

2020

Let's Pivot Basic Data Analysis Using Microsoft Excel: Census Data



Trueblood, Amber

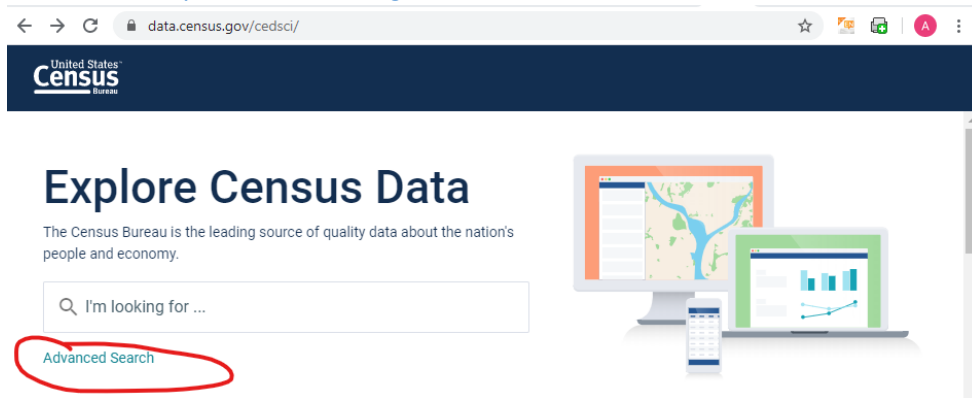
Texas A&M Transportation Institute

6/12/2020

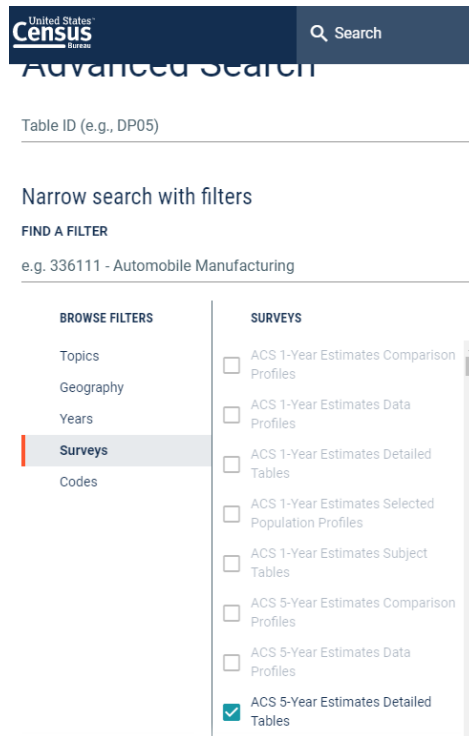
Census Data Walk Through

ACS Data Example # 1 (Means of Transportation to Work by Earnings)

- a. Go to <https://data.census.gov/> and Select Advanced Search



- i. Select Surveys
 1. ACS 5-Year Estimates Detailed Tables



- ii. Select Geography
 1. Select Tract
 2. Select Texas
 3. Select All Census Tracts within Texas

// Search / Advanced Search

Advanced Search

Table ID (e.g., DP05)

Narrow search with filters

FIND A FILTER

e.g. 336111 - Automobile Manufacturing

BROWSE FILTERS	GEOGRAPHY	WITHIN (STATE)	WITHIN (COUNTY)
<ul style="list-style-type: none"> Topics Geography Years Surveys Codes 	<p><input type="checkbox"/> Show Summary Levels</p> <ul style="list-style-type: none"> Nation Region Division State County Tract Block Group Block Zip Code Tabulation Area (Five-Digit) Elementary School District Secondary School District Unified School District 	<ul style="list-style-type: none"> Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware District of Columbia Florida Georgia Hawaii Idaho Illinois 	<p>Within Other Geographies</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> All Census Tracts within Texas Anderson County, Texas Andrews County, Texas Angelina County, Texas Aransas County, Texas Archer County, Texas Armstrong County, Texas Atascosa County, Texas Austin County, Texas Bailey County, Texas Bandera County, Texas Bastrop County, Texas

iii. Select Topics

1. Select Employment
2. Select Commuting

// Search / Advanced Search

Advanced Search

Table ID (e.g., DP05)

