



# BUREAU OF BUSINESS & ECONOMIC RESEARCH

## Census 101

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PREPARED BY UNM BUREAU OF BUSINESS AND ECONOMIC RESEARCH

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# Census Bureau 101

DATA, Data, and more data!

## Agenda:

- Decennial Census
  - Just a little background (brief!)
  - Census 2020 data update
- More than **JUST** Decennial Census
  - Census data basics
  - Census Geographies
  - Census Products – Technical Documents
  - Hands on Data.Census.Gov
    - Basics on the search
    - How to select All Tribal Areas within New Mexico
  - API
  - FTP (How to find it!)



# About the US Census Bureau



1790 First  
Census count

Mandated by the U. S. Constitution to count the population every 10 years to apportion seats in the U.S. House of Representatives.

*Both George Washington and Thomas Jefferson expressed skepticism over the final count, expecting a number that exceeded the 3.9 million inhabitants counted in the census.*



# 2020 Census Update

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Apportionment data STATEWIDE TOTALS only  
**April 30, 2021**

Redistricting Data *P.L. 94-171*  
Data not expected to be released until  
**September 30, 2021**

This is different: time release will all geographies

These files are sent to  
Governors, legislative  
leadership and Redistricting  
Commissions if they exist.  
Then released publicly in  
[data.census.gov](https://data.census.gov)

# Redistricting Data Products

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## **P.L. 94-171 Redistricting Data**

Products available will be:

P1 - Race

P2 - Race for voting age

P3 - Hispanic and Race

P4 - Hispanic and Race voting age

H1 - Occupancy Status Housing

P5 - Group Quarters Pop

**Redistricting Data Page:** <https://www.census.gov/programs-surveys/decennial-census/about/rdo.html>

**File Schematic!**

[https://www2.census.gov/programs-surveys/decennial/rdo/about/2020-census-program/Phase3/Phase3\\_prototype\\_schematic\\_final.pdf](https://www2.census.gov/programs-surveys/decennial/rdo/about/2020-census-program/Phase3/Phase3_prototype_schematic_final.pdf)



# Voting Rights Act Data

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Citizen Voting Age Population by Race and Ethnicity – Special Tabulation CVAP

<https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>



# More than just the decennial census

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## Census Bureau Products - Programs

- Decennial Census
- American Community Survey
- Small Area Income and Poverty Estimates
- Census Population Estimates
- Economic Census
- Survey of Business Owners
- Nonemployer Statistics
- Economic Indicators
  - ( Several surveys, construction, manufacturing etc.)
- Annual Survey of Schools System Finances
- Census of Governments
- Survey of Income and Program participation
- Current Population Survey



