South Dakota State Data Conference
Sioux Falls, SD June 14th and 15th 2018

Datasets and Tools that Help Measure America

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United States Census Bureau

U.S. Department of Commerce
Economics and Statistics Administration
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census.gov

21st Century Expectation: Anywhere, Anytime Access

Data Available on Census.gov

Decennial Census Data

- 100% Data
- 10 Questions, 10 Minutes

American Community Survey Estimates

- 1 year (65,000+)
- 5 year (all pop)

Business Datasets

- Economic Census
- NAICS
- County Business Patterns
- Foreign Trade Data
- Survey of Construction
- Economic Indicators
- Business Dynamics Statistics

https://www.census.gov/popclock/

https://www.census.gov/economic-indicators/

Decennial Census Data

100% Data

- Not a Sample but a count of everyone.

Short Form Only in 2010

- 10 Questions, 10 Minutes

2010 Census Data Items:

- Race, Ethnicity, Sex, Age, Household Relationship, Housing Tenure (own or rent)

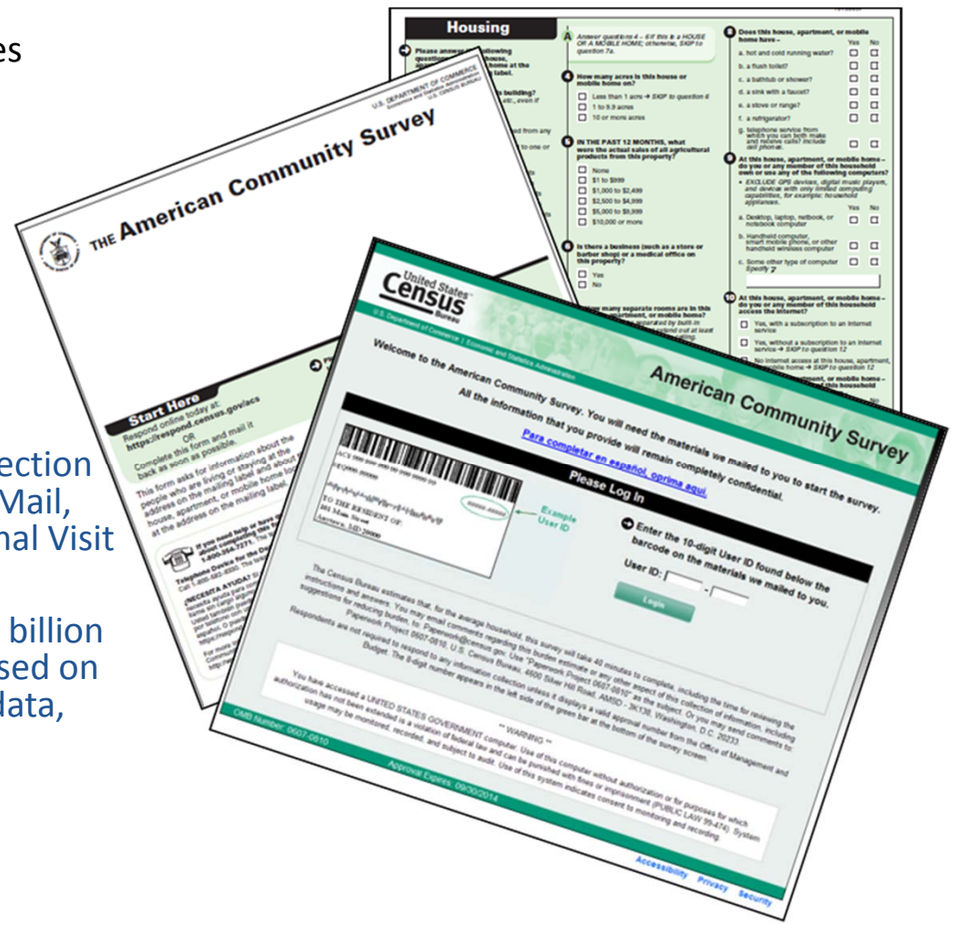
Geography:

- Data is fully available at all levels of geography.

The American Community Survey

- Largest U.S. survey 3.5 Million Homes Annually
- Four Key Characteristics
  - Social
  - Economic
  - Housing
  - Demographic
- Margin of Error
- 1, and 5 Year Data Sets Estimates
- Helps inform decision makers
- Geography Limitations
  1 Year above 65K ,
  5 Year all populations

- Covers 35 topics and supports over 300 known Federal Government uses
- Has four data collection modes: Internet, Mail, Telephone, Personal Visit
- More than $675 billion are allocated based on Census Bureau data,



The Economic Census

- Conducted every five years
- Comprehensive Business Information
- Statistics on 1,000+ Industries
- Electronic Reporting Available
- Responses are Confidential

The Other 9 Years - Census Surveys

- Survey of Business Owners
- Current Population Survey
- National Crime Victimization Survey
- Consumer Expenditure
- Survey of Income and Program Parti
- American Housing Survey
- Census of Governments

BUREAU OF LABOR STATISTICS

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

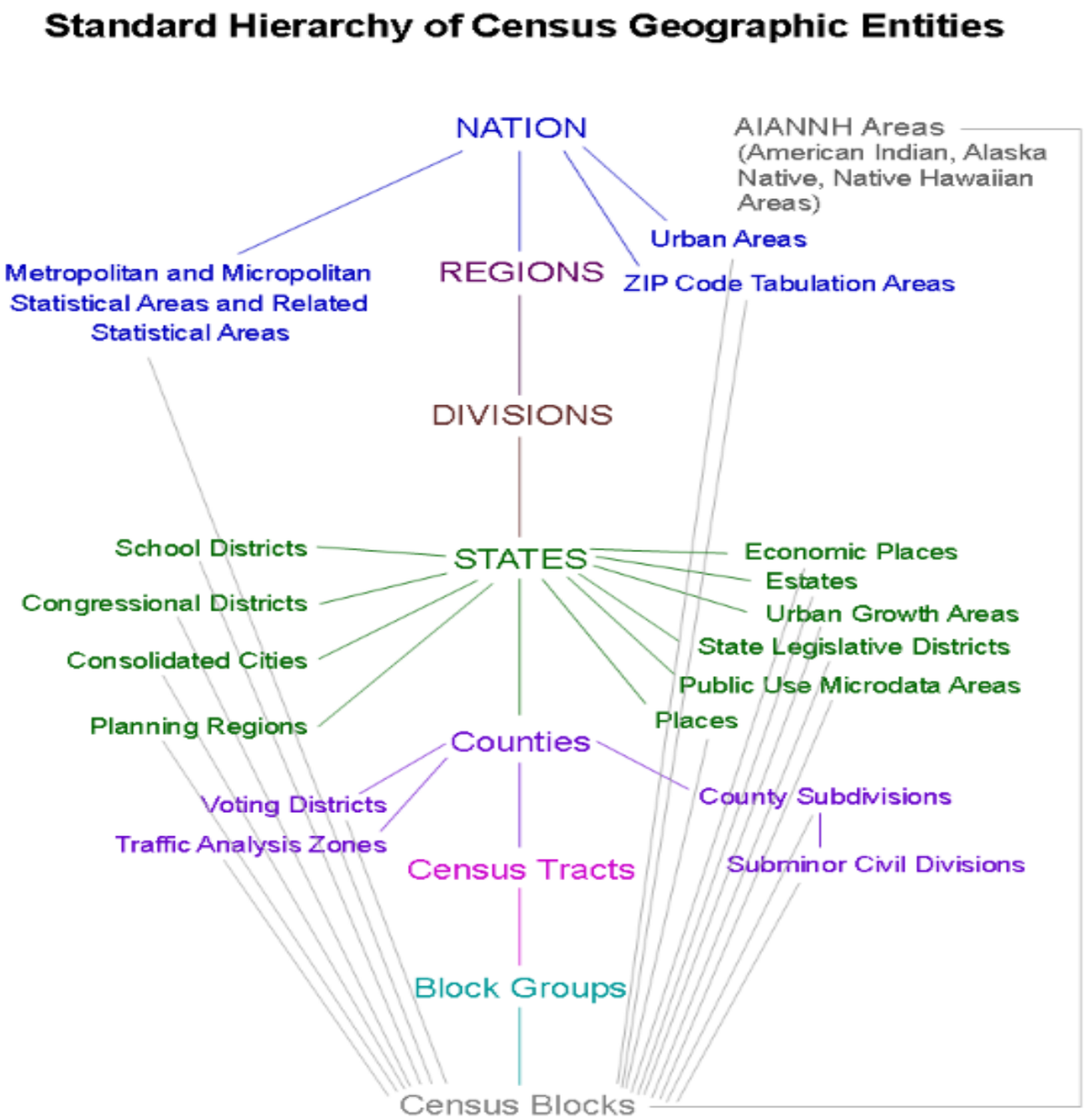
DEPARTMENT OF JUSTICE
QUI PRO DOMINA JUSTITIA SEQUITUR

2020 Census Planning Survey
Advance Monthly Sales for Retail and Food Services (MARTS)
American Community Survey (ACS)
American Housing Survey (AHS)
American Time Use Survey (ATUS)
Annual Capital Expenditures Survey (ACES)
Annual Retail Trade Survey (ARTS)
Annual Survey of Entrepreneurs (ASE)
Annual Survey of Manufactures (ASM)
Annual Survey of Public Employment & Payroll (ASPEP)
Annual Survey of Public Pensions (ASPP)
Annual Survey of School System Finances
Annual Survey of State Government Tax Collections (STC)
Annual Survey of State and Local Government Finances
Annual Wholesale Trade Survey (AWTS)
Beginning Teacher Longitudinal Study (BTLS)
Boundary and Annexation Survey (BAS)
Building Permits Survey (BPS)
Business Dynamics Statistics (BDS)
Business Expenses Supplement (BES)
Business Formation Statistics (BFS)
Business R&D and Innovation Survey (BRDIS)
Business Research and Development Survey (BRDS)
Business and Professional Classification Survey
Census of Governments
Census of Jails
Census of Juveniles in Resident Placement (CJRP)
Census of State and Federal Adult Correctional Facilities
Commodity Flow Survey (CFS)
Construction Progress Reporting Survey (CPRS)
Consumer Expenditure Survey (CE)
County Business Patterns (CBP)
Current Industrial Reports
Current Population Survey (CPS)
Decennial Census of Population and Housing
E-Commerce Statistics (E-STATS)
Economic Census
Economic Census Industry Classification Report
Economic Census of Island Areas (IA)
Export Statistics
Exports from Manufacturing Establishments
Federal Assistance Awards Data System (FAADS)
Federal Audit Clearinghouse (FAC)
Foreign Trade Statistical Program
Government Units Survey (GUS)
Housing Vacancy Survey (HVS)
Identity Theft Supplement
Import Statistics
International Programs
International Trade Program
Justice Assistance Data Survey
Juvenile Residential Facility Census (JRFC)
La Encuesta sobre la Comunidad Estadounidense
La Encuesta sobre la Comunidad de Puerto Rico
Lists and Structure of Governments
Local Government School System Finance Survey
Management and Organizational Practices Survey (MOPS)
Manufactured Housing Survey (MHS)
Manufacturers' Shipments, Inventories, and Orders Survey (M3)
Manufacturers' Unfilled Orders (M3UFO) Survey
Manufacturing Energy Consumption Survey (MECS)
Medical Expenditure Panel Survey (MEPS)
Metropolitan and Micropolitan
Monthly Retail Trade Survey (MRTS)
Monthly Wholesale Trade Survey (MWTS)
National Ambulatory Medical Care Survey (NAMCS)
National Census Bureau Survey
National Crime Victimization Survey (NCVS)
National Health Interview Survey (NHIS)
National Hospital Ambulatory Medical Care Survey (NHAMCS)
National Household Education Survey (NHES)
National Juvenile Justice Directory Program
National Prisoner Statistics (NPS)
National Sample Survey of Registered Nurses (NSSRN)
National Survey of Children's Health (NSCH)
National Survey of College Graduates (NSCG)
National Survey of Fishing, Hunting, & Wildlife-Associated Recreation
New York City Housing and Vacancy Survey (NYCHVS)
Nonemployer Statistics (NES)
Police-Public Contact Survey (PPCS)
Population Projections
Population and Housing Unit Estimates
Principal Follow-up Survey (PFS)
Private School Universe Survey (PSS)
Puerto Rico Community Survey (PRCS)
Quarterly Financial Report (QFR)
Quarterly Services Survey (QSS)
Quarterly Summary of State & Local Tax Revenue (QTAX)
Quarterly Survey of Plant Capacity Utilization (QPC)
Quarterly Survey of Public Pensions (QSPP)
Quarterly Workforce Indicators (QWI)
Redistricting Data Program
Rental Housing Finance Survey (RHFS)
Report of Organization
Residential Finance Survey (RFS)
School Crime Supplement (SCS)
School District Review Program (SDRP)
School Survey on Crime and Safety (SSOCS)
Schools and Staffing Survey (SASS)
Service Annual Survey (SAS)
Small Area Health Insurance Estimates (SAHIE) Program
Small Area Income and Poverty Estimates (SAIPE) Program
Special Census Program
Statistics of U.S. Businesses (SUSB)
Survey of Business Owners and Self-Employed Persons (SBO)
Survey of Construction (SOC)
Survey of Income and Program Participation
Survey of Market Absorption of New Multifamily Units (SOMA)
Survey of Program Dynamics (SPD)
Survey on Sexual Violence (SSV)
Teacher Follow-Up Survey (TFS)
Telephone Point of Purchase Survey (TPOPS)
Value of Construction Put in Place Survey

