

The U.S. Census Bureau's Frames Program



Presented at *Innovations in Measuring Employment*
September 18, 2026

Deirdre Dalpiaz Bishop
Associate Director for Economic Programs
U.S. Census Bureau

Frames Program Introduction

- The Frames Program is modernizing the Census Bureau's data infrastructure to maximize the utility of geospatial, economic, and demographic data.
- Enables the Census Bureau to deliver on its mission to serve as *the nation's leading provider of quality data about its people and economy*.

Data Development Over 30 Years: Geography, Businesses, Jobs, People

Geography

Master Address File (MAF)

- Baseline of national inventory of addresses derived by merging the 1990 Census address list with USPS Delivery files.
- Continuous updating since 2000's.
- Incorporated with Topologically Integrated Geographic Encoding and Referencing (TIGER) System to supply geospatial features and boundaries.

Businesses

Longitudinal Business Database (LBD)

- Haltiwanger, Jarmin & Miranda (2002, CES-WP-02-17).
- Identifier to track business establishments over time.
- Measures entry, exit, employment growth or decline.
- Firm age.
- Business Dynamics Statistics (BDS).

Jobs

Longitudinal Employer Household Dynamics (LEHD)

- State UI Wage records.
- Longitudinal tracking of jobs: PIK + state business identifier.
- Quarterly Workforce Indicators, Job-to-Job Flows, On The Map.

People

Person Identification Validation System (PVS)

- Wagner & Layne (2014, CARRA WP 2014-01)
- Create Protected Identification Key (PIK).
- First: Validate SSNs and replace with PIKs.
- Also: Add PIKs to any dataset with demographics.
- Unique longitudinal identifier for people.

Looking Forward: The Geospatial Frame

- Enhanced Master Address File/Topologically Integrated Geographic Encoding and Reference (MAF/TIGER) System.
- Contains residential, non-residential (business), and mixed-use addresses.
- Creating tools for meaningful data access & consistent enterprise approaches, such as 'Select Your Own Geography.'

Looking Forward: The Business Frame

- Centralized repository of business units and their core characteristics.
- Leverages matching methodology to link various business data sources to records in the Business Register, facilitating timelier updates (e.g., openings and closures).
- Improved measurement of location of business activity.

Looking Forward: The Job Frame

- Provides the most comprehensive annual snapshot available of employment in the U.S. economy.
- Makes use of data from a wide variety of administrative sources, including not only wage and salary employment, but also self-employment.
- Enables measurement of dynamic patterns of the entire workforce (i.e., jobs compositions and transitions between wage and salary work a self-employment, or both).

Looking Forward: The Demographic Frame

- The Demographic Frame is a *new* comprehensive database of person-level data, containing demographic characteristics and addresses associated with each person.
- Provide timely, high-quality population information at the pace needed to support current programs.
- The quality and accuracy of population data will be strengthened through enhancements to estimating where people live at a given point in time.

Broader Benefits of the Frames Program

- Expands the U.S. Census Bureau's ability to report on changes and trends affecting the nation's population, economy, and communities.
- Reduces burden on respondents (individuals and businesses) by reusing existing Census Bureau data and allowing survey methodologists to select more targeted samples.
- Reduces redundancies, improves quality of our products, and enables more effective use of our resources.
- As the central source for the data, it ensures consistency in measurement and sources.

Examples of Linked Frames Benefits

- **Reconciling the Longitudinal Business Database and Quarterly Census of Employment and Wages**
 - “New U.S. Business Establishments: Surging or Stalling?” presentation by Henry Hyatt.
- **Measuring people and the economy at the intersection of these Frames**
 - “The Nonemployee Workforce” presentation by Martha Stinson.