

Central Plains Federal Statistical Research Data Center

FINANCE RELATED DATASETS
&
HOW TO GET INVOLVED

Census Terminals On The Way!



- UNL and consortium partners won NSF funding and US Census Bureau approval to establish the *Central Plains Federal Statistical Research Data Center* (FSRDC)
 - Will facilitate and support researchers in social, behavioral, health, and life sciences
 - Will provide access to 61 and counting restricted-use datasets

Where We Stand in the RDC Network

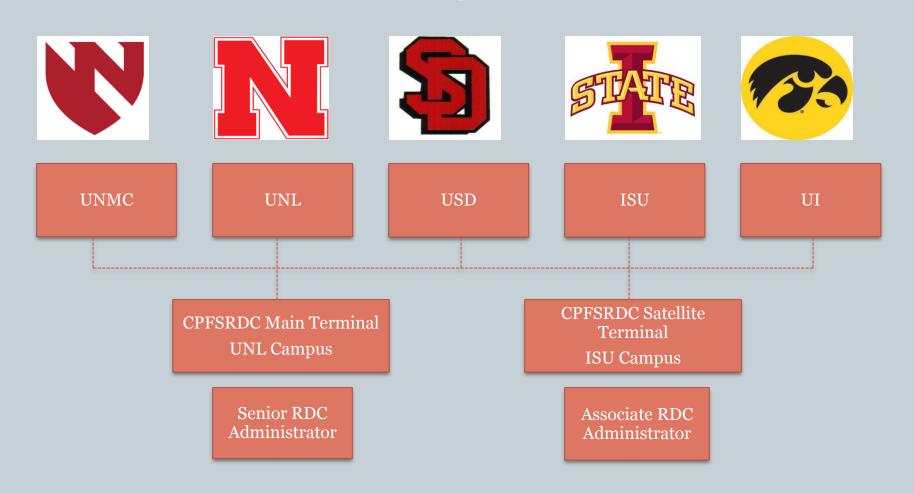


- 1st FSRDC in the Great Plains
 - Will specialize in data collections of regional importance
 - Will be located in the Whittier Research Center



The FSRDC Consortium Network





What is a Federal Statistical Research Data Center?

- Special research facility in partnership with the Census Bureau that aims to:
 - 1. improve the federal statistical system
 - 2. enhance academic research, infrastructure, and recruitment

Census Bureau administrator on site

Restricted-use data accessed from within the RDC facility

Benefits of an FSRDC



- 1. Provide access to restricted access data
- 2. High-impact publications
- 3. Partnership opportunities
- 4. Extramural funding
- 5. Recruitment
- 6. Increase and heighten regional policy impact
- 7. Any Census approved research is UNL IRB approved

Advantages to Restricted-Use Microdata

- Detailed geographic identifiers for small area estimation
- Facilitates nation-wide and historical trend analysis
- Data size increases statistical power
- Enables more accurate estimates
- Ability to data link different datasets
- Full population counts or full samples
- Original variables before they are processed
- AFFORDABLE –free for consortium members

^{*}does not apply to NCHS and AHRQ data files which require a fee

See Available Data Sets at:





