

# The Rocky Mountain Federal Statistical Research Data Center (RMRDC)

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Executive Director

A stylized graphic of a mountain range with three peaks, rendered in dark purple and green, set against a blue gradient background.

*ADVANCING THE FRONTIERS OF SOCIAL SCIENCE*

*ECONOMICS - POPULATION - HEALTH*

“This Research Data Center allows us to ***Engage Researchers*** outside of Washington in using this very important data while also ***Protecting the Public’s Rights to Privacy.***”

*Former U.S. Census Bureau Director C. Lewis Kincannon*

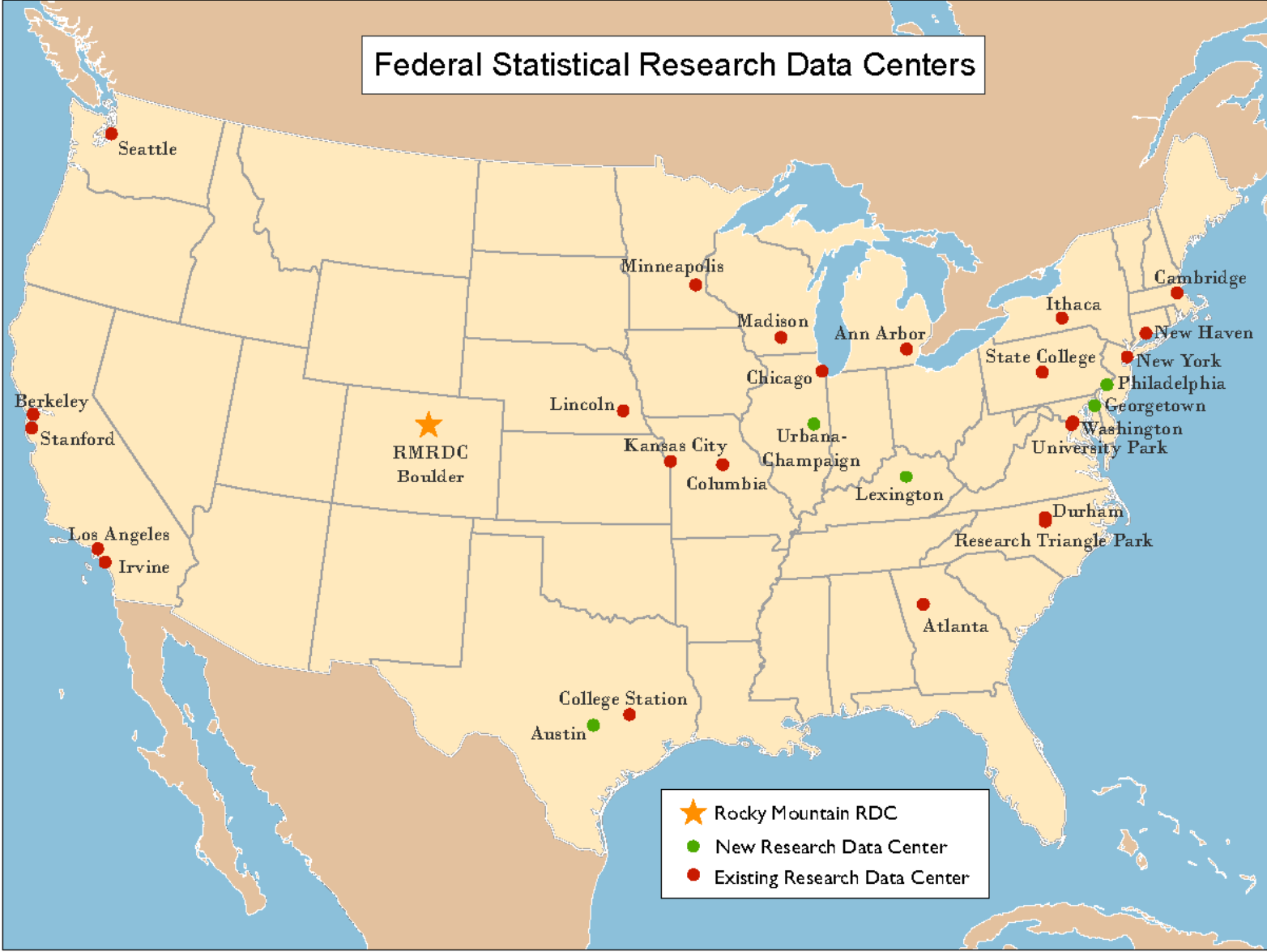


Steve Ruggles, Creator of IPUMS, Historian, and Well Known Visionary concludes:

“The most recent milestone in developing a national infrastructure for research is the FSRDC: a trusted institutional mechanism for research access of confidential data.”