Narrow search with filters

FIND A FILTER

e.g. 336111 - Automobile Manufacturing

BROWSE FILTERS	TOPICS	EMPLOYMENT
<ul style="list-style-type: none"> Topics Geography Years Surveys Codes 	<ul style="list-style-type: none"> Business and Economy Education Employment Families and Living Arrangements Government Health Housing Income and Poverty Populations and People Race and Ethnicity 	<ul style="list-style-type: none"> <input type="checkbox"/> Employment <input type="checkbox"/> Class of Worker <input checked="" type="checkbox"/> Commuting <input type="checkbox"/> Employment and Labor Force Status <input type="checkbox"/> Industry <input type="checkbox"/> Occupation <input type="checkbox"/> Work from Home Work Experience

iv. Add a second Topic

1. Select Income and Poverty

// Search / Advanced Search

Advanced Search

Table ID (e.g., DP05)

Narrow search with filters

FIND A FILTER

e.g. 336111 - Automobile Manufacturing

BROWSE FILTERS	TOPICS	INCOME AND POVERTY	POVERTY
Topics	Business and Economy	<input checked="" type="checkbox"/> Income and Poverty	<input type="checkbox"/> Poverty
Geography	Education	<input type="checkbox"/> Wealth and Assets	<input type="checkbox"/> Official Poverty Measure
Years	Employment	Income and Earnings	<input type="checkbox"/> Supplemental Poverty Measure
Surveys	Families and Living Arrangements	Poverty	<input type="checkbox"/> Well-Being
Codes	Government		
	Health		
	Housing		
	Income and Poverty		
	Populations and People		
	Race and Ethnicity		

v. Select Search

CLEAR FILTERS
SEARCH

vi. Review Matches

United States **Census** Bureau
Search

ALL TABLES MAPS PAGES

About 39,765 results | [Filter](#)

Tables

MEANS OF TRANSPORTATION TO WORK BY WORKERS' EARNINGS IN THE PAST 12 MONTHS (IN 2018 INFLATION-ADJUSTED DOLLARS)
 Survey/Program: American Community Survey
 Years: 2018,2017,2016,2015,2014,2013,2012,2011,2010 Table: B08119

Sorry, that table is too large to display.

DOWNLOAD TABLE
FILTER RESULTS

MEDIAN EARNINGS IN THE PAST 12 MONTHS (IN 2018 INFLATION-ADJUSTED DOLLARS) BY MEANS OF TRANSPORTATION TO WORK
 Survey/Program: American Community Survey
 Years: 2018,2017,2016,2015,2014,2013,2012,2011,2010 Table: B08121

MEANS OF TRANSPORTATION TO WORK BY POVERTY STATUS IN THE PAST 12 MONTHS
 Survey/Program: American Community Survey
 Years: 2018,2017,2016,2015,2014,2013,2012,2011,2010 Table: B08122

VIEW ALL TABLES (3)

Maps

MEANS OF TRANSPORTATION TO WORK BY WORKERS' EARNINGS IN THE PAST 12 MONTHS (IN 2018 INFLATION-ADJUSTED DOLLARS)
 Survey/Program: American Community Survey
 Years: 2018,2017,2016,2015,2014,2013,2012,2011,2010 Table: B08119

b. Downloading ACS Data

i. Find Data and Click Download Table

DOWNLOAD TABLE

FILTER RESULTS

Download / Print / Share

DOWNLOAD EMBED SHARE API PRINT MORE DATA

Select Table Vintages

	All	2018	2017	2016	2015	2014	2013	2012	2011	2010
B08119 5-Year	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

File Type

CSV

PDF

What You're Getting

- 1 .csv files (metadata)
- 1 .csv files (data)
- 1 .txt files (table title)

Uncompressed Estimated Size: 6.7 MB

DOWNLOAD

Note 2018 5-year estimates include: 2014,2015, 2016,2017,2018

1. Click Download
2. Once files are prepared click download now.

We're preparing your files.

Canceling this window will end the download.