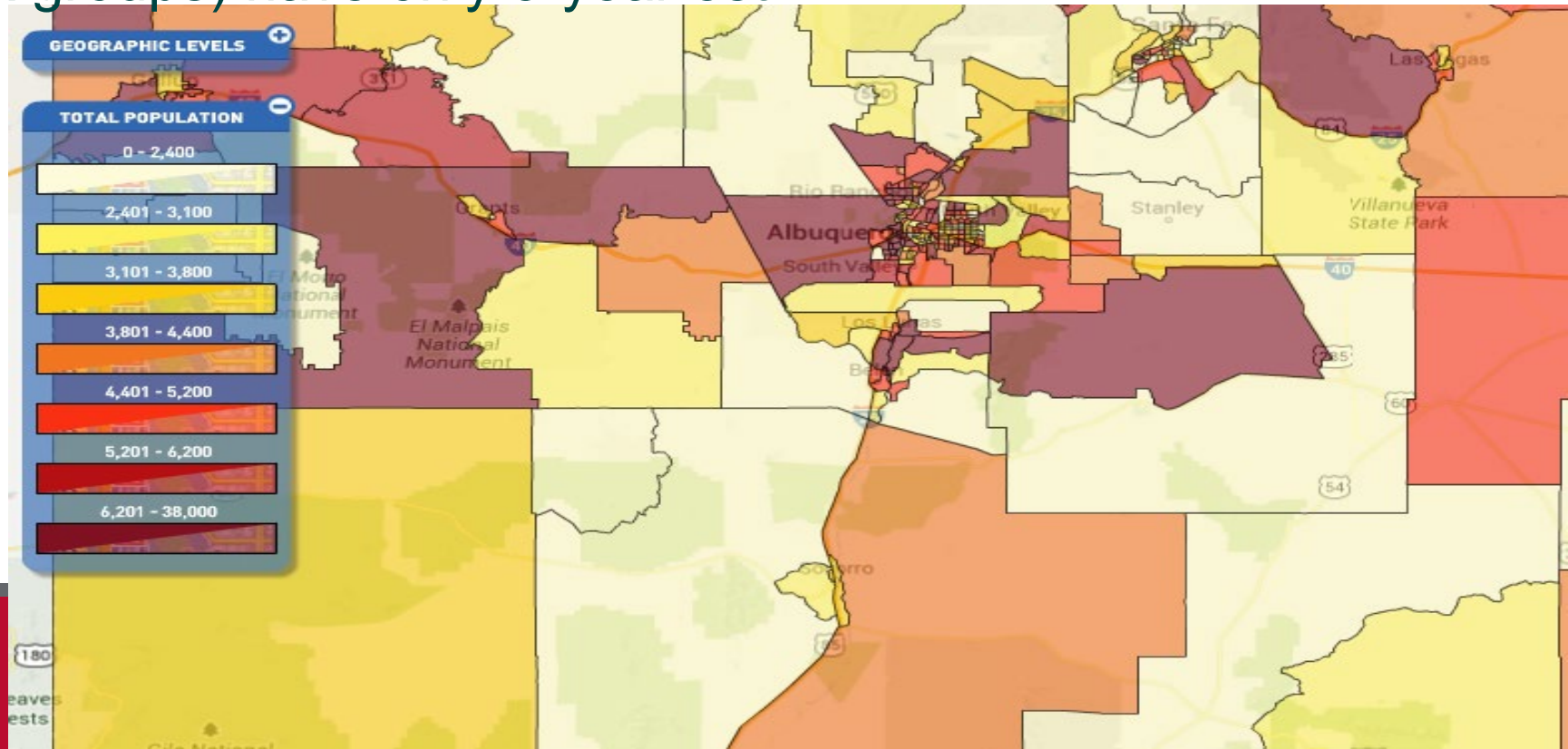


Demographic	Economic	Housing
Age Sex Race	Income	Year Built
Hispanic Origin	Food Stamp Benefit	Units in Structure
Rel. to Householder	Labor Force Status	Year Moved into Unit
	Industry	Room Bedrooms
Social	Occupation	Kitchen Facilities
Marital Status/History	Class of Worker	Plumbing Facilities
Fertility Ancestry Disability	Place of Work	House Heating Fuel
Grandparents as Caregivers	Journey to Work	Telephone Serv. Available
Place of Birth	Work Status Last Year	Farm Residence
Foreign Born - Citizenship	Vehicles Available	Tenure (Owner/Renter)
Year of Entry	Health Ins. Coverage	Housing Value
Language Spoken at Home		Rent
Educational Attainment		Monthly Owner Costs
School Enrollment		
Residence 1 Year Ago		
Veteran Status		
Period of Military Service		
VA Service-Connected Disability		

With a decennial census you can only change questions every ten years. With ACS they can modify/add/delete questions more easily. Leads to consistency issues over time.