The U.S. Census Bureau conducts more than 130 surveys each year,
https://www.census.gov/programs-surveys/surveys-programs.html

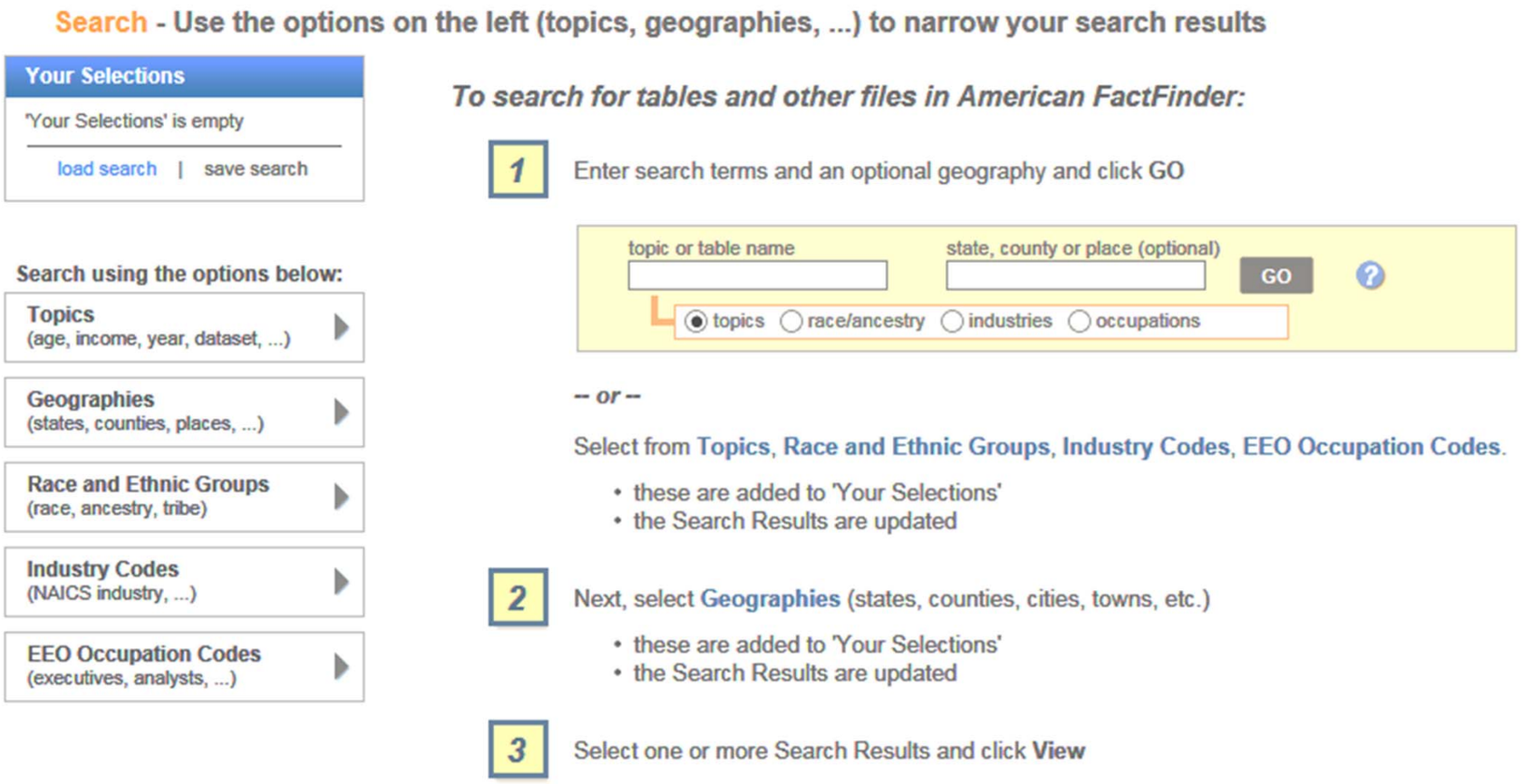
Geography Atlas https://www.census.gov/geo/reference/webatlas/

The standard hierarchy of census geographic entities displays the relationships between legal, administrative, and statistical boundaries maintained by the U.S. Census Bureau.



American Factfinder Advanced Search

http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t



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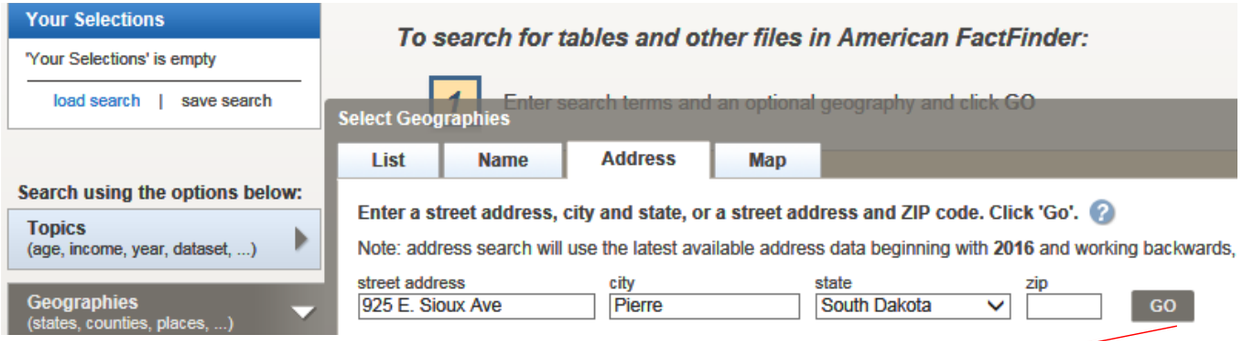
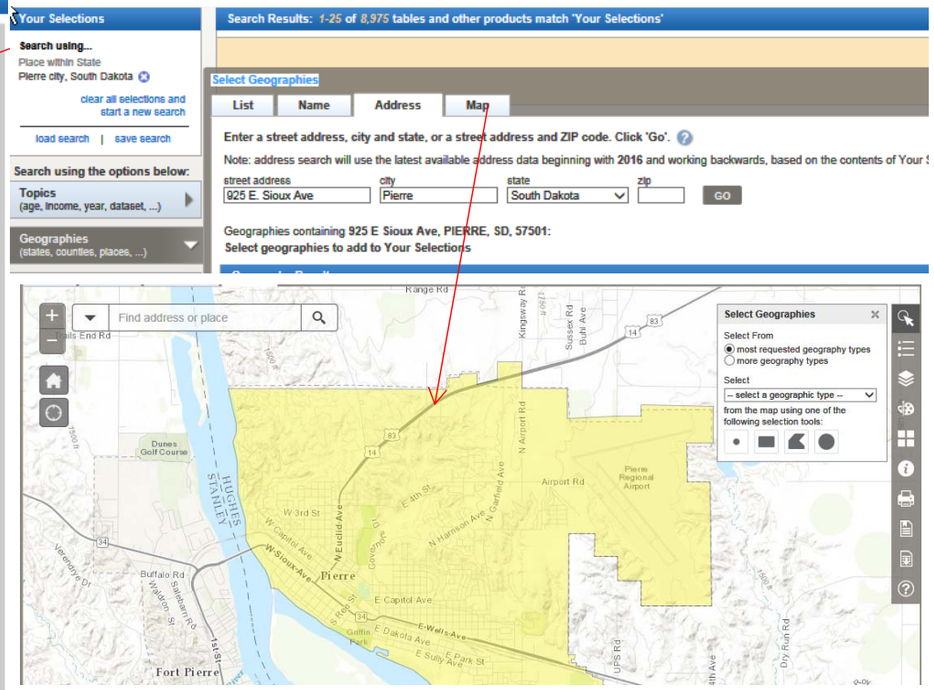


Geographies containing 925 E Sioux Ave, PIERRE, SD, 57501:
Select geographies to add to Your Selections

Geography Results:

Geography Name	Geography Type	Geography Code	About
Midwest Region	Region	020	
West North Central Division	Division	030	
South Dakota	State	040	
Hughes County, South Dakota	County	050	
Pierre city, Hughes County, South Dakota	County Subdivision	060	
Block 2015, Block Group 2, Census Tract 9779, Hughes County, South Dakota	Block	100	
Census Tract 9779, Hughes County, South Dakota	Census Tract	140	
Block Group 2, Census Tract 9779, Hughes County, South Dakota	Block Group within Census Tract	150	
Pierre city, South Dakota	Place within State	160	
Pierre, SD Micro Area	Metro/Micro Statistical Area	310	
Pierre city, SD; Pierre, SD Micro Area	Principal City (or part) within State within Metro/Micro Statistical Area	312	
Pierre, SD Urban Cluster (2010)	Urban Area	400	
Congressional District (at Large) (115th Congress), South Dakota	Congressional District	500	
State Senate District 24 (2016), South Dakota	State Legislative District (Upper)	610	
State House District 24 (2016), South Dakota	State Legislative District (Lower)	620	
PierreCity Voting District (22), Hughes County, South Dakota	Voting District/Remainder	700	
Lakota Region PUMA, South Dakota	Public Use Microdata Area (PUMA)	795	
ZCTA5 57501	5-Digit ZCTA	860	
ZIP 57501 (Pierre, SD)	5-Digit ZIP Code	861	
Pierre School District 32-2, South Dakota	School District (Unified)/Remainder	970	
Pierre city, South Dakota	Economic Place	E60	



Close the select Geography window and the available data is displayed

	ID	Table, File or Document Title	Dataset	About
☐	S0101	AGE AND SEX	2015 ACS 5-year estimates	
☐	S0101	AGE AND SEX	2015 ACS 1-year estimates	
☐	S0102	POPULATION 60 YEARS AND OVER IN THE UNITED STATES	2015 ACS 5-year estimates	
☐	S0102	POPULATION 60 YEARS AND OVER IN THE UNITED STATES	2015 ACS 1-year estimates	
☐	S0103	POPULATION 65 YEARS AND OVER IN THE UNITED STATES	2015 ACS 5-year estimates	
☐	S0103	POPULATION 65 YEARS AND OVER IN THE UNITED STATES	2015 ACS 1-year estimates	
☐	S0501	SELECTED CHARACTERISTICS OF THE NATIVE AND FOREIGN-BORN POPULATIONS	2015 ACS 5-year estimates	
☐	S0501	SELECTED CHARACTERISTICS OF THE NATIVE AND FOREIGN-BORN POPULATIONS	2015 ACS 1-year estimates	
☐	S0502	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY PERIOD OF ENTRY INTO THE UNITED STATES	2015 ACS 5-year estimates	
☐	S0502	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY PERIOD OF ENTRY INTO THE UNITED STATES	2015 ACS 1-year estimates	
☐	S0503	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: EUROPE	2015 ACS 5-year estimates	
☐	S0503	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: EUROPE	2015 ACS 1-year estimates	
☐	S0504	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: AFRICA, NORTHERN AMERICA, AND OCEANIA	2015 ACS 5-year estimates	
☐	S0504	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: AFRICA, NORTHERN AMERICA, AND OCEANIA	2015 ACS 1-year estimates	
☐	S0505	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: ASIA	2015 ACS 5-year estimates	
☐	S0505	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: ASIA	2015 ACS 1-year estimates	
☐	S0506	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: LATIN AMERICA	2015 ACS 5-year estimates	
☐	S0506	SELECTED CHARACTERISTICS OF THE FOREIGN-BORN POPULATION BY REGION OF BIRTH: LATIN AMERICA	2015 ACS 1-year estimates	
☐	S0601	SELECTED CHARACTERISTICS OF THE TOTAL AND NATIVE POPULATIONS IN THE UNITED STATES	2015 ACS 5-year estimates	
☐	S0601	SELECTED CHARACTERISTICS OF THE TOTAL AND NATIVE POPULATIONS IN THE UNITED STATES	2015 ACS 1-year estimates	

