

U.S. Census Bureau Infrastructure Overview

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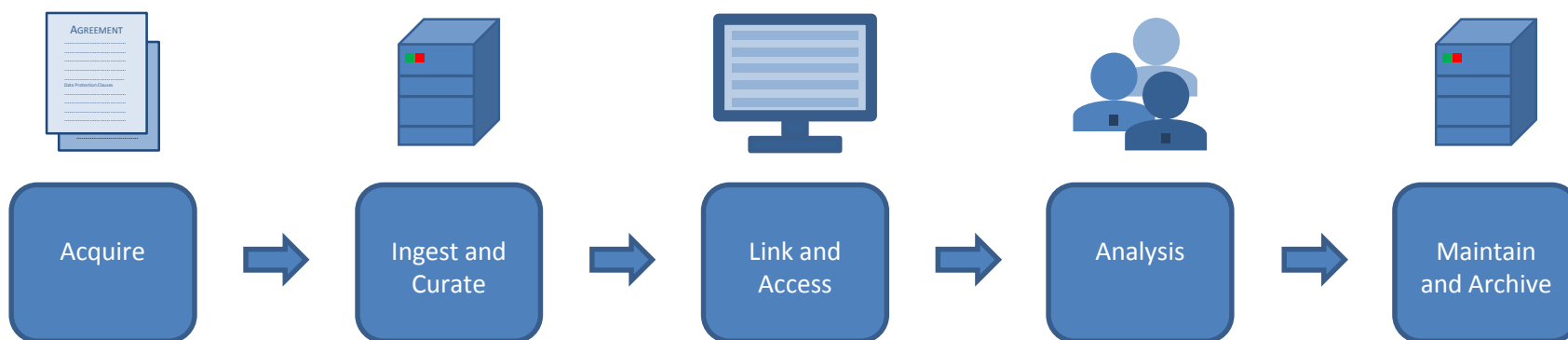
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CEP questions

1. Does the model acquire (or ingest) data?
2. Does the model curate data?
3. Does the model link data?
4. Does the model analyze data?
5. Does the model provide for sustainability and scalability?
6. Does the model archive data?

In a word...

Yes...the Census Bureau acquires, ingests, curates, links, analyzes, and archives data. And, yes, we are striving to promote a sustainable and scaleable model for accessing a range of high-value, sensitive, confidential information.



Overview

1. Census Bureau mission and authorities
2. Infrastructure and data assets
3. Enhancements and opportunities

Mission

The Census Bureau's *mission* is to measure the nation's people and economy. We honor privacy, protect confidentiality, share our expertise globally, and conduct our work openly.

More specifically, how do we realize our mission in the context of evidence-building?

- Increase the awareness and acceptance of administrative data in federal statistics
- Identify, acquire, ingest, process, link, and analyze administrative data
- Create products that demonstrate the value of data linkage and linked data

Legal framework and authority

Title 13 provides authorities for for protecting and accessing high value information about the nation's population and economy.



- **6**: acquire and utilize records to the greatest extent possible
- **8**: reimbursable studies and joint statistical projects
- **9**: protect confidential individual and establishment data, limit access, and statistical uses
- **23(c)**: swear in researchers to assist the Census Bureau

Infrastructure and data assets

external data sources: administrative and 3rd-party data

linked data: products, research, and program evaluation

censuses, surveys, and frames

3 Examples

- CARRA data linkage infrastructure
- Longitudinal-Employer Household Dynamics (“LEHD”)
- Federal Statistical Research Data Centers (FSRDC)

