 - AHRQ and NCHS join RDC program as partners in 2008.
 - Interagency Council on Statistical Policy (ICSP) approves rebranding to Federal Statistical RDCs in 2015.

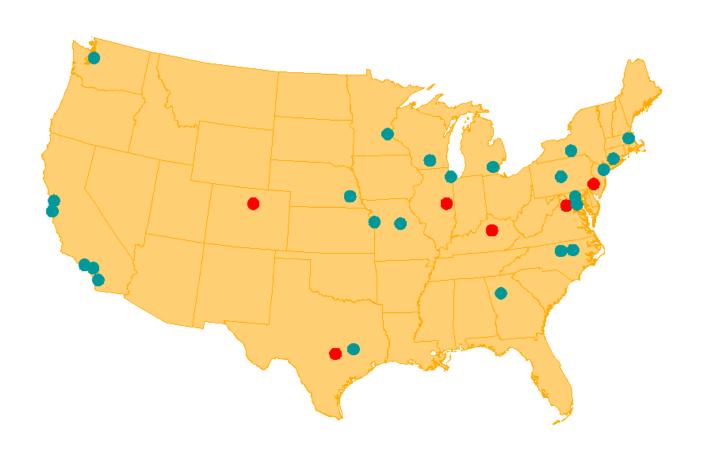
Current Status of the FSRDCs

- 24 RDC locations; 6 in development
 - 259 active projects
 - 100 projects on deck
- AHRQ and NCHS projects make up half of all current RDC projects
- BLS new partner
 - Pilot program for researchers using
 - Survey of Occupational Injuries and Illnesses
 - National Longitudinal Surveys

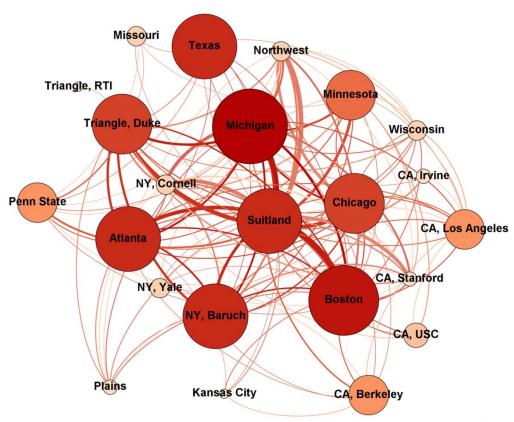
Partners/Data

- Census Bureau: Full datasets and can link/match data.
 - Economic; Longitudinal Employer-Household Data;
 Demographic.
- AHRQ/NCHS: Data extracts.
 - National Health and Nutrition Examination Survey (NHANES); National Health Interview Survey (NHIS); National Ambulatory Medical Care Survey (NAMCS); Medical Expenditure Panel Survey (MEPS)-Insurance and Household Components
- BLS: Full datasets and cannot yet link/match data.
 - National Longitudinal Survey of Youth; Survey of Occupational Injuries and Illnesses.

Physical Locations



Interconnectivity



Note: Graph includes only external projects. Node (FSRDC) size and color are proportional to the number of sponsored projects. Edge thickness and color are proportional to the number of projects on which each pair of FSRDCs collaborate.

Processes: Overview

- New Project: Proposals are reviewed by agencies responsible for the data.
- New Researcher: Must obtain SSS.
- New Federal Partner: ICSP has encouraged all to join.
- New Institutional Partner (Location)
 - Core: National Science Foundation approval and funding required. Criteria: scientific merit and contribution to FSRDC program. Core RDCs may request satellite, or Branch, locations
 - Branch: Reviewed by Census Bureau and existing Core RDCs. Criteria: expected use and funding

Processes: Proposal Reviews

- Proposal Review Durations
 - NCHS/AHRQ/BLS/Census Bureau review 70-90 days
 - Other agency review (SSA, IRS, etc) 90 days
 - SSS processing— 90 days
- LEHD
 - State-level approval required
 - 12 states grant blanket approval for RDC research
 - AZ AR DE DC IN IA
 - KS ME MD NV OK TN

Processes: Costs

- Institutional Partner (hosting an RDC)
 - Construction (one-time)
 - Infrastructure and Ongoing Costs
 - \$50,000/year for first 3 years
 - RDC Administrator salary and Disclosure Avoidance Review -\$150k-\$250k/year
- Researcher (using an RDC)
 - Agency-specific fee
 - Data preparation and disclosure review
 - Examples: NCHS \$500/day preparation fee; BLS \$4000/project
 - Local access fee
 - Contingent upon whether researcher is part of local consortium
 - Fee level is set by local RDC

Next Steps: Governance Infrastructure

- Interagency governance development committee launched in January 2016 with the goal of having the interagency governance structure in place in January 2017.
- Steering Committee
 - Executive sponsorship of FSRDC program
 - Strategic vision and guidance
 - Policies
 - Procedures
- Steering Committee Members
 - Chair Office of Management and Budget
 - Principal Statistical Agencies
 - Local RDC Institutional Partners

Next Steps: Governance Infrastructure (continued)

- Interagency Council on Statistical Policy members are evaluating two options for FSRDC governance
- Shared Governance
 - Participating agencies and institutional partners equal partners in program management and evolution
 - Steering Committee guides program management and architecture
 - Distributes responsibility for program growth across all participants
- Service Provider
 - Participating agencies and institutional partners independently purchase services to participate in FSRDC
 - Census Bureau directs program management and architecture
 - Centralizes responsibility for program growth with Census

Next Steps: Management Infrastructure

- Project Management Office
 - Daily operations and coordination
 - Staffing
 - |T
 - Physical Security
 - Coordination across agencies
 - Legal agreements
 - Budget

Challenges

- Scalability: The network is growing rapidly, how to ensure there is no degradation in service.
- Sustainability: Not all agencies operate under the same authorities, how to ensure we have the resources to continue.
- Relevance: As other modes of access become technologically feasible, how to adapt to these changes.

Seeking FESAC Input

Scalability:

- Agency partners who to encourage?
- Physical locations when are there enough?
- Program Management should we find an outside partner?
- Sustainability:
 - How do we balance costs/benefits when not all agencies operate under the same authorities?
- Relevance:
 - How can the FSRDCs complement other modes of access?