Restricted-Use Firm Microdata

Data Set	Frequency	Unit of Enumeration	Availability	Sponsor
Annual Capital Expenditures Survey (ACES) Includes Information and Communication Technology (ICT) Supplement starting in 2003	Annually	Firm	1993–2012	Census Bureau
Annual Retail Trade Survey (ARTS)	Annually	Firm	1999–2012	Census Bureau
Annual Wholesale Trade Survey (AWTS)	Annually	Firm	1995–2012	Census Bureau
Business Expenditures Survey (BES) Also known as Business Expenses Supplement	Every 5 Years	Firm	1992–2007	Census Bureau
Business Research & Development and Innovation Survey (BRDIS) See also <u>SIRD</u>	Annually	Firm	2008–2011	National Science Foundation
Enterprise Summary Report (ESR)	Every 5 Years	Firm	1977–1992	Census Bureau
Exporter Database (EDB)	Annually	Firm	1997, 2002, 2004–2010	International Trade Administration
Kauffman Firm Survey (KFS) ⊞+ Must be used in conjunction with Census Bureau restricted-use microdata	Annual	Firm	2004–2010	Ewing Marion Kauffman Foundation
Manufacturers' Shipments, Inventories, and Orders (M3)	Monthly	Firm	1992–2012	Census Bureau
Quarterly Financial Report (QFR)	Annually	Firm	1977–2014	Census Bureau
Service Annual Survey (SAS)	Annually	Firm	1991–2012	Census Bureau
Survey of Business Owners (SBO)	Every 5 Years	Firm	1982–2007	Census Bureau
Survey of Industrial Research and Development (SIRD) See also BRDIS	Annually (Discontinued)	Firm	1972–2007	National Science Foundation

Restricted-Use Transactions Microdata

Data Set	Frequency	Unit of Enumeration	Availability	Sponsor
Commodity Flow Survey (CFS)	Various	Establishment	1993, 1997, 2002, 2007	Department of Transportation (DOT)
Foreign Trade Data – Exports (EXP)	Monthly	Transaction	1992–2011	Census Bureau
Foreign Trade Data – Imports (IMP)	Monthly	Transaction	1992–2011	Census Bureau
Longitudinal Firm Trade Transactions Database (LFTTD)	Monthly	Transaction	1992–2011	Census Bureau

Restricted-Ose Demographic Microdata	
Data Set	Γ

Data Set	riequency	Enumeration	Availability	Sponsor
American Community Survey (ACS)	Annually	Housing Unit	1996-2012	Census Bureau
American Housing Survey (AHS)	Annually	Housing Unit	1984–1999, 2001–2005, 2007, 2009, 2011	Housing and Urban Development (HUD) E+
Current Population Survey (CPS) Annual Social and Economic (ASEC) Supplement (March)	Annually	Household	1967–2013	Census Bureau and Bureau of Labor Statistics (BLS)
Current Population Survey (CPS) Food Security Supplement (December)	Annually	Household	2001–2012	Census Bureau and U.S. Department of Agriculture (USDA)
Decennial Census	Every Ten Years	Household	1970, 1980, 1990, 2000, 2010	Census Bureau
National Crime Victimization Survey (NCVS)	Annually	Household	2006-2012	Bureau of Justice Statistics (BJS)
National Longitudinal Mortality Study (NLMS)	Variable	Individual	Through 1998*	Census Bureau, National Cancer Institute (NCI), National Center for Health Statistics (NCHS), National Heart, Lung, and Bisood Institute (NHLBI), and National Institute on Aging (NIA)
National Longitudinal Survey (NLS)	Annually	Individual	1966–1999	Bureau of Labor Statistics (BLS)
Survey of Income and Program Participation (SIPP) Longitudinal	Variable	Household	1984–1988, 1990–1993	Census Bureau
Survey of Income and Program Participation (SIPP) Panels	Monthly	Household	1984, 1990–1993, 1996, 2001, 2004, 2008	Census Bureau

Availability

- National Home and Hospice Care Survey (NHHCS) and National Home Health Aide Survey (NHHAS)
- · National Survey of Residential Care Facilities (NSRCF)
- National Study of Long-Term Care Providers (NSLTCP)
- National Health Interview Survey (NHIS)
- National Survey of Family Growth (NSFG)
- · State and Local Area Integrated Telephone Survey (SLAITS)
 - National Survey of Children's Health (NSCH)
 - · National Survey of Children with Special Health Care Needs (CSHCN)
- NCHS Data Linkage Activities
 - · Linked Mortality Data Products
 - Linked Medicare Enrollment and Claims Files Data
 - Linked Medicaid Enrollment and Claims Data
- Linked Social Security Benefit History Data
- · National Vital Statistics System (NVSS) Data Release and Access Policy
- National Maternal and Infant Health Survey