Guidance for Data Users

https://www.census.gov/programs-surveys/acs/guidance.html

- Subjects Included in the Survey
- Which Data Table or Tool Should I Use?
  - Data Tools Chart
  - Table IDs Explained
- When to Use 1-year, 3-year, or 5-year Estimates
- Handbooks
- Comparing ACS Data
  - ACS/Census Table Comparisons
- Statistical Testing Tool
- Training Presentations

Element 1: Table Type

Table ID Characters	Type of Table		Contains
B	Detailed Tables	Base Table	Most detailed estimates on all topics for all geographies
C		Collapsed Table	Similar information from its corresponding Base Table (B) but at a lower level of detail because one or more lines in the Base Table have been grouped together
K20	Supplemental Table		The only source of 1-year statistics for selected geographies with populations of 20,000-64,999
S	Subject Table		A span of information on a particular ACS subject, such as veterans, presented in the format of both estimates and percentages
R	Ranking Table		State rankings across approximately 90 key variables
GCT	Geographic Comparison Table		Comparisons across approximately 95 key variables for geographies other than states such as counties or congressional districts
DP	Data Profile		Broad social, economic, housing, and demographic information in a total of four profiles
NP	Narrative Profile		Summaries of information in the Data Profiles using nontechnical text
CP	Comparison Profile		Comparisons of ACS estimates over time in the same layout as the Data Profiles
S0201	Selected Population Profile		Broad ACS statistics for population subgroups by race, ethnicity, ancestry, tribal affiliation, and place of birth

Element 4: Race Iteration (Selected Tables Only)

For selected tables, an alphabetic suffix follows to indicate that a table is re

Code	Race or Ethnic Group
A	White Alone
B	Black or African American Alone
C	American Indian and Alaska Native Alone
D	Asian Alone
E	Native Hawaiian and Other Pacific Islander Alone
F	Some Other Race Alone
G	Two or More Races
H	White Alone, Not Hispanic or Latino
I	Hispanic or Latino

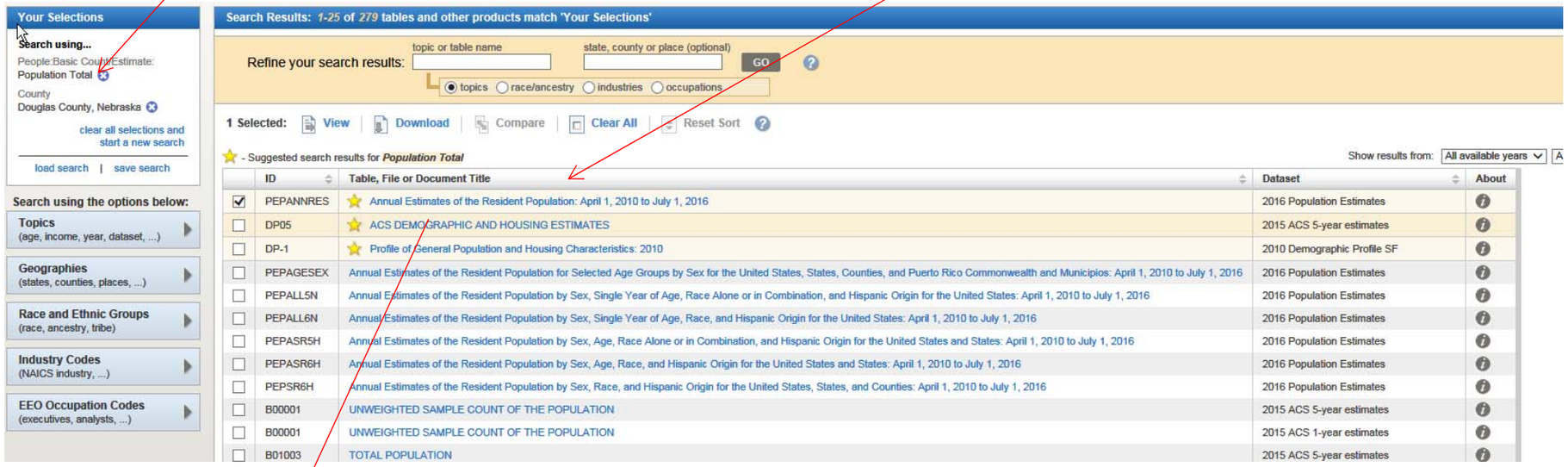
Element 2: Subject (B, C, K20, S, R, and GCT Tables Only)

The next 2 characters identify the subject of the table. Profiles (DP, NP, CP, and S0201) cover multiple topics, so they do not have any characters to indicate a subject.

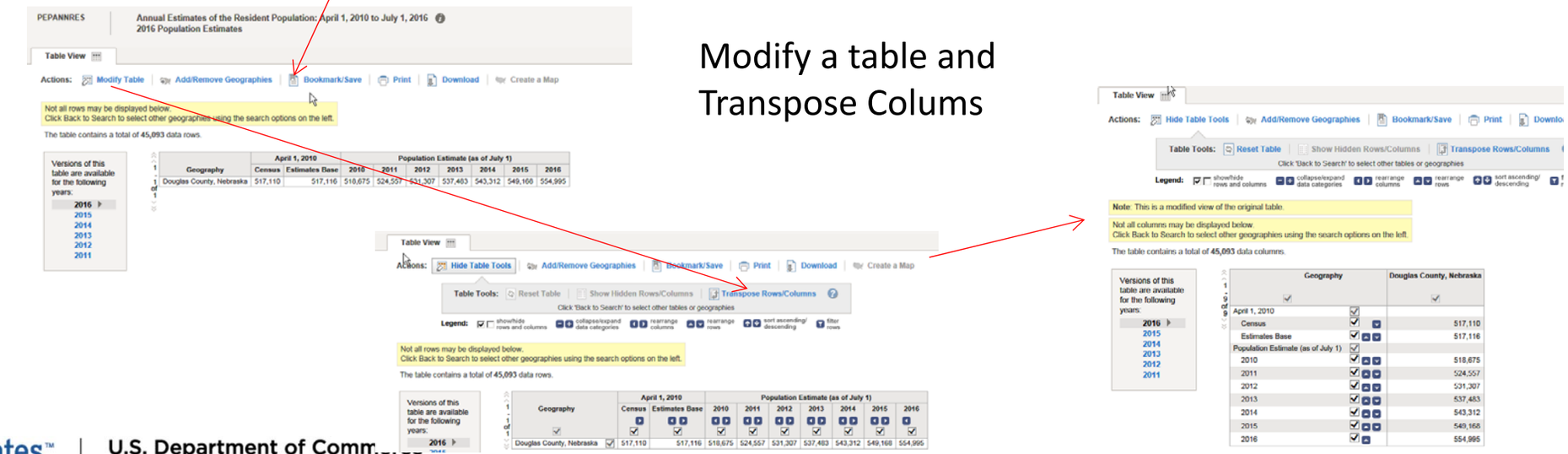
Subject Number	Subject Name	Subject Number	Subject Name
01	Age; Sex	16	Language Spoken at Home
02	Race	17	Poverty Status
03	Hispanic or Latino Origin	18	Disability Status
04	Ancestry	19	Income
05	Citizenship Status; Year of Entry; Foreign Born Place of Birth	20	Earnings
06	Place of Birth	21	Veteran Status; Period of Military Service
07	Migration/Residence 1 Year Ago	22	Food Stamps/Supplemental Nutrition Assistance Program (SNAP)
08	Commuting (Journey to Work); Place of Work	23	Employment Status; Work Status Last Year
09	Relationship to Householder	24	Industry, Occupation, and Class of Worker
10	Grandparents and Grandchildren Characteristics	25	Housing Characteristics
11	Household Type; Family Type; Subfamilies	26	Group Quarters
12	Marital Status; Marital History	27	Health Insurance Coverage
13	Fertility	28	Computer and Internet Use
14	School Enrollment	98	Quality Measures
15	Educational Attainment; Undergraduate Field of Degree	99	Allocation Table for Any Subject

Select Total Population.

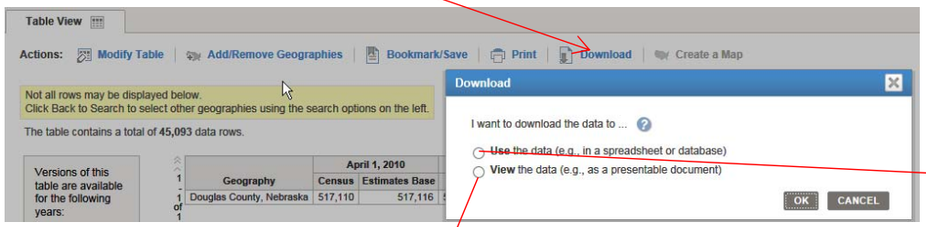
All available tables with total population are listed

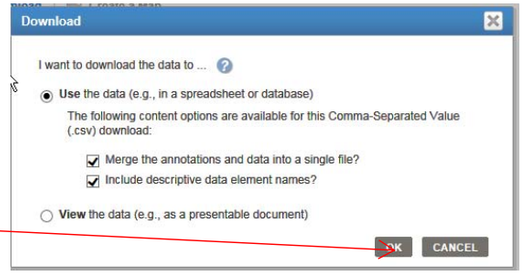


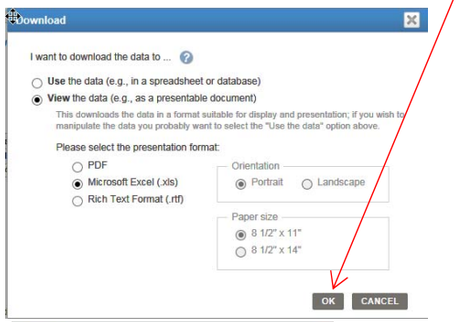
Modify a table and Transpose Colums

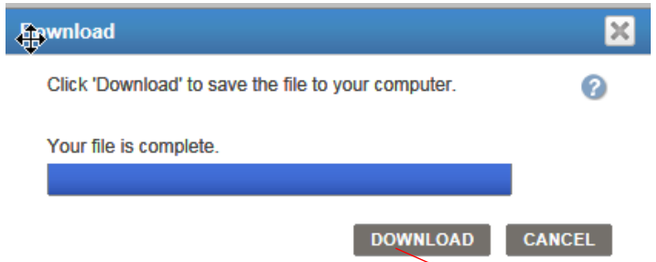


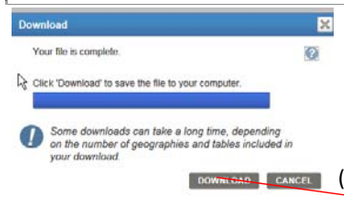
Download Data







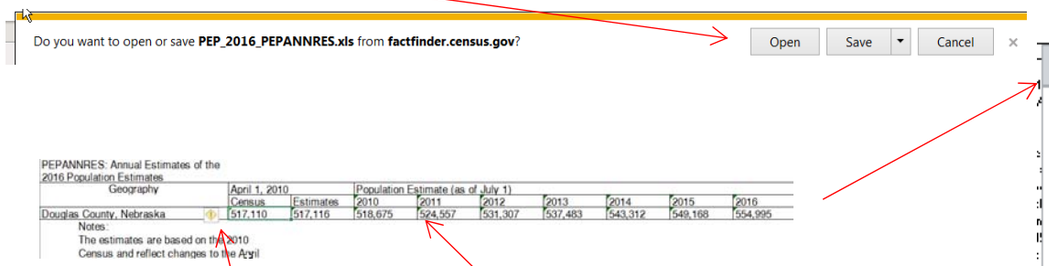




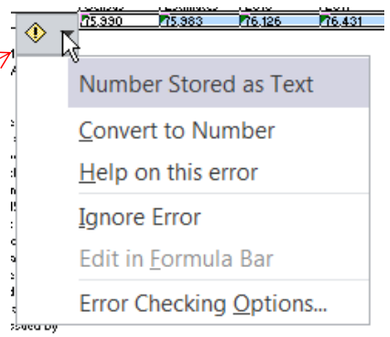
Output file is a PDF or *.XLS

(If File dialog does not appear Check Popup blocker and turn off)

Output file is a Zip file with *.CVS files



Notice the Yellow Triangle And green triangles in each Cell upper left corner.