# Federal Statistical Research Data Centers



# The RMRDC Consortium

## Partner Members:



University of Colorado  
Boulder



Denver



Anschutz



## Other Members:

UC Colorado Springs

Colorado State Government

Colorado School of Mines

Denver University

National Center for Atmospheric Research

National Renewable Energy Laboratory

CSU Faculty, Grad Students, and Affiliated  
Researchers

Get free access to the RMRDC services and  
secure laboratory

Costs for Non-Consortium researchers:  
\$15,000 per year



# What is a Federal Statistical Research Data Center (FSRDC or RDC)?

- Made possible by a contractual agreement between a leading research institution and the U.S. Census Bureau
- A secure computing lab that is linked with the Census Bureau's internal computing network, which hosts restricted-access data from multiple federal agencies
- The Center for Economic Studies (CES) directs all FSRDCs and the FSRDC Program
- FSRDCs are managed by an on-site Census employee—the administrator—who guides researchers on proposal development, enforces security guidelines, and serves as liaison with the research community.

# Conditions for Using an FSRDC

- Research projects must undergo a formal approval process with the agency that owns the data, e.g., Census, NCHS, BLS
- Researchers must go through a background investigation that qualifies them for “Special Sworn Status” which makes them an unpaid Census Bureau employee.
- Projects using Census data must provide benefits to the Census Bureau. All projects must show scientific merit and feasibility. Read more here: <https://community.isr.umich.edu/public/mcrdc/CensusBenefits.aspx>
- Results must be formally reviewed for disclosure violation before they leave the secure facility.



# Advantages Provided to Research?

- Microdata not available publicly on individuals, firms and establishments (including Personal Identification Key (PIK) & Employer Identification number (EIN))
- Variables not available in public versions of data sets (e.g., low level geography—block and block group)
- Full population counts or larger samples (Decennial Census, ACS, CPS)
- Full range of response items before they are “edited” and processed (e.g., detailed race answers, income is not top-coded, etc.)
- Finer codings of variables (e.g., 5 digit industry codes)
- Ability to link with external data (e.g., via geocodes, establishment ID, etc.)
- Ability to merge multiple internal data sets via non-public link keys

# Major Federal Statistical Agency Partners

- U.S. Census Bureau
  - [Economic Data](#)
  - [Demographic Data](#)
  - [Longitudinal Employer-Household Dynamics \(LEHD\) Data](#)
- [Bureau of Labor Statistics](#)
- [National Center for Health Statistics \(NCHS\)](#)
- [Agency for Healthcare Research and Quality \(AHRQ\)](#)
  - [Other Federal Partners](#)

# Restricted Census Data\*

## Economic Data

- Economic Census
- Longitudinal Business Database (LBD)
- Annual Survey of Manufactures (ASM)

## Longitudinal Employer-Household Dynamics Data (LEHD)

- Employment History Files (EHF)
- Employer Characteristics File (ECF)

\*<https://www.census.gov/ces/dataproducts/economicdata.html>

# Restricted Census Data\*

## Demographic Data

- Decennial Census
- American Community Survey (ACS)
- Current Population Survey (CPS) & Supplements
- American Housing Survey (AHS)
- Survey of Income and Program Participation Panels (SIPP)

\*<https://www.census.gov/ces/dataproducts/demographicdata.html>

## Public-Use Restricted Data: National Health Status Surveys

- National Health and Nutrition Examination Survey (NHANES) I, II, and III
- National Health Interview Survey (NHIS)
- Longitudinal Study on Aging I and II (LSOA)
- National Survey of Family Growth
- National Survey of Children's Health
- National Survey of Early Childhood Health
- National Survey of Children with Special Health Care Needs
- National Asthma Survey