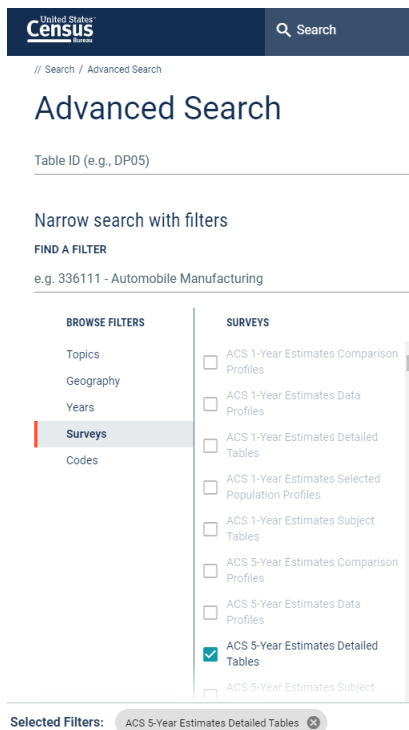
100%

Download Now

- c. ACS Data in Excel
 - i. Unzip Data
 1. Open Files
 - a. Metadata
 - b. Data
 - c. Table Title
 - ii. Cleaning File
 1. Save metadata
 2. Save file as worksheet
 - d. Let's Pivot
 - i. Goal look at Differences in the Average Percent of Population by Earnings that Walk for Commuting
 1. Statewide
 2. Travis County
 3. Census Tracts in Travis County

ACS Data Example # 2 (Age and Sex)

- a. Go to <https://data.census.gov/> and Select Advanced Search
- ii. Surveys
 1. Select ACS 5-Year Estimates Detailed Tables



- iii. Geography
 1. County
 2. Texas
 3. All Counties in Texas

Advanced Search

Table ID (e.g., DP05)

Narrow search with filters

FIND A FILTER

e.g. 336111 - Automobile Manufacturing

- iv. Topics
 - 1. Populations and People
 - a. Age and Sex
- v. Select Search
- vi. Review Matches
- b. Downloading ACS Data
 - vii. Find Data and Click Download Table
 - 1. Click Download
 - 2. Once files are prepared click download now.
 - viii. ACS Data in Excel
 - 1. Unzip Data
 - 2. Open Files
 - a. Metadata
 - b. Data
 - c. Table Title
 - ix. Cleaning File
 - 1. Save metadata
 - 2. Save file as worksheet
- c. Let's Pivot
 - a. Percent Male
 - b. Percent Female

Census Data Example # 3 (Construction)

- a. Go to <https://data.census.gov/> and Select Advanced Search
 1. Codes
 - a. Industry Codes
 - b. 23- Construction
 - c. 23-Construction

United States
Census
BUREAU

Search

// Search / Advanced Search

Advanced Search

Table ID (e.g., DP05)

Narrow search with filters

FIND A FILTER

e.g. 336111 - Automobile Manufacturing

BROWSE FILTERS	CODES	INDUSTRY CODES (NAICS)	23 - CONSTRUCTION
Topics	Industry Codes (NAICS)	<input type="checkbox"/> 99 - Industries not classified	<input checked="" type="checkbox"/> 23 - Construction
Geography	Product and Service Codes	<input type="checkbox"/> 999222 - Other secondary producers	<input type="checkbox"/> 3-digit NAICS within 23
Years	Commodity Codes	11 - Agriculture, forestry, fishing and hunting	<input type="checkbox"/> 4-digit NAICS within 23
Surveys	Material/Fuel	21 - Mining, quarrying, and oil and gas extraction	<input type="checkbox"/> 5-digit NAICS within 23
Codes	NAPCS Collection	22 - Utilities	<input type="checkbox"/> 6-digit NAICS within 23
		23 - Construction	233 - Building, developing, and general contracting
		31-33 - Manufacturing	234 - Heavy construction
		42 - Wholesale trade	235 - Special trade contractors
		44-45 - Retail trade	236 - Construction of buildings
		48-49 - Transportation and warehousing	237 - Heavy and civil engineering construction
		51 - Information	238 - Specialty trade contractors

- b. Select Search
- c. Explore Results
- d. Adding additional search filters
 - x. Add Texas
- e. Downloading ACS Data
 - xi. Find Data and Click Download Table
 1. Click Download
 2. Once files are prepared click download now.
- f. ACS Data in Excel
 - xii. Unzip Data
 1. Open Files
 - a. Metadata
 - b. Data
 - c. Table Title
 - xiii. Cleaning File
 1. Save metadata
 2. Save file as worksheet