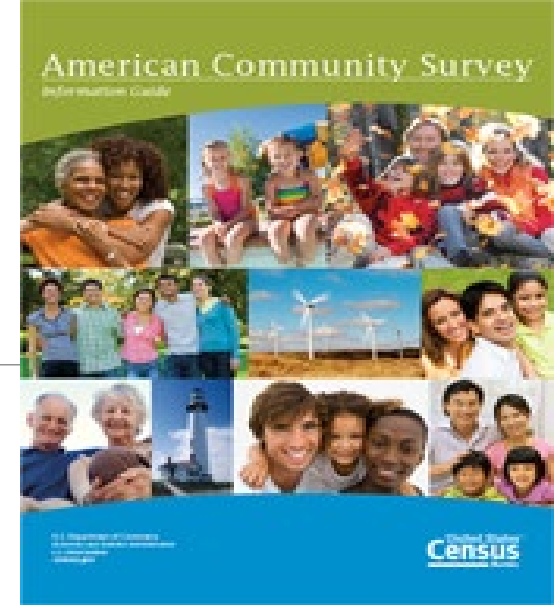
# ACS Geography and Time

- Areas of 65,000 or more have 1-yr and 5-yr est.
- Areas of any population have 5-year est.
- Most Counties in NM only have 5-year est.
- Census tracts (and block groups) have only 5-year est.



# Census Products

- Data Profiles (start with these to find statistics: table ID starts with 'DP')
- Comparison profiles (across years: table ID starts with 'C')
- Selected population profile tables  
(race, ethnic, ancestry, tribal groups: table ID start with 'S').
- Subject tables (also start with 'S')
- Detailed tables (2020 will see fewer tables)
- Public use microdata sample file (40% sample of ACS file, create crosstabs)



# How to find more information on ACS

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<https://www.census.gov/programs-surveys/acs>

Most important is the list of tables under:

- ➔ Technical Documentation
  - ➔ Code Lists, Definitions, and Accuracy
  - ➔ Table Shells and Table List
- 2019 ACS Table List

[https://www2.census.gov/programs-surveys/acs/tech\\_docs/table\\_shells/table\\_lists/2019\\_DataProductList.xlsx](https://www2.census.gov/programs-surveys/acs/tech_docs/table_shells/table_lists/2019_DataProductList.xlsx)



# Data Access

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[data.census.gov](https://data.census.gov)

Feel free to do Hands on with me.

Tutorials are available at [census.gov/academy](https://census.gov/academy)

The rest of the slide show is to provide some simple assistance for you when if you want to review stuff.



# Explore Census Data

The Census Bureau is the leading source of quality data about the nation's people and economy.

SEARCH

[Advanced Search](#) [? Help](#) [Feedback](#)

The screenshot shows a web browser displaying a data table from the Census Bureau. The table title is "ACS DEMOGRAPHIC AND HOUSING ESTIMATES". The table has several columns, including "AGE", "SEX", "RACE", and "HISpanic or Latino". The data is organized into rows, with some rows highlighted in blue. The interface includes a search bar at the top and a "Download" button on the right side of the table.

## Tables

Check out our new table display which allows you to dynamically add geographies, topics, or any applicable filters. You can reorder, pin, and hide columns all with simple drag and drop functionality. Tab through different tables to make sure you found the right one, customize it, and then download multiple vintages of it quickly. If you don't see a functionality you need, find a bug, or have a comment, drop us a line at [census@bureauofeconomicresearch.gov](#).

# Simple search “New Mexico Population”

The screenshot shows the United States Census Bureau search interface. At the top, the search bar contains 'new mexico population' and a 'SEARCH' button. Below the search bar, there are navigation tabs for 'ALL', 'TABLES', 'MAPS', and 'PAGES'. The 'ALL' tab is selected. The search results show 'About 4,768 results | Filter'. There are two 'EXPLORE DATA' cards. The first card displays '2,096,829 Total Population in New Mexico' with a source link to the 2019 American Community Survey. The second card is titled 'New Mexico Profile' and provides statistics on area and water. Below these cards is a 'Tables' section with four entries: 'ACS DEMOGRAPHIC AND HOUSING ESTIMATES', 'TOTAL POPULATION', 'TOTAL POPULATION', and 'AGE AND SEX', each with survey details and table identifiers.

United States Census Bureau

new mexico population

SEARCH

ALL TABLES MAPS PAGES

About 4,768 results | Filter

EXPLORE DATA

**2,096,829 Total Population in New Mexico**

Source 2019 American Community Survey 1-Year Estimates  
https://www.census.gov/programs-surveys/acs/

EXPLORE DATA

**New Mexico Profile**

New Mexico has a total area of 121,269.4 square miles, including 291.7 square miles of water, making it the 5th-largest state by area.