## NCHS Restricted Data II: National Health Care Surveys

- National Ambulatory Medical Care Survey
- National Hospital Ambulatory Medical Care Survey
- National Survey of Ambulatory Surgery
- National Hospital Discharge Survey
- National Nursing Home Survey (NNHS)
- National Home and Hospice Care Survey
- National Employer Health Insurance Survey
- National Health Provider Inventory
- National Immunization Survey

# NCHS Restricted Data III:

## Vital Statistics

- Mortality and Multiple Mortality
- Birth
- Fetal Death
- National Death Index
- Marriage and Divorce Linked Data Sets

Linked mortality data: NHIS, NHANES LSOA II, NNHS

Linked Medicare Enrollment and Claims data: NHIS, NHANES, LSOA II

Linked Social Security Administration Data: NHIS, NHANES, LSOA II, NNHS

Linked EPA data

# Agencies Expected to Expand their Contributions

- Office of Management and Budget
- Bureau of Economic Analysis
- Bureau of Justice Statistics
- Department of Education
- Economic Research Services, USDA
- National Center for Science and Engineering Statistics
- Statistics of Income, IRS



# Leading Researchers in Many Fields Use FSRDCs

- Business, Trade, Finance, and Management
- Crime and Crime Victimization
- Demography, Population Distributions and Trends, Migration, and Immigration
- Economics, Labor Markets, Entrepreneurship, Employment and Industry
- Education and Education Policy
- Hazard Mitigation, Environmental Impact Assessment, Pollution Abatement
- Health and Well-Being, Health Insurance, Health Policy
- Housing, Housing Markets, and Residential Patterns
- Poverty and Social Welfare Policy
- Transportation Analysis and Planning
- Urban and Regional Economics and Planning

## **Advantages to Researchers and CSU:**

- Greatly expands the policy and basic questions that can be addressed
- Improves competitive edge for grants and publications.
- Preliminary investigations are FREE or low cost
- Attracts and retains top researchers and scholars
- Improves graduate education (big data/statistical techniques) and placement
- Serves as a “hub” that attracts leading researchers to visit and collaborate
- Fosters a vibrant regional research community in the Rocky Mountains
- Fosters collaboration with researchers near other FSRDCs



# RMRDC: The Physical Facility

- Expected opening March 1, 2017
- Located in the Institute of Behavioral Science (IBS) Building on CU Boulder Campus
- 10 thin client workstations to access servers
- Secure communications that tunnel over campus internet
- Contains the Administrator's office
- Badge Reader at Entrance
- 24/7 Security System with camera
- no electronic devices allowed
- nothing leaves the secure lab without approval



# FSRDC: Server Software

Gauss

Stata

Matlab & toolboxes

PBS Pro

Intel Composer XE

NX Enterprise

R

SAS

SAS (Dataflux)

SUDAAN

GEODa

Tomlab

Knitro

Madd

QGIS

StatTransfer

Python - Anaconda

Fortran

Perl

Tex/LaTex



**RMRDC**

Rocky Mountain Research Data Center  
[www.colorado.edu/rocky-mountain-research-data-center](http://www.colorado.edu/rocky-mountain-research-data-center)

# How Will the RMRDC Help?

**We will research information relevant to the researcher's interest**

- data availability; available software**
- project budget and timeline**
- contact information**

**For Census projects, the Administrator will give guidance on the Proposal Development Process**

- and the benefits to Census**
- help navigate the project approval process**

**Give assistance and training in using the Secure Lab**



# I Want In! What Do I Do? When?

Contact the RMRDC Director and Administrator

Review materials at our website, the CES website, and other relevant sites listed on our website.

**When? Start ASAP. Approval is needed from Census and/or other agencies. This process takes about 90 days once your proposal is submitted. IRS takes additional time. SSS takes additional time.**

**Also, the RMRDC needs to demonstrate its value to justify the CSU commitment.**

**If the RMRDC is a potential resource for you, USE IT or LOSE IT.**



# Upcoming Opportunities

## 1) The Cornell University Course by Videoconferencing

Taught by John Abowd and Lars Vilhuber in the Spring semester

### *Understanding Social and Economic Data*

The 2016 version is particularly aimed at American Ph.D. students who are interested in using **public-use** and **confidential** U.S. Census Bureau data, and the confidential data of other American statistical agencies that cooperate with the Census Bureau.

## 2) Proposal Development Workshops

One day events in Boulder or Fort Collins between semesters

## 3) Invited speakers with FSRDC expertise