Select all cells with green arrows, Hover over yellow triangle, Select Down arrow, Select “Convert to number”
Now the cells are filterable

Census Business Builder:

Regional Analyst Edition (CBB: RAE) v. 2.2

https://cbb.census.gov/rae/#
https://cbb.census.gov/sbe/#

Small Business Edition is built primarily for small business owners who need key data for their business plan or to better understand their potential market. It presents data for a single type of business and geography at a time.

Regional Analyst Edition is built for chambers of commerce and regional planning staff who need a broad portrait of the people and businesses in their service area. It presents data for all sectors of the economy and for a user-defined region made up of one or more areas.

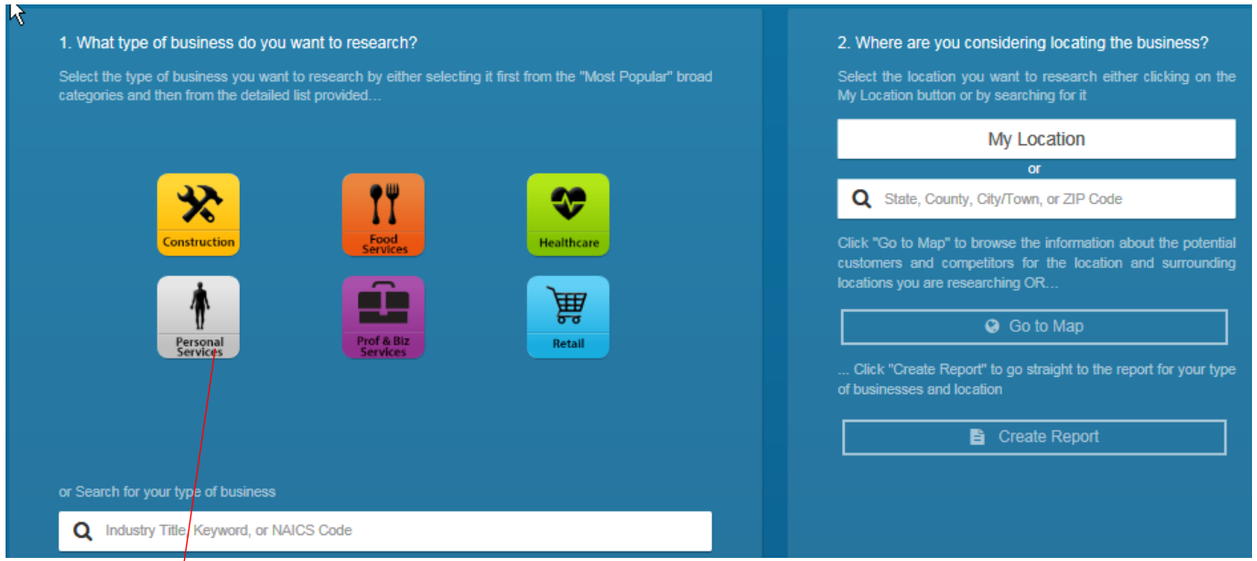
Census Business Builder:

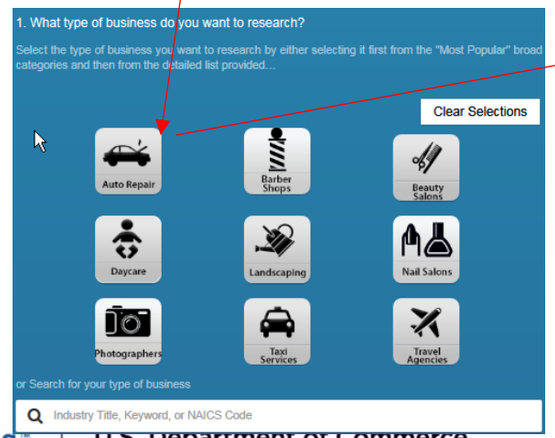
https://cbb.census.gov/rae/#
https://cbb.census.gov/sbe/#

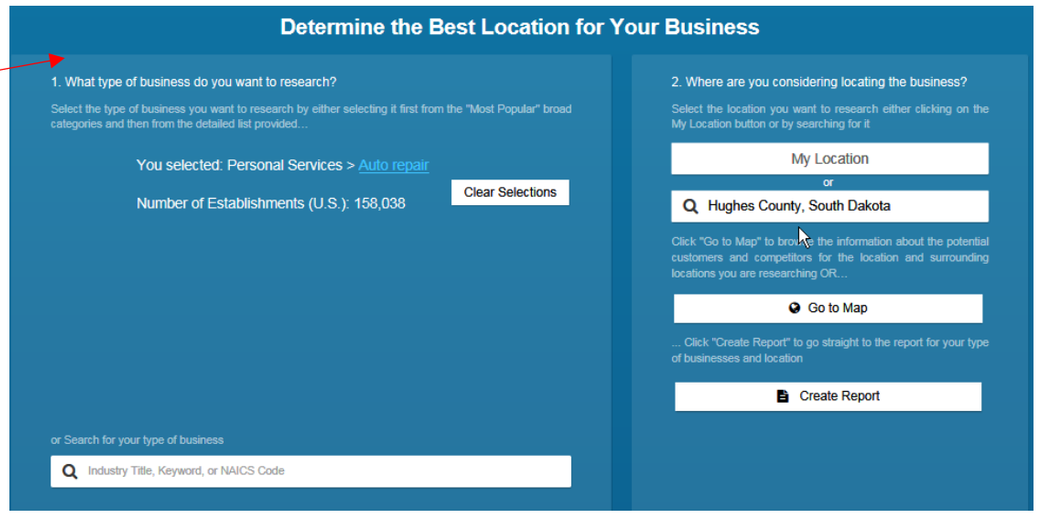
Key Features:

- Easy to use menus to select your type of business and location
- Interactive maps to browse data about the selected area and types of businesses
- Downloadable reports (including charts) that can be easily incorporated into your research
- Expanded, customizable dashboard
- Download data directly from the map
- New, interactive Profile Reports for Businesses and Regions
- Optimized for your smart phone or tablet
- Small Business Edition: Access to all types of businesses via a new NAICS Search
- Regional Analyst Edition: Build your region from either Cities/Towns or Counties

https://cbb.census.gov/sbe/#
Small Business Edition







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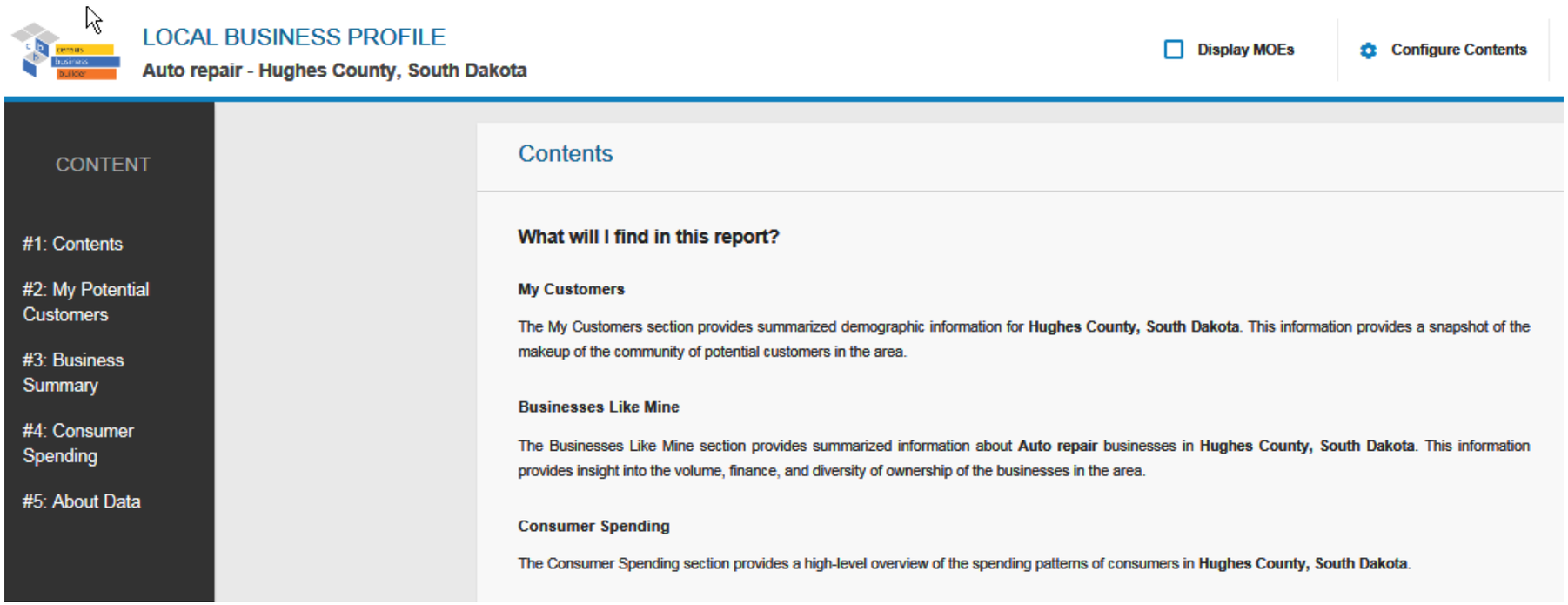
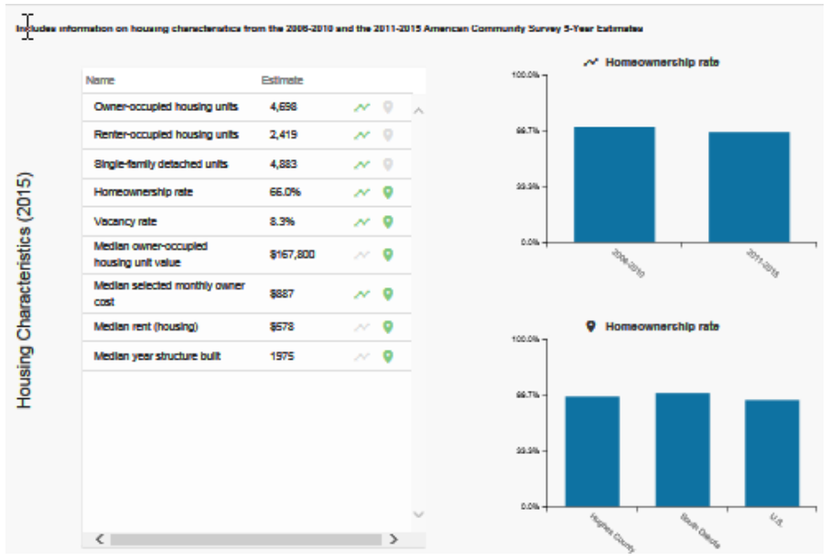
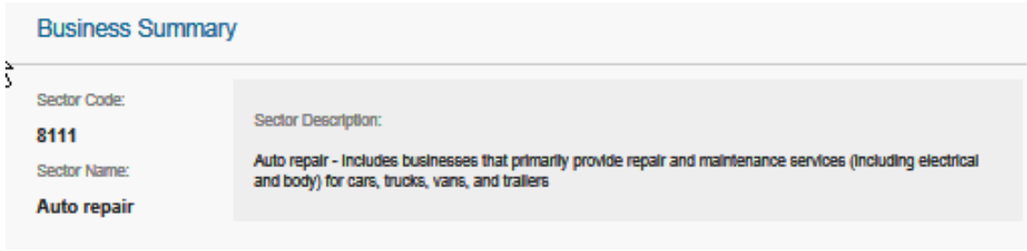
Create a Report