**Tables**

**ACS DEMOGRAPHIC AND HOUSING ESTIMATES**  
Survey/Program: American Community Survey  
Years: 2019,2018,2017,2016,2015,2014,2013,2012,2011,2010 Table: DP05

**TOTAL POPULATION**  
Survey/Program: American Community Survey  
Years: 2019,2018,2017,2016,2015,2014,2013,2012,2011,2010 Table: B01003

**TOTAL POPULATION**  
Survey/Program: Decennial Census  
Years: 2010 Table: P1

**AGE AND SEX**  
Survey/Program: American Community Survey  
Years: 2019,2018,2017,2016,2015,2014,2013,2012,2011,2010 Table: S0101

Note: Tables, Maps Pages.  
On the side is the Profile

Click on “TABLES”  
at the top right



# Table lists – 2,125 for NM

United States  
**Census**  
Bureau
new mexico population
SEARCH

ALL TABLES MAPS PAGES
ACS DEMOGRAPHIC AND HOUSING ESTIMATES
CUSTOMIZE TABLE

2125 Results
FILTER | DOWNLOAD
Survey/Program: American Community Survey  
TableID: DP05
Product: 2019: ACS 1-Year Estimates Data Profiles

	New Mexico			
Label	Estimate	Margin of Error	Percent	
<div style="display: flex; justify-content: space-between; align-items: center;"> <span>▼ SEX AND AGE</span> </div>				
<div style="display: flex; justify-content: space-between; align-items: center;"> <span>▼ Total population</span> </div>	2,096,829	*****	2,096,829	
Male	1,036,708	±3,586	49.4%	
Female	1,060,121	±3,586	50.6%	
Sex ratio (males per 100 females)	97.8	±0.7	(X)	
Under 5 years	116,978	±1,500	5.6%	
5 to 9 years	130,751	±6,064	6.2%	
10 to 14 years	146,207	±5,678	7.0%	
15 to 19 years	139,186	±3,826	6.6%	
20 to 24 years	137,719	±3,834	6.6%	
25 to 34 years	278,627	±4,322	13.3%	
35 to 44 years	261,847	±4,320	12.5%	
45 to 54 years	235,075	±3,383	11.2%	
55 to 59 years	132,366	±4,303	6.3%	
60 to 64 years	140,343	±4,528	6.7%	
65 to 74 years	224,011	±2,463	10.7%	
75 to 84 years	113,221	±3,199	5.4%	

**ACS DEMOGRAPHIC AND HOUSING ESTIMATES**  
Survey/Program: American Community Survey  
Years: 2019,2018,2017,2016,2015,2014,2013,2012,2011,2010  
Table: DP05

---

**TOTAL POPULATION**  
Survey/Program: American Community Survey  
Years: 2019,2018,2017,2016,2015,2014,2013,2012,2011,2010  
Table: B01003

---

**TOTAL POPULATION**  
Survey/Program: Decennial Census  
Years: 2010  
Table: P1

---

**AGE AND SEX**  
Survey/Program: American Community Survey  
Years: 2019,2018,2017,2016,2015,2014,2013,2012,2011,2010  
Table: S0101

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**POPULATION BY SEX**  
Survey/Program: American Community Survey  
Years: 2019,2018,2017,2016,2015,2014

Send Feedback [cedsci.feedback@census.gov](mailto:cedsci.feedback@census.gov)

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# Note the options on the tool