CARRA: individuals and households

Federal data

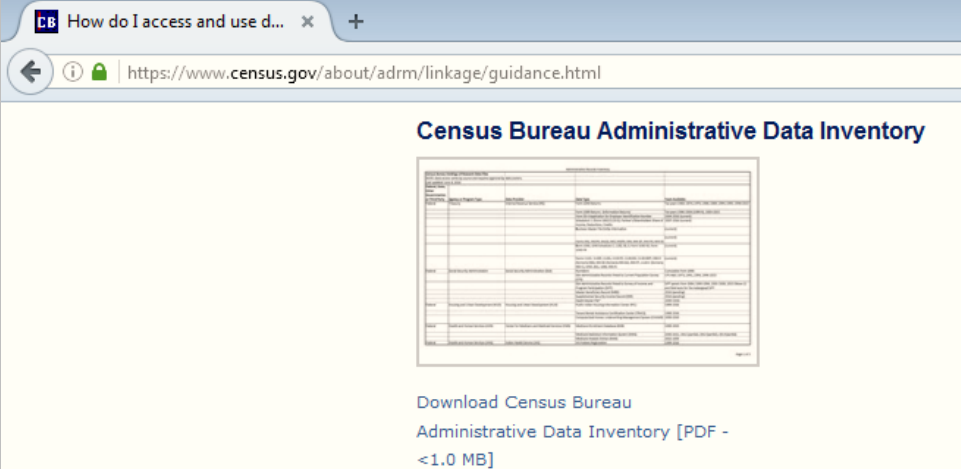
- Internal Revenue Service
- Housing and Urban Development
- Childcare Development Fund
- Medicaid and Medicare
- Social Security Administration
- Veteran's Administration
- U.S. Postal Service
- Selective Service

State data

- Women, Infants, and Children
- Temporary Assistance for Needy Families
- Supplemental Nutrition Assistance Program
- Low Income Energy Assistance Program
- Child Care Subsidy

3rd-party data

- Contact frame
- Public schools
- Property and tax foreclosure



The screenshot shows a web browser window with the URL <https://www.census.gov/about/adm/linkage/guidance.html>. The page title is "Census Bureau Administrative Data Inventory". Below the title is a table with multiple columns and rows, likely listing various data inventories. At the bottom of the page, there is a link: "Download Census Bureau Administrative Data Inventory [PDF - <1.0 MB]".

Coverage? Utility? Frequency?

Childcare Development Fund
Deeds
FHA Borrowers
Foreclosures
HUD Assisted Renters
Indian Health Service
IRS 1040s
IRS Information Returns
LEAP
MBR
Medicaid
Medicare
National Change of Address
National Corrections Reporting System
Numident
Property tax
Selective Service Registrations
SNAP
SSI
TANF
Telephone numbers
WIC

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Deeds
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IRS 1099