Restricted-Use Economic Census* Microdata

Data Set	Frequency	Unit of Enumeration	Availability
Census of Auxiliary Establishments (AUX)	Every 5 Years	Establishment	1977-2007
Census of Construction Industries (CCN)	Every 5 Years	Establishment	1972-2007
Census of Finance, Insurance, and Real Estate (CFI)	Every 5 Years	Establishment	1992-2007
Census of Island Areas – Puerto Rico (CIAPR)	Every 5 Years	Establishment	1992-2007
Census of Manufactures (CMF)	Every 5 Years	Establishment	1963, 1967–2007
Census of Mining (CMI)	Every 5 Years	Establishment	1987-2007
Census of Retail Trade (CRT)	Every 5 Years	Establishment	1977-2007
Census of Services (CSR)	Every 5 Years	Establishment	1977-2007
Census of Transportation, Communications, and Utilities (CUT)	Every 5 Years	Establishment	1987–2007
Census of Wholesale Trade (CWH)	Every 5 Years	Establishment	1977-2007

*All economic censuses are sponsored by Census Bureau

Restricted-Use Business Register Microdata

Data Set	Frequency	Unit of Enumeration	Availability
Compustat-SSEL Bridge (CSB)**	Annually	Establishment	1981-2005
Form 5500 Bridge File	Annually	Establishment	1992-2006
Integrated Longitudinal Business Database (ILBD)	Various	Establishment	1977, 1982, 1987, 1992, 1994–2010
Longitudinal Business Database (LBD)	Annually	Establishment	1976-2012
Ownership Change Database (OCD)	Every 5 Years (Discontinued)	Establishment	1963, 1967–2002
Standard Statistical Establishment List/Business Register (SSEL)	Annually	Establishment	1974–2012

**The CSB was constructed using the 2001 and 2005 Compustat and its history files

Restricted-Use Establishment Microdata

Data Set	Frequency	Unit of Enumeration	Availability	Sponsor
Annual Survey of Manufactures (ASM)	Annually	Establishment	1973-2011	Census Bureau
Current Industrial Reports (CIR)	Annually (Discontinued)	Establishment	1993–2011	Census Bureau
Manufacturing Energy Consumption Survey (MECS)	Various	Establishment	1985, 1988, 1991, 1994, 1998, 2002, 2006	Energy Information Administration (EIA)
Medical Expenditure Panel Survey – Insurance Component (MEPS-IC)	Annually	Establishment	1996–2006, 2008–2013	Agency for Healthcare Research and Quality (AHRQ)
National Employer Survey_(NES)	Various	Establishment	1994, 1996, 1997, 1998	Department of Education (DOE)
Quarterly Survey of Plant Capacity Utilization (QPC) / Survey of Plant Capacity Utilization (PCU)	Quarterly	Establishment	1974–2013	Federal Reserve (FED)
Survey of Manufacturing Technology (SMT)	Various (Discontinued)	Establishment	1988, 1991, 1993	Census Bureau
Survey of Pollution Abatement Costs and Expenditures (PACE)	Various (Discontinued)	Establishment	1974–1982, 1984–1986, 1988–1994, 1999, 2005	Census Bureau / Environmental Protection Agency (EPA)

Finance Related Datasets



- 1. CENSUS OF FINANCE, INSURANCE, AND OF REAL ESTATE AND RENTAL AND LEASING (CFI)
- 2. FORM 5500 BRIDGE FILE
- 3. QUARTERLY FINANCIAL REPORT
- 4. STANDARD STATISTICAL ESTABLISHMENT LIST (SSEL)
- 5. COMPUSTAT-SSEL BRIDGE
- 6. LONGITUDINAL BUSINESS DATABASE (LBD)
- 7. ANNUAL CAPITAL EXPENDITURES SURVEY (ACES)
- 8. BUSINESS EXPENDITURES SURVEY (BES)
- 9. ENTERPRISE SUMMARY REPORT (ESR)
- 10.LONGITUDINAL EMPLOYER-HOUSEHOLD DYNAMICS

