

Central Plains Federal Statistical Research Data Center

ECONOMIC RELATED DATASETS

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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:





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 SIRD	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	
Xauffman Firm Survey (KFS) □+ Must be used in conjunction with Census Bureau estricted-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

		Enumeration		
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) []+
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 Blood Institute

Frequency Unit of

Availability

Census Bureau
Census Bureau

0	National Home and	Hospice Care	Survey	(NHHCS)	and Nati	ional Home	Health Aide	Survey
	(NHHAS)							

Annually

Variable

- 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)

Restricted-Use Demographic Microdata

- · 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

National Longitudinal Survey (NLS)

Survey of Income and Program Participation (SIPP)

- · 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

estricted-Use Business Register Microdata

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)

Economic Related Datasets



- 1. CENSUS OF FINANCE, INSURANCE, AND OF REAL ESTATE AND RENTAL AND LEASING (CFI)
- 2. QUARTERLY FINANCIAL REPORT
- 3. ANNUAL SURVEY OF MANUFACTURES
- 4. ANNUAL CAPITAL EXPENDITURES SURVEY
- 5. FOREIGN TRADE DATA IMPORTS/EXPORTS
- 6. LONGITUDINAL FOREIGN TRADE TRANSACTION DATA
- 7. SSEL BUSINESS REGISTER
- 8. LONGITUDINAL BUSINESS DATABASE/ILBD
- 9. BUSINESS EXPENDITURES SURVEY
- 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
- o analyzing industry or geographic trends
- o forecasting labor supply/demand
- o estimating infrastructure spending impact on jobs
- o 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
 - o State, county and place geography codes for all years. 80% of cases in the 2002 and 2007 files also have tract codes.

Quarterly Financial Report

- **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:
 - o 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

Annual Survey of Manufactures (ASM)

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- **Description:** The ASM provides sample estimates of statistics for all manufacturing establishments with one or more paid employee.
- Survey Unit: Establishment
- **Frequency:** Annually
- Time Periods: 1973-2011
- Number of Observations: 52,000-70,000 per year
- Example Variables: annual data on total employment, payroll, compensation, and fringe benefits; production worker wages and hours; total cost of materials, contract work, and purchased energy; electricity consumption and production; value added; detailed value of shipments; detailed end of year inventories; and capital expenditures.

• Unique Value:

- Statistics available at 3 to 6-digit NAICS industry codes and state levels for key variables
- The ASM provides the best current measure of current U.S. manufacturing industry outputs, inputs, and operating status
- Used to update GDP and GNP weight deflators, calculate productivity, and evaluate and forecast industrial activity, benchmark manufacturing shipments and inventories

Annual Capital Expenditures Survey ACES

- **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:
 - o 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

Foreign Trade Data – Exports/Imports (EXP/IMP)

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- **Description**: The EXP/IMP captures merchandise transaction data collected from US customs
- **Survey Unit:** Transaction
- **Frequency:** Monthly
- Time Periods: 1992-2011
- Number of Observations: 32,600,000 in 2010 (EXP), 55,100,000 in 2010 (IMP)
- **Key Variables**: Transaction value, date, country/state of origin/destination, quantity, product code, shipping weight, method of transportation (vessel/air), customs district/port. SITC, NAICS, End-Use Commodity Classification, and Advanced Technology Products codes included.

• Unique Value:

o Foreign trade data includes information on up to 18,000 import commodity codes, 9,000 export commodity codes, 240 U.S. trading partners, 400 U.S. ports, over 50 states and territories, and 45 districts.

O Uses:

- * Appraise trade trends, evaluate market share analysis, and measure the impact of foreign competition
- Measure the movement of merchandise in and out of the US, US customs territories, bonded warehouses and foreign trade zones
- Conduct trade policy analysis

Longitudinal Foreign Trade Transactions Data (LFTTD)

- **Description:** LFTTD links individual trade transactions to firms in the United States. This dataset is composed of the EXP/IMP datasets.
- Survey Unit: Transaction
- **Frequency**: Monthly
- Time Periods: 1992-2011
- Number of Observations: 27,750,000 in 2009 (EXP), 43,410,000 in 2009 (IMP)
- Sample Variables: Variables collected from in the IMP and EXP, including firm identifier codes
- Unique Value:
 - The firm identifiers on the LFTTD can be used to link trade transactions by firms to many other Census data products (LBD, Economic Censuses, surveys, etc.)
 - o Longitudinal aspect allows for analysis of firm characteristics and producer dynamics over time

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 establishment-based information about U.S. businesses
 - Frame for economic censuses and many economic surveys

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:
 - o Longitudinal aspect allows tractability of statistics over time
 - Examine entry and exit, gross job flows, and changes to U.S. economy
 - o Track non-employer and employer status over time

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:
 - o Provides the only reliable national data on detailed business expenses by kind of business for covered industries

Longitudinal Employer-Household Dynamics

- **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 instate 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



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

- LEHD Technical Papers Series
 - 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.)
 - O Determine outputs desired (e.g. descriptive stats, regression coefficients, box plots, etc.)



- 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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CONTACT:
JOHN ANDERSON
RDC EXECUTIVE DIRECTOR
JANDERSON4@UNL.EDU

402.472.1190

VERONICA ROTH
RDC ADMINISTRATOR
WHITTIER RESEARCH CENTER
VERONICA.L.ROTH@CENSUS.GOV
402.472.0362