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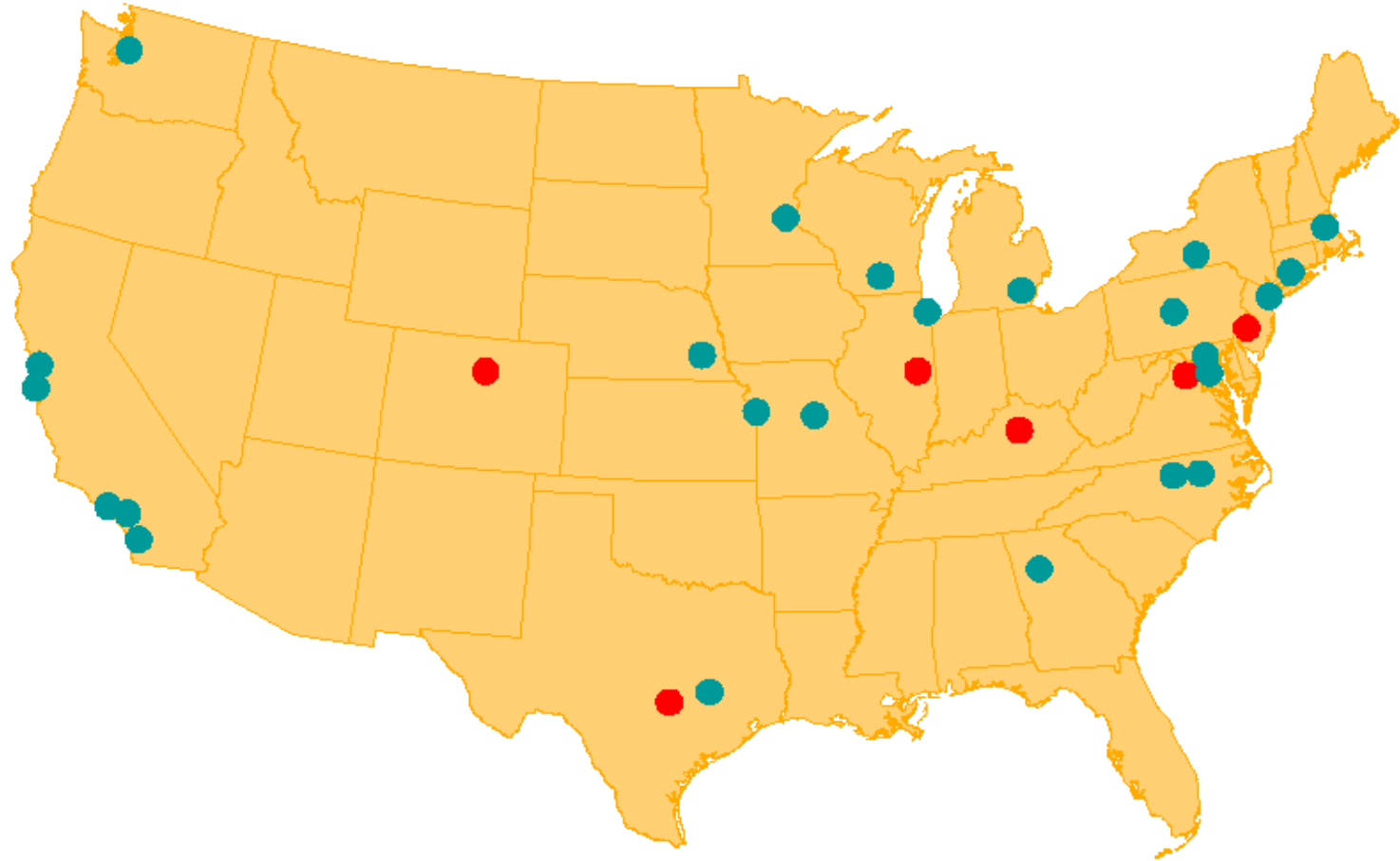
Current evidence-building projects

- Joint work with BJS, BOP, CMS, ERS, IRS, SSA, and VA programs, as well as a forthcoming project with HUD
- Longitudinal linkage projects with ten institutions in seven FSRDCs, the Census Longitudinal Infrastructure Project (CLIP)
- Twelve evidence building pilots, including Chapin Hall pilot projects