10 Economic 5-year Censuses

- **Includes:** Manufactures (63), Construction (72), Retail, Wholesale, Services Trade (77), Mining (87), Transportation-Communications-Utilities (87), Finance-Insurance-Real Estate (92)
- **Variables:** employees, hours, employee benefits, inventories, payroll, geographic info at census track level, 6-digit NAICS industry, value of primary and secondary products, cost of materials, energy expenses, capital investment by categories, IT expenditures
- **Advantages: 1)** Mix of establishment surveys and administrative data **2)** Statistics on most parts of the non-farm private economy, on 18/20 industry sectors, for towns with >2,500 inhabitants **3)** county/metro/state level estimates

Uses:

- measuring business activity
- analyzing industry or geographic trends
- o forecasting labor supply/demand
- estimating infrastructure spending impact on jobs
- economic indicators (productivity, corporate finance and profits, GDP)

Census of Finance, Insurance, and of Real Estate and Rental and Leasing (CFI)

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- **Description:** Census of establishments primarily engaged in transactions involving the creation, liquidation, or change in ownership of financial assets.
- **Purpose:** To provide periodic and comprehensive information about financial, insurance, and real estate establishments
- Survey Unit: Establishment
- **Frequency:** Every 5 years
- Time Periods: 1992-2007
- Number of Observations: 965,000 in 2007
- **Example Variables**: Type of business, Number of employees, Revenue per establishment/employee, Annual payroll per employee
- Unique Value: The first complete enumeration of key service industries, and only source of detailed industry and geographic data
 - State, county and place geography codes for all years. 80% of cases in the 2002 and 2007 files also have tract codes.

Form 5500 Bridge File

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- **Description:** Used to link data on employee benefit plans from Department of Labor (DOL) Form 5500 filings to internal Census business datasets
- Survey Unit: Establishment
- Frequency: Annually
- Time Periods: 1992-2006
- **Number of Observations:** ~13 million plan records available from 1992-2006
- Variables: Captures employee benefit plan records
- Unique Value:
 - The bridge can be used to link user-provided public use Form 5500 plan records to census business data.

Quarterly Financial Report

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- **Description:** The QFR program collects and publishes quarterly aggregate statistics on the financial results and position of U.S. corporations.
- Survey Unit: Firm
- **Frequency:** Annually
- Time Periods: 1977-2011
- Number of Observations: ~10,000 firms
- **Key variables:** debt structure, liquidity, profits, estimated statement of income, retained earnings, balance sheets, financial and operating ratios for manufacturing firms with assets >\$250,000, and mining/wholesale/retail/trade firms with assets > \$50million

• Unique Value:

- Aggregate statistics on corporation financial positions, asset size, and industry code breakdown (i.e., manufacturing, wholesale, retail, mining, trade)
- o Ability to assess industrial debt structure, liquidity, and profitability
- Ability to estimate corporate tax liability
- Create investment evaluations

Standard Statistical Establishment List aka the Business Register

- **Description:** The SSEL is a comprehensive register of active employer business establishments in the US. Includes employer and non-employer businesses, except government and private household
- Survey Unit: Establishment
- **Frequency:** Annually
- Time Periods: 1974-2011
- **Number of Observations:** >160,000 multi-establishment companies, representing 1.8 mil affiliated establishments, 5 million single establishment companies, and nearly 21 million non employer businesses
- **Key variables:** name, location, organization type, tax filing requirements, quarterly payroll information, business receipts, revenues, assets, inventories, industry classifications, size
- Unique Value:
 - Provides the most complete, current, and consistent source of establishmentbased information about U.S. businesses
 - Frame for economic censuses and many economic surveys