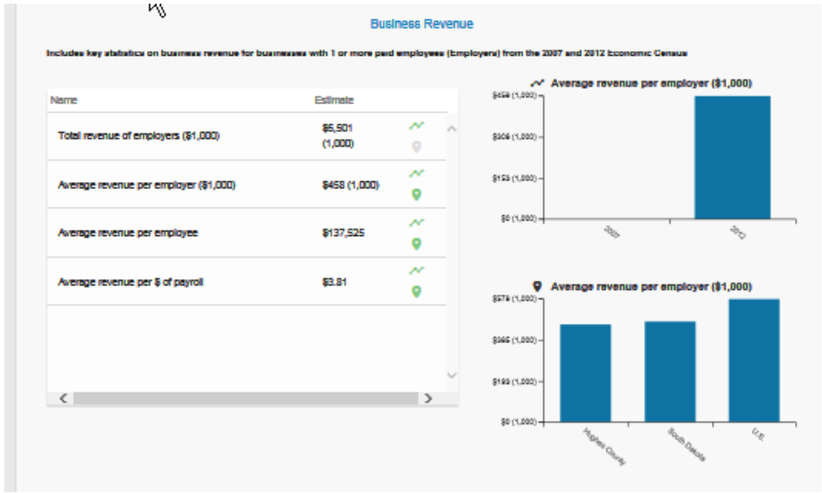


https://cbb.census.gov/sbe/#

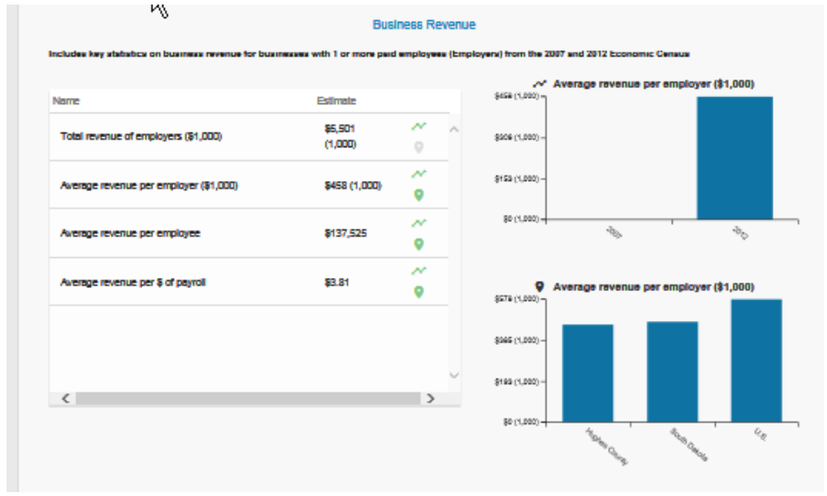
My Potential Customers




Business Summary
Sector Code:
8111
Sector Name:
Auto repair
Sector Description:
Auto repair - Includes businesses that primarily provide repair and maintenance services (including electrical and body) for cars, trucks, vans, and trailers


Business Revenue
Includes key statistics on business revenue for businesses with 1 or more paid employees (Employers) from the 2007 and 2012 Economic Census
Name
Estimate
Total revenue of employers ($1,000)
$5,501 (1,000)
Average revenue per employer ($1,000)
$458 (1,000)
Average revenue per employee
$137,525
Average revenue per $ of payroll
$3.81
Average revenue per employer ($1,000)
2007
2012
Average revenue per employer ($1,000)
Highest County
South Dakota
U.S.

Employer Businesses
Name
Estimate
Employer establishments
12
Total employment of employers
43
Total annual payroll of employers ($1,000)
$1,610 (1,000)
Average employment per employer
4
Average payroll per employee
$37,442
Population per employer
1,456
Average employment per employer
Average employment per employer


Business Revenue
Includes key statistics on business revenue for businesses with 1 or more paid employees (Employers) from the 2007 and 2012 Economic Census
Name
Estimate
Total revenue of employers ($1,000)
$5,501 (1,000)
Average revenue per employer ($1,000)
$458 (1,000)
Average revenue per employee
$137,525
Average revenue per $ of payroll
$3.81
Average revenue per employer ($1,000)
2007
2012
Average revenue per employer ($1,000)
Highest County
South Dakota
U.S.

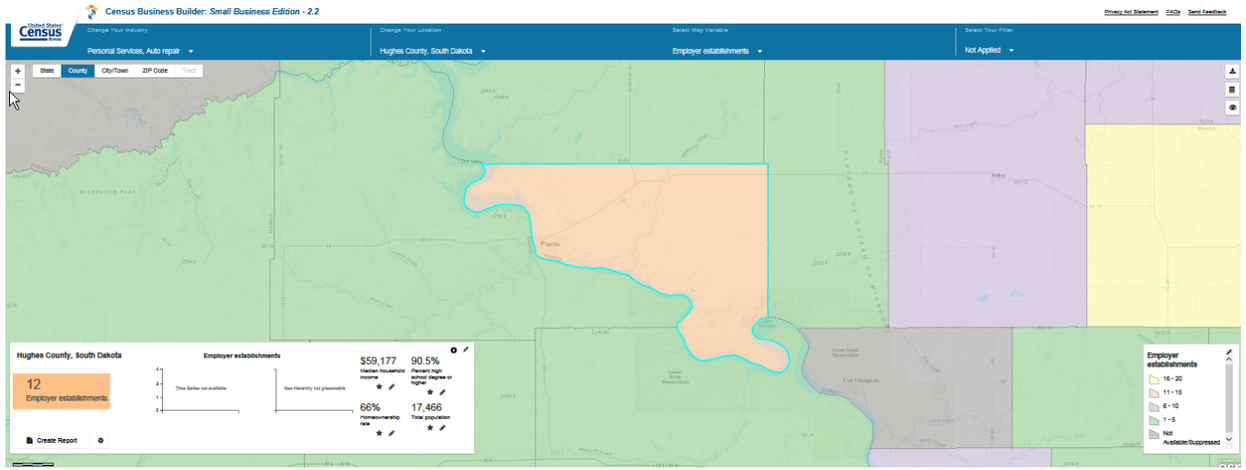
Consumer Spending

Includes information on per capita consumer expenditures from the 2015 American Community Survey 5-year estimate and Esri

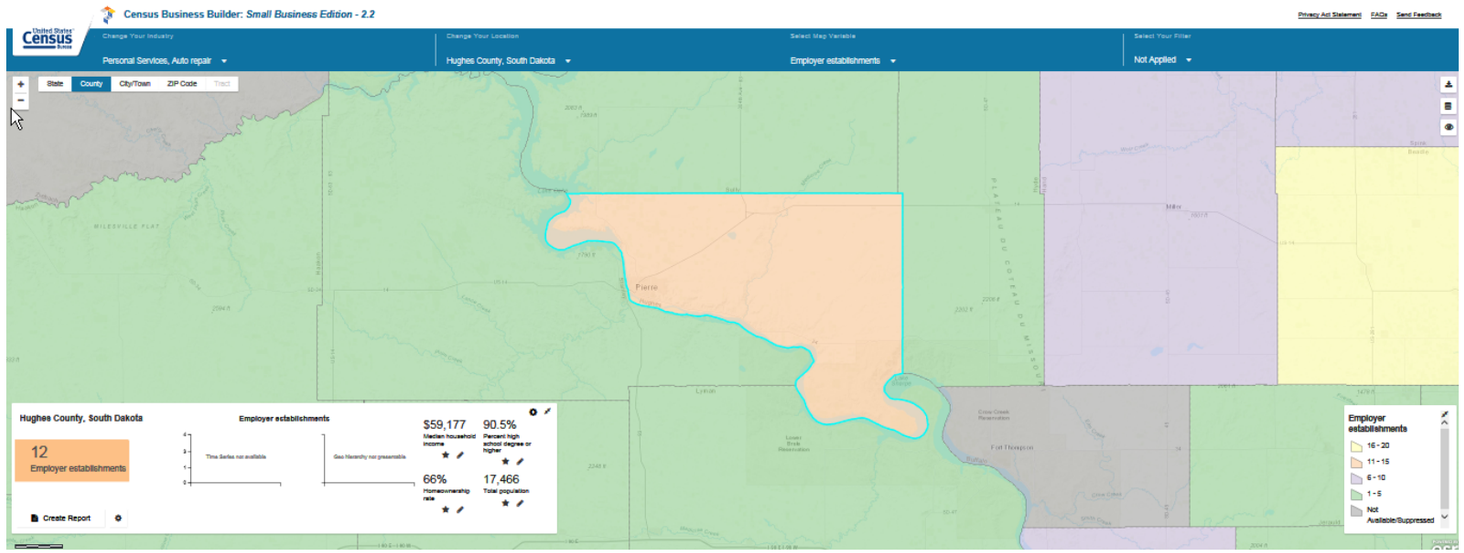
Name	Estimate
Total per capita consumer expenditures	$26,561
Per capita consumer expenditures on Alcoholic beverages	$205
– Per capita consumer expenditures on Alcoholic beverages consumed at home	$129
– Per capita consumer expenditures on Beer consumed away from home	$35
– Per capita consumer expenditures on Wine consumed away from home	$16
Per capita consumer expenditures on Apparel & services	$791
– Per capita consumer expenditures on Men's Apparel	$157
– Per capita consumer expenditures on Women's Apparel	$275
– Per capita consumer expenditures on Children's Apparel	$124
– Per capita consumer expenditures on Boys' Apparel	$37
– Per capita consumer expenditures on Girls' Apparel	$51
– Per capita consumer expenditures on Footware	$168
Per capita consumer expenditures on Dining out (Food away from home)	$1,233
– Per capita consumer expenditures on Dining out - Breakfast	$126
– Per capita consumer expenditures on Dining out - Lunch	$382
– Per capita consumer expenditures on Dining out - Dinner	$566
Per capita consumer expenditures on Education	$523
Per capita consumer expenditures on Entertainment / Recreation	$1,182
– Per capita consumer expenditures on Club membership fees	$71
– Per capita consumer expenditures on Dating services	$0

Source: Esri (2016)