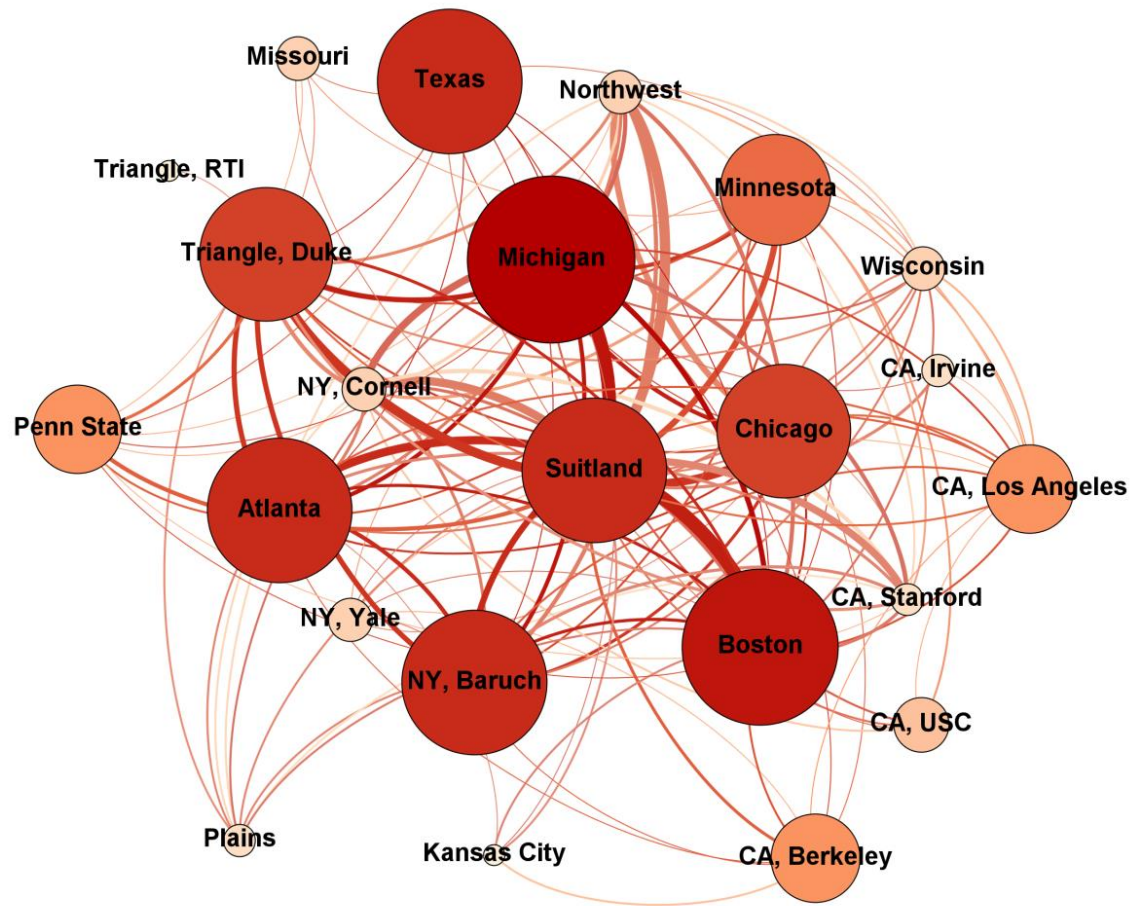
Research Data Centers: FSRDCs

- Program created: Census Bureau creates program at HQ in mid-1980's for access to business data
- Institutional Partners
 - First remote location added in 1994
 - 24 locations as of 2016, 6 in development
 - 259 active projects and 100 projects “on deck”
- Federal Partners
 - AHRQ and NCHS join RDC program as partners in 2008.
 - BLS joined in 2016 as a partner
 - Interagency Council on Statistical Policy (ICSP) approves rebranding to Federal Statistical RDCs (**FSRDC**) in 2015