United States Census Bureau

new mexico population

SEARCH

ALL TABLES MAPS PAGES

2125 Results FILTER DOWNLOAD

**ACS DEMOGRAPHIC AND HOUSING ESTIMATES**  
 Survey/Program: American Community Survey  
 TableID: DP05

Product: 2019: ACS 1-Year Estimates Data Profiles

**CUSTOMIZE TABLE**

Label	Estimate	Margin of Error	Percent
<ul style="list-style-type: none"> <li>SEX AND AGE               <ul style="list-style-type: none"> <li>Total population</li> <li>Male</li> <li>Female</li> <li>Sex ratio (males per 100 females)</li> <li>Under 5 years</li> <li>5 to 9 years</li> <li>10 to 14 years</li> <li>15 to 19 years</li> <li>20 to 24 years</li> <li>25 to 34 years</li> <li>35 to 44 years</li> <li>45 to 54 years</li> <li>55 to 59 years</li> <li>60 to 64 years</li> <li>65 to 74 years</li> <li>75 to 84 years</li> </ul> </li> </ul>			
Total population	2,096,829	*****	2,096,829
Male	1,036,708	±3,586	49.4%
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Columns Cell/Column Notes

**ACS DEMOGRAPHIC AND HOUSING ESTIMATES**  
 Survey/Program: American Community Survey  
 Years: 2019,2018,2017,2016,2015,2014,2013,2012,2011,2010  
 Table: DP05

**TOTAL POPULATION**  
 Survey/Program: American Community Survey  
 Years: 2019,2018,2017,2016,2015,2014,2013,2012,2011,2010  
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 Survey/Program: Decennial Census  
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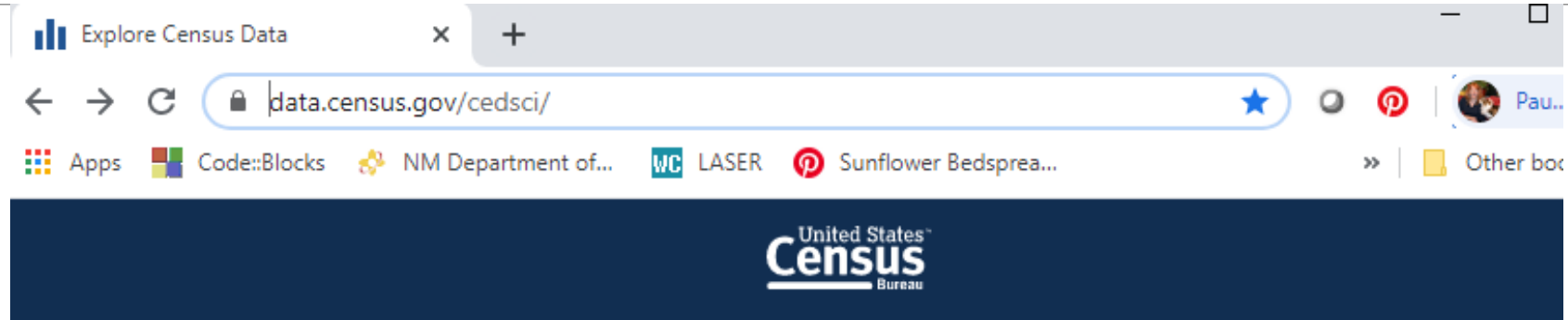
**AGE AND SEX**  
 Survey/Program: American Community Survey  
 Years: 2019,2018,2017,2016,2015,2014,2013,2012,2011,2010  
 Table: S0101

**POPULATION BY SEX**  
 Survey/Program: American Community Survey  
 Years: 2016,2015,2014

Send Feedback  
 cedsci.feedback@census.gov



# How to select all American Indian Areas with in NM



## Explore Census Data

The Census Bureau is the leading source of quality data about the nation's people and economy.

[Advanced Search](#)



# Step 2: Geography

// 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

Geography

Years

Surveys

Codes

# Step 3: Next slide on the “Show Summary Levels”

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## FIND A FILTER

e.g. 336111 - Automobile Manufacturing

### BROWSE FILTERS

Topics

**Geography**

Years

Surveys

Codes

### GEOGRAPHY

Show Summary Levels

Nation

Region

Division

State

County



# Step 4:

Scroll down and select “280- American Indian Area/Alaska Native Area/Hawaiian Home Land within State.”