Compustat-SSEL Bridge

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- **Description:** The SSEL is a register of active employer business establishments in the United States. Compustat is a database compiled by Standard and Poor's that tracks pricing data, earnings results, corporate actions, and ratings
- **Survey Unit:** Establishment
- **Frequency:** Annually
- Time Periods: 1981-2005
- Number of Observations: 115,000
- **Variables:** name, address, legal form of organization, and tax filing requirements for each business, quarterly payroll information, business receipts, revenues, assets, inventories, industry classifications, and other critical data items
- Unique Value:
 - o In the Compustat-SSEL Bridge, the March 2005 Compustat file is linked to the 1981-2005 SSEL, providing firm level linkage

Longitudinal Business Database (LBD)/ ILBD



- **Description:** Census of business establishments and firms in the U.S. with paid employees comprised of survey and administrative records. The LBD covers all industries and all U.S. States. ILBD includes nonpaid employees for nonemployer businesses
- Survey Unit: Establishment
- **Frequency:** Annually from 1976-2011 (LBD)
 - o ILBD varies: 1977, 1982, 1987, 1992, 1994-2010
- Number of Observations: 8 mil. in 2011 (LBD); 18.4 mil. in 2010 (ILBD)
- **Methodology:** Face-to-face interviews
- **Key variables:** quarterly payroll, employment, ownership, industry classifications at 6-digit NAICS, name, address, organization types, tax filing requirements, business receipts, revenues, assets, inventories
- Unique Value:
 - Longitudinal aspect allows tractability of statistics over time
 - o Examine entry and exit, gross job flows, and changes to U.S. economy
 - Track nonemployer and employer status over time

Annual Capital Expenditures Survey ACES

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- **Description**: Firm-level survey collecting industry-level data on types and amount of capital investment. Used to generate comprehensive estimates of annual US capital expenditures
- Survey Unit: domestic non-farm firms
- **Frequency:** Annually
- Time Periods: 1993-2010
- Number of Observations: 77,000 in most recent year
- **Variables:** capital expenditures by industry, classified as new/used, as structures/equipment/other (some years by type of structure or equipment), total assets, depreciation, retirements, sales, revenue, capital leases, capitalized interest

• Unique Value:

- Ability to evaluate productivity growth, competition with foreign business, and change in industrial capacity
- o Introduced in 2003, the ICT supplement collects data on non-capitalized and capitalized expenditure on ICT equipment and software and allows for additional productivity and financial analysis

Business Expenditures Survey (BES)



- **Description:** BES compiles statistics on business operating expenses from business in the wholesale, retail, and service sectors.
- Survey Unit: Firm
- Coverage:
 - o Retail Trade (44-45)
 - Accommodation and Food Services (NAICS 72)
 - Wholesale Distributors excluding Manufacturers' Sales Branches and Offices (NAICS 42)
- **Frequency**: Every 5 Years (coinciding with the Economic Census)
- Time Periods: 1992-2007
- Number of Observations: 110,000 in 2002
- **Variables:** Sampled businesses provide data on total and detailed operating expenses (e.g., fringe benefits, fees, computer expenses, etc.) for the year covered.
- Unique Value:
 - Provides the only reliable national data on detailed business expenses by kind of business for covered industries

Enterprise Summary Report (ESR)

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- **Description:** provides comprehensive firm-level data aggregated from establishment data found in Economic Censuses
- Survey Unit: Firm
- **Frequency:** Every 5 Years
- Time Periods: 1977-1992
- Number of Observations: 6,200-11,000
- Variables: number of establishments, sales and receipts, employment, annual payroll, form of organization and enterprise industry classification (further financial characteristics)
- Unique Value:
 - Supplementary data for large companies (>500 employees) include inventories, assets, fringe benefits, capital and research and development (R&D) expenditures, and depreciation

Longitudinal Employer-Household Dynamics

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- **Description:** to provide a detailed and comprehensive picture of workers, employers, and their interaction in the U.S. economy.
- LEHD composed of several restricted data sets:

Data Set	Unit of Observation	Years Available
Business Register Bridge (BRB)	Establishment	1990-2011
Employer Characteristics Files (ECF)	Establishment	1989-2011
Employment History Files (EHF)	Job (Person-Firm)	1985-2011
Geocoded Address List (GAL)	Establishment	1990-2011
Individual Characteristics Files (ICF)	Person	1985-2011
Quarterly Workforce Indicators (QWI)	Establishment	1990-2011
Unit-to-worker (U2W)	Job (Person-Establishment)	1990-2011

LEHD Continued

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• **Key variables:** job-level quarterly earnings, worker work and residence address, worker in-state work history, and worker ethnicity, sex, age, and education, firm industry, size, and location

• Unique Value:

- LEHD data contains Federal Tax Information (FTI) with IRS approval, this data be linked to other census surveys
- Longitudinal aspect allows for tracking changes over time
- o Geographical Measures: 1) residential and commercial addresses geocoded to census block level 2) long/latitude coordinates
- o 32 Quarterly Workforce Indicators
- New Young firm job characteristics

Other Useful Research Links

(22)

- Census Bureau CES Discussion Papers
 - o https://ideas.repec.org/s/cen/wpaper.html

- LEHD Technical Papers Series
 - o http://econpapers.repec.org/paper/centpaper/

Want in? Here's how!



- After formulating a research question, consult rdc.unl.edu in order to:
 - o Identify the dataset and specific variables you require
 - Choose a quantitative method of analysis (e.g. ANOVA, regression, c-b analysis, etc.)
 - Obetermine outputs desired (e.g. descriptive stats, regression coefficients, box plots, etc.)
- Contact **Veronica**, the CPRDC Administrator, to get her input on what you come up with and next steps
 - o veronica.l.roth@census.gov
- The sooner you get started the better because it takes
 Census up to 90 days to review proposals and up to an
 additional 90 days to obtain special sworn status



Tips



- Call us NOW to help you plan ahead and avoid delays
- Learn about the research environment in advance
- Develop 2 proposals: 1 for CB approval, 1 for external funders
- Think strategically about tradeoffs: broad vs. narrow proposals
- If possible, work with the virtual RDC during reviews : http://www2.vrdc.cornell.edu/news/welcome/about/

Questions?



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Title 13 Benefits to CB



Not for proposals w/ FTI

- 1. Evaluating concepts and practices underlying Census Bureau statistical data collection and dissemination practices, including consideration of continued relevance and appropriateness of past Census Bureau procedures to changing economic and social circumstances.
- 2. Analyzing demographic and social or economic processes that affect Census Bureau programs, especially those that evaluate or hold promise of improving the quality of products issued by the Census Bureau.
- 3. Developing means of increasing the utility of Census Bureau data for analyzing public programs, public policy, and/or demographic, economic, or social conditions.
- 4. Conducting or facilitating Census Bureau census and survey data collection, processing or dissemination, including through activities such as administrative support, information technology support, program oversight, or auditing under appropriate legal authority.
- 5. Understanding and / or improving the quality of data produced through a Title 13, Chapter 5 survey, census or estimate;
- 6. Leading to new or improved methodology to collect, measure, or tabulate a Title 13, Chapter 5 survey, census or estimate;
- 7. Enhancing the data collected in a Title 13, Chapter 5 survey or census. For example:
 - Improving imputations for non-response; b. Developing links across time or entities for data gathered in censuses and surveys authorized by Title 13, Chapter 5.
- 8. Identifying the limitations of, or improving, the underlying business register, household Master Address File, and industrial and geographical classification schemes used to collect the data;
- 9. Identifying shortcomings of current data collection programs and / or documenting new data collection needs;
- 10. Constructing, verifying, or improving the sampling frame for a census or survey authorized under Title 13, Chapter 5;
- 11. Preparing estimates of population and characteristics of population as authorized under Title 13, Chapter 5;
- 12. Developing a methodology for estimating non-response to a census or survey authorized under Title 13, Chapter 5;
- 13. Developing statistical weights for a survey authorized under Title 13, Chapter 5.