Physical Locations

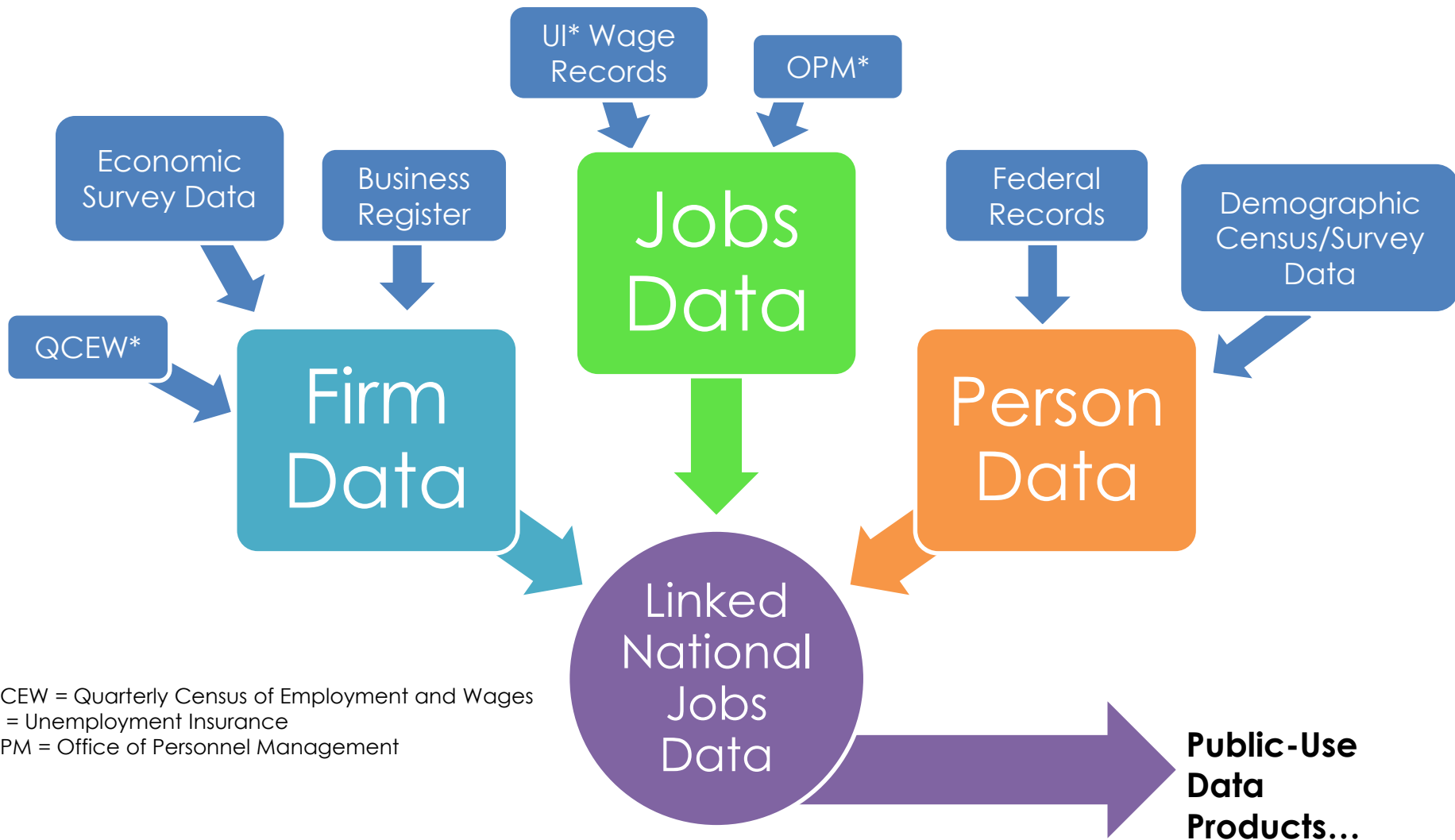


Interconnectivity



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.

LEHD Infrastructure



QCEW = Quarterly Census of Employment and Wages
UI = Unemployment Insurance
OPM = Office of Personnel Management

Current and planned LEHD projects

- Internal Projects
 - Job-to-Job Flows Data Set
 - Labor Market Outcomes Associated with Military Service
 - Education Pilot
- Other Federal Projects (DOL)
 - Homeless Veterans Reintegration
 - Trade Adjustment Act Evaluation
- External Projects
 - Firm Financial Constraints and Employment
 - Labor Market Implications of External Shocks

How to access LEHD data

- Internal Projects
 - Partner with Census Bureau researchers
 - Must abide by specific rules stated in Memorandum of Understanding (MOU)
 - Limitations: capacity constraints, state laws, release of state-specific results
- Federal Statistical Research Data Center (FSRDC) Projects
 - Well-established process
 - Additional hurdles for access to full LEHD data

Enhancements to infrastructure

- Cloud-based data facility in partnership with NYU as Software as a Service (SaaS) platform
- Short-term and long-term solutions for creating and displaying metadata
- Data infrastructure website
[<http://www.census.gov/about/adrm/linkage.html>]
- Research partnerships with DARPA XDATA performers and academic collaborators
- Hardware and software upgrades

Discussion

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