Go To Map

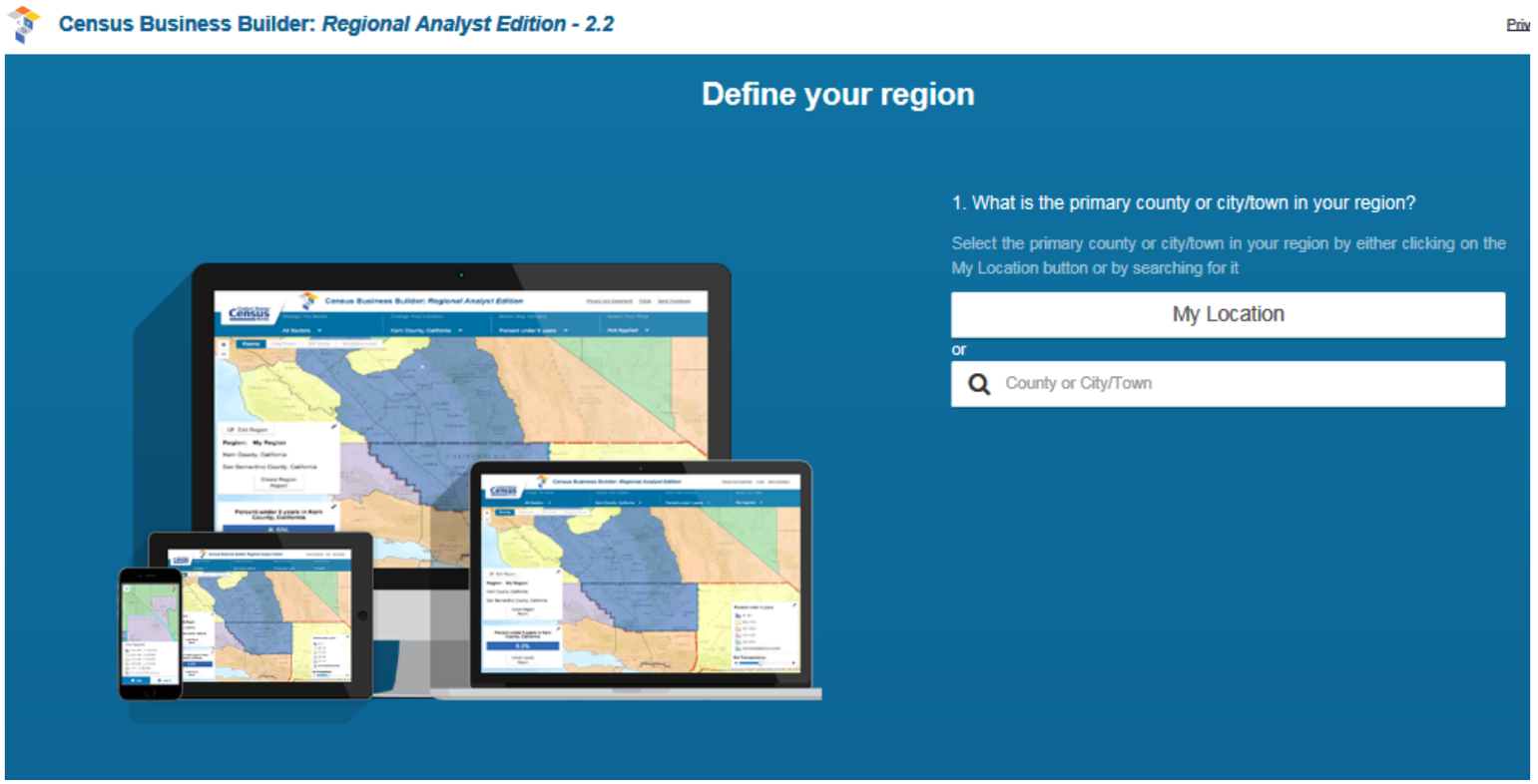


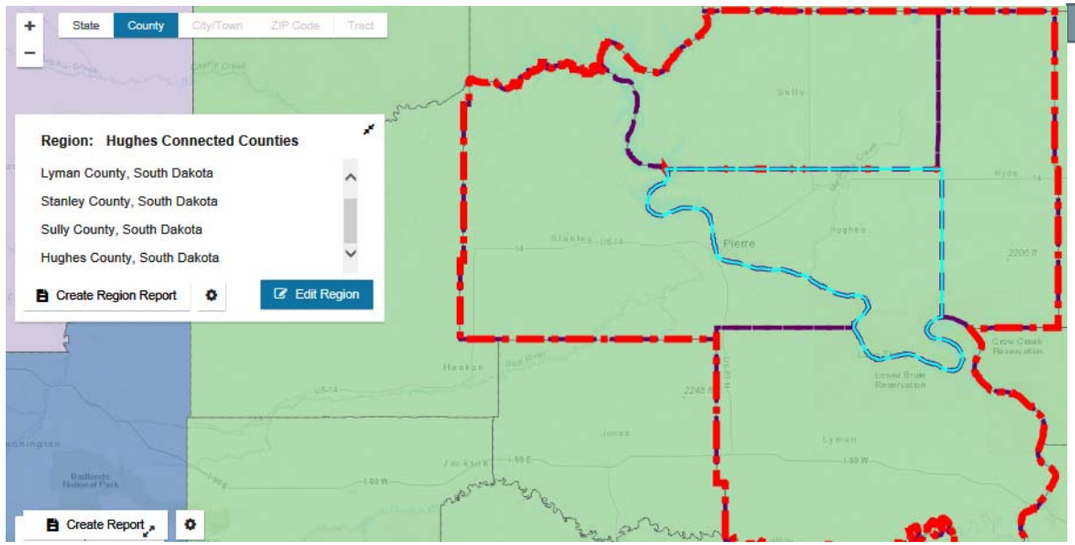
Analyze a characteristic visually on the map



https://cbb.census.gov/rae/#

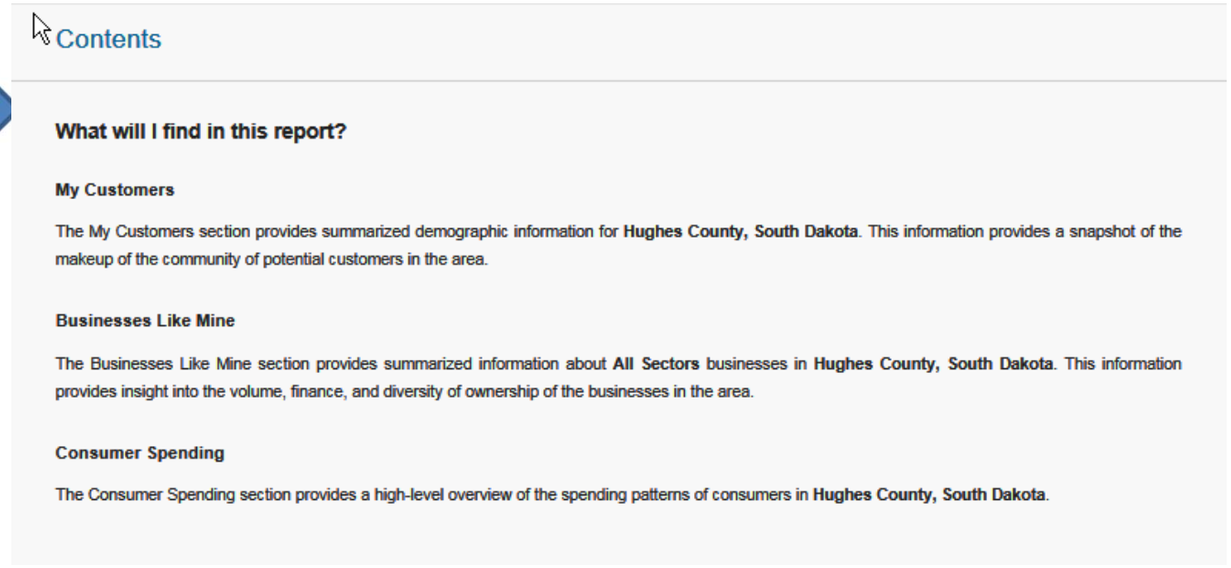
Regional Analyst Edition





Define your Regional Area

Create a Report
Summary or Detailed



Contents

What will I find in this report?

My Customers

The My Customers section provides summarized demographic information for **Hughes County, South Dakota**. This information provides a snapshot of the makeup of the community of potential customers in the area.

Businesses Like Mine

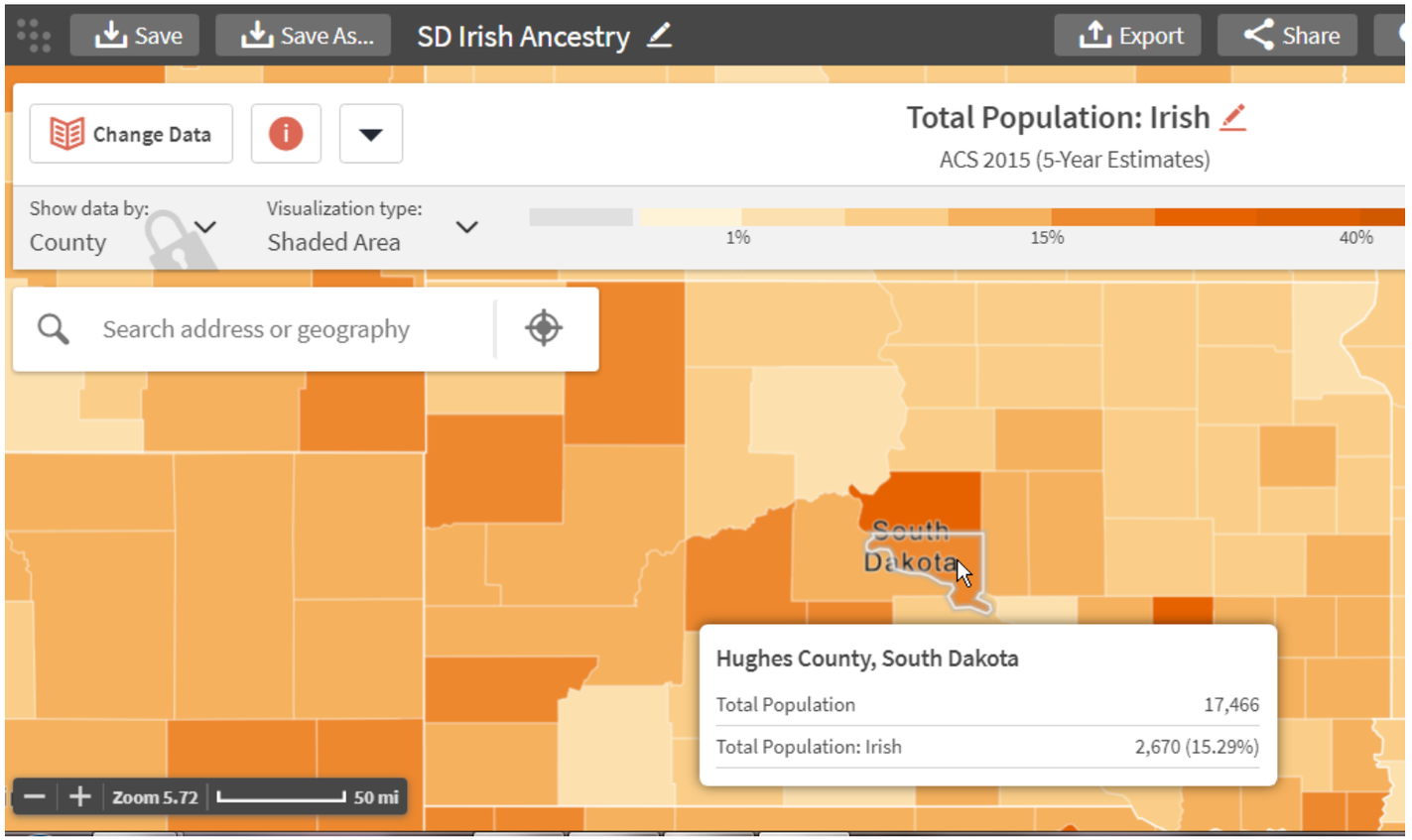
The Businesses Like Mine section provides summarized information about **All Sectors** businesses in **Hughes County, South Dakota**. This information provides insight into the volume, finance, and diversity of ownership of the businesses in the area.

Consumer Spending

The Consumer Spending section provides a high-level overview of the spending patterns of consumers in **Hughes County, South Dakota**.

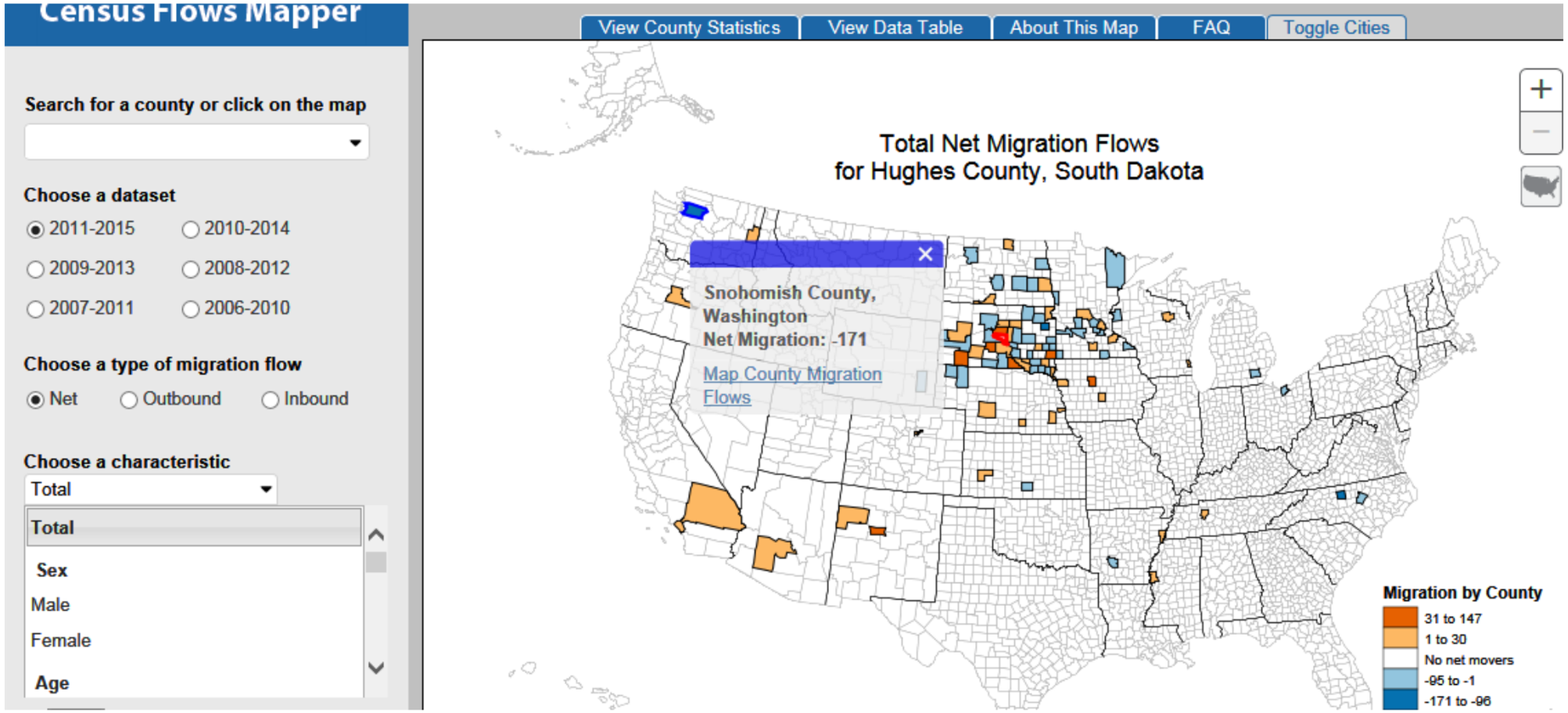
Social Explorer https://www.socialexplorer.com/fd0ad74161/explore

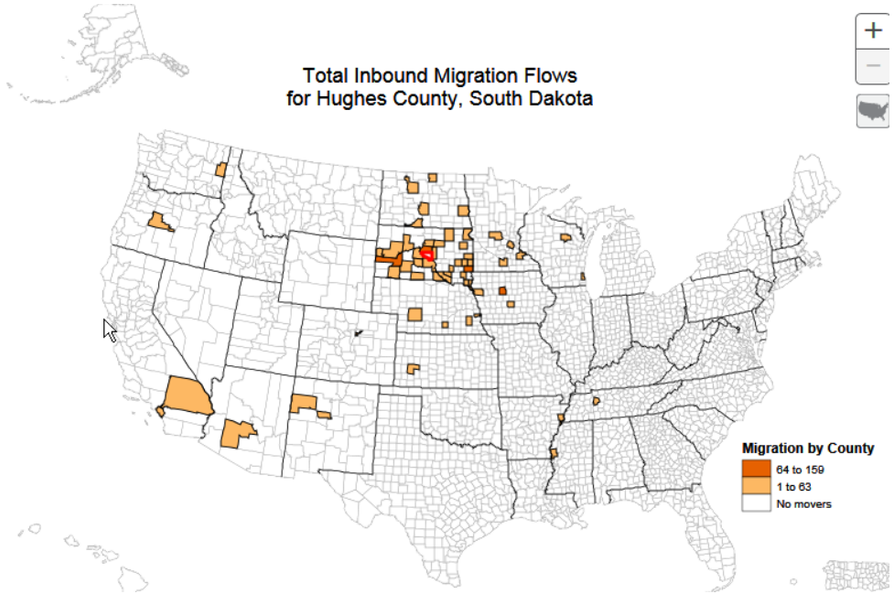
Irish Ancestry in South Dakota



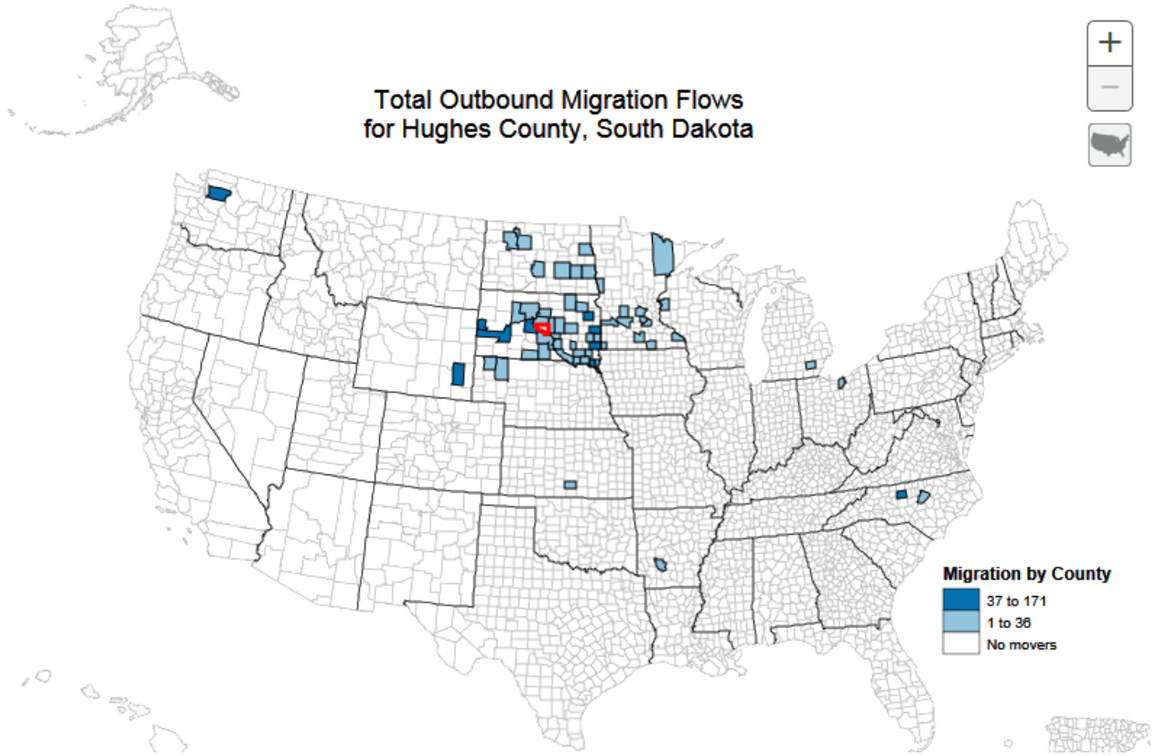
Census Flows Mapper, Population Migration , In-out-net

https://flowsmapper.geo.census.gov/map.html





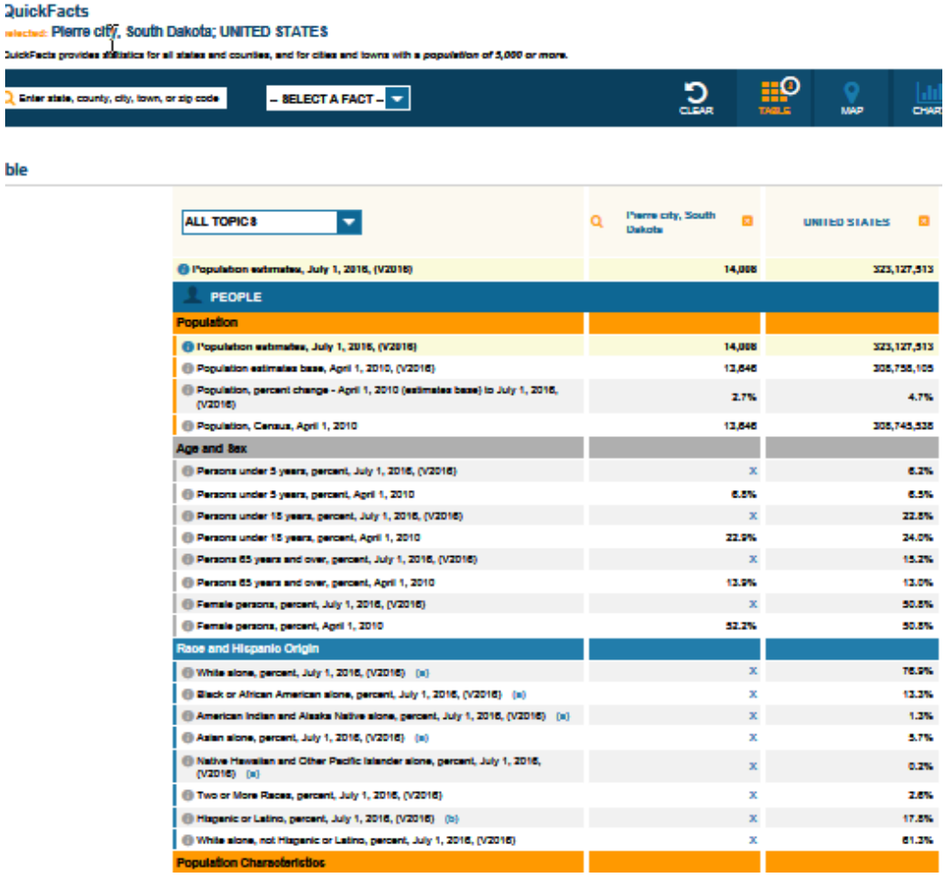
IN
Where are they coming From

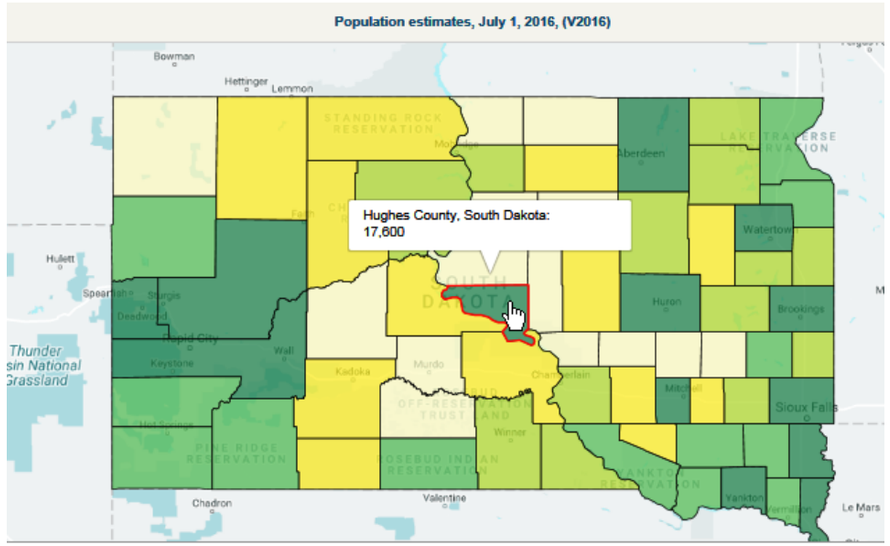


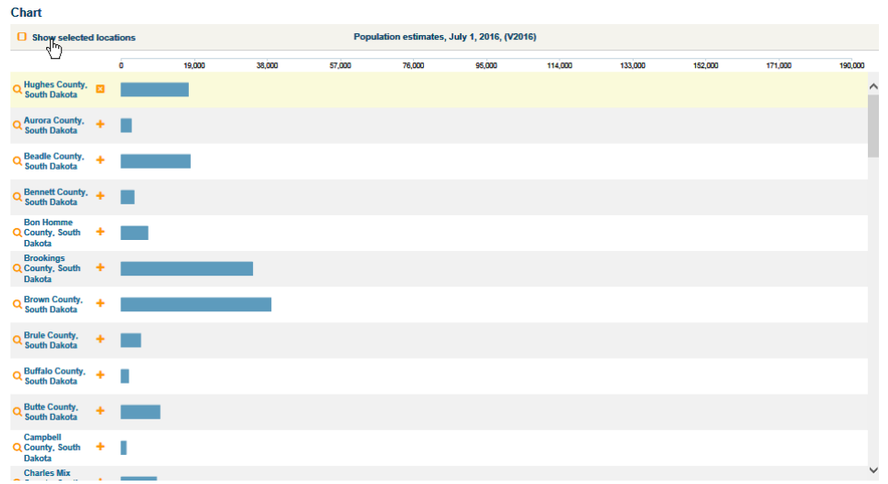
Out
Where are they Migrating to

Quick Facts https://www.census.gov/quickfacts/

For populations over 5000







United States Census Bureau

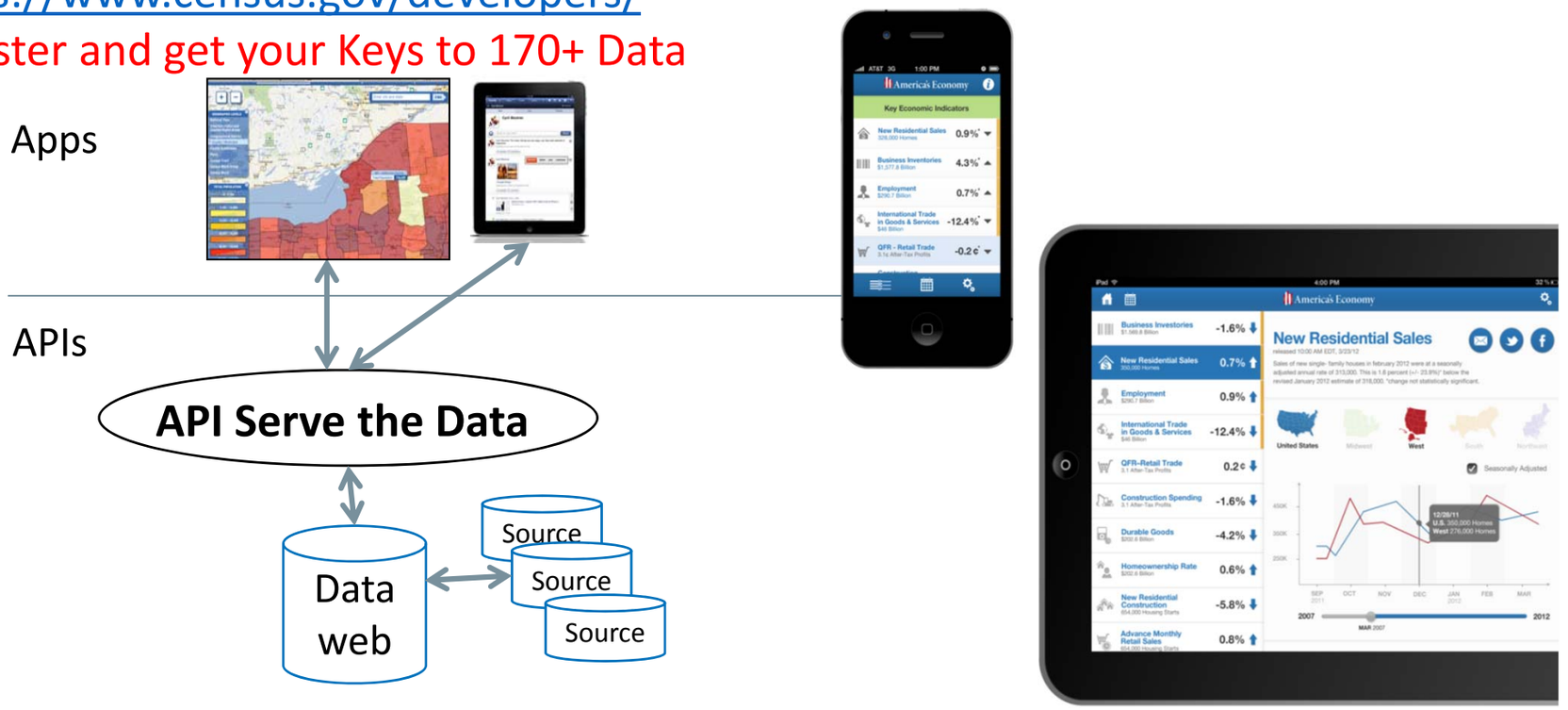
U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

Digital Products for the 21st Century – Open Data

- APIs and Mobile Apps provide new methods of data access
- APIs become the source for new tools on census.gov

https://www.census.gov/developers/

Register and get your Keys to 170+ Data sets

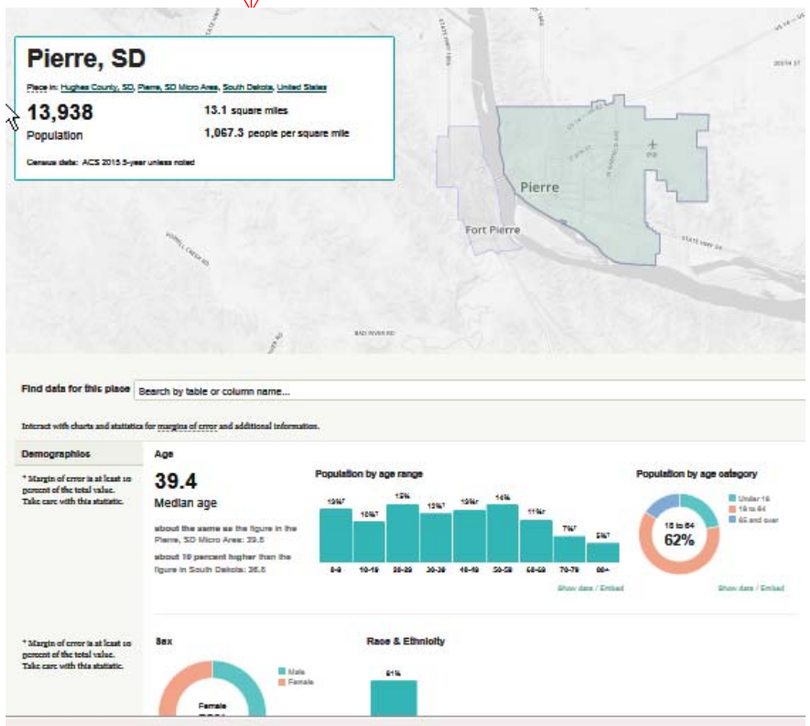


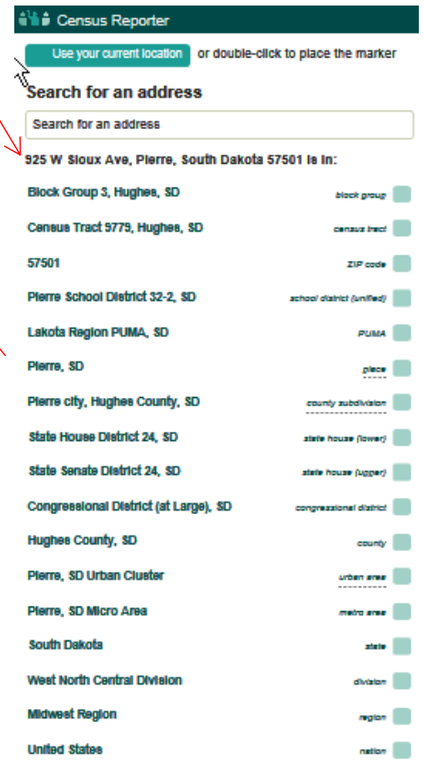
The CitySDK is a collaboration between the US Census Bureau, the Department of Commerce, HUD, USDA, and other agencies in the federal government. The goal is to support civic innovation (through the efforts like Code for America) and streamline the development of applications that use open data. https://uscensusbureau.github.io/citysdk/

Census Reporter API's at work Http://CensusReporter.org/locate

https://censusreporter.org/locate/?lat=44.372497&lng=-100.364366&address=925 W Sioux Ave, Pierre, South Dakota 57501

https://censusreporter.org/profiles/16000US4649600-pierre-sd/

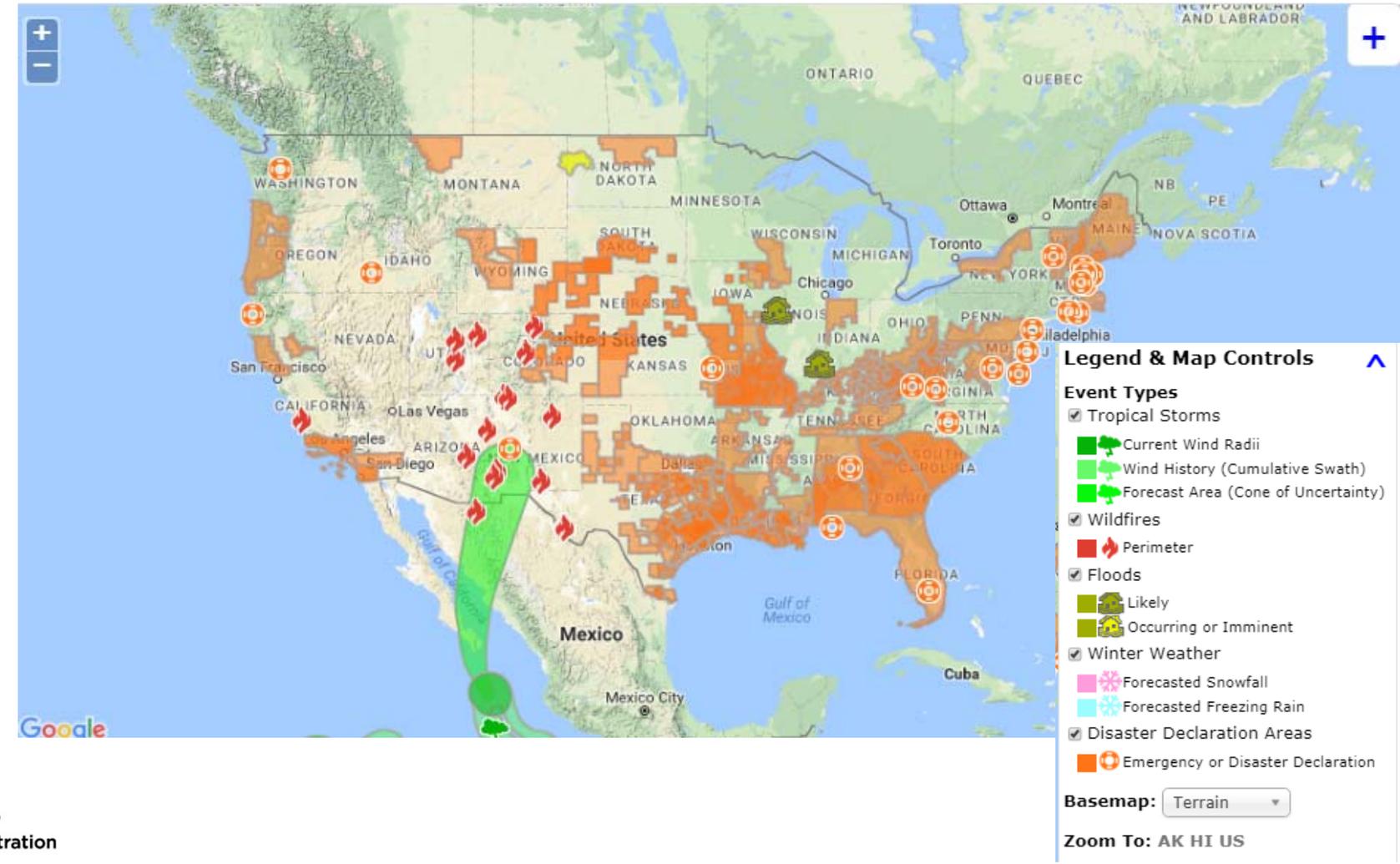




OnTheMap for Emergency Management

http://onthemap.ces.census.gov/em/

provides real-time access to a range of detailed U.S. Census Bureau data about the people living and working in areas being affected by hurricanes, floods, wildfires, winter storms, and federal disaster declaration areas.



CENSUS DATA & TOOLS

Complete list of Census Tools
https://www.census.gov/data/data-tools.html

A Few of Dave's personal favorites
Quick Facts Profiles
https://www.census.gov/quickfacts/fact/table/US/PST045217
American Fact Finder advanced search
https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t
Census Business Builder (CBB)
https://cbb.census.gov/sbe/#
https://cbb.census.gov/rae/#
North American Industry Classification System (NAICS)
http://www.census.gov/eos/www/naics/
On The Map
http://onthemap.ces.census.gov
Response Outreach Area Mapper (ROAM)
https://census.gov/roam

NON CENSUS SITES

Census Reporter
http://censusreporter.org/
Social Explorer
http://www.socialexplorer.com/
Small Business Administration
http://business.usa.gov
Other Federal Statistical Agencies
Https://www.usa.gov/statistics
Minnesota Population Center
http://www.pop.umn.edu/
National Historical Geographic Information System (NHGIS)
https://www.nhgis.org/
Missouri State Data Center
http://mcdc2.missouri.edu
Federal Statistical Research Data Center
https://www.census.gov/about/adrm/fsrdc/locations/kansas-city.html

United States Census Bureau
U.S. Department of Commerce
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