## FIND A FILTER

e.g. 336111 - Automobile Manufacturing

### BROWSE FILTERS

Topics

**Geography**

Years

Surveys

Codes

### GEOGRAPHY

Show Summary Levels

278 - American Indian Area/Alaska Native Area/Hawaiian Home Land-AIA (Trust Land Only)/HHL-State (or part)-County (or part)-County Subdivision (or part)-Place/Remainder (or part)

**280 - American Indian Area/Alaska Native Area/Hawaiian Home Land within State**

281 - State American Indian



# Step 5:

## In the next column Select New Mexico

The screenshot displays a three-column interface for filtering data. The first column, titled "BROWSE FILTERS", contains a vertical list of filter categories: "Topics", "Geography" (highlighted with a grey background and an orange vertical bar on the left), "Years", "Surveys", and "Codes". The second column, titled "GEOGRAPHY", features a toggle switch labeled "Show Summary Levels" which is currently turned on. Below this, a list of geographic categories is shown, with "280 - American Indian Area/Alaska Native Area/Hawaiian Home Land within State" highlighted in grey. Other categories include "278 - American Indian Area/Alaska Native Area/Hawaiian Home Land-AIA (Trust Land Only)/HHL-State (or part)-County (or part)-County Subdivision (or part)-Place/Remainder (or part)" and "281 - State-American Indian Area/Alaska Native Area/Hawaiian...". The third column shows a search bar with a magnifying glass icon and a search result list. The search bar contains the text "280 - AMERICAN INDIAN AREA...". The list includes "MISSOURI", "Montana", "Nebraska", "Nevada", "New Hampshire", "New Jersey", "New Mexico" (highlighted in grey), "New York", "North Carolina", and "North Dakota".



# Step 6:

In the last column check “All AIA/ANA/HHL in New Mexico.”

## FIND A FILTER

e.g. 336111 - Automobile Manufacturing



### BROWSE FILTERS

Topics

**Geography**

Years

Surveys

Codes

### GEOGRAPHY

Show Summary Levels

278 - American Indian Area/Alaska Native Area/Hawaiian Home Land-AIA (Trust Land Only)/HHL-State (or part)-County (or part)-County Subdivision (or part)-Place/Remainder (or part)

**280 - American Indian Area/Alaska Native Area/Hawaiian Home Land within State**

281 - State-American Indian Area/Alaska Native Area/Hawaiian Home Land-Tribal Subdivision/Remainder (or part)

282 - State-American Indian Area/Alaska Native Area/Hawaiian Home Land-County (or part)

### 280 - AMERICAN INDIAN AREA...

MISSOURI

Montana

Nebraska

Nevada

New Hampshire

New Jersey

**New Mexico**

New York

North Carolina

North Dakota

Ohio

Oklahoma

Oregon

Pennsylvania

### NEW MEXICO

All AIA/ANA/HHL in New Mexico

Acoma Pueblo and Off-Reservation Trust Land, NM; New Mexico

Cochiti Pueblo, NM; New Mexico

Fort Sill Apache Indian Reservation, NM; New Mexico

Isleta Pueblo, NM; New Mexico

Jemez Pueblo, NM; New Mexico

Jicarilla Apache Nation Reservation and Off-Reservation Trust Land, NM; New Mexico

Jicarilla Apache Reservation, NM; New Mexico

Laguna Pueblo and Off-Reservation Trust Land, NM; New Mexico

# Census API

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- 1) API Basics
- 2) Edit a template URL or Build an API Request
- 3) API Demo
- 4) Resources

See Demystifying the Census API

Webinar <https://www.census.gov/data/academy/webinars/2020/demystifying-the-census-api.html>



# 3 different API's

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## Census Data API

Geocoder: Address and get info on geography it's in.

Tigerweb Services: Shapes



# API Call

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Developers Page <https://www.census.gov/data/developers.html>

**All Calls start with:**

<https://api.census.gov/data/>

**ADD Year/Dataset Name**

<https://api.census.gov/data/2019/pep/>

**Next for the Variables** ?get=

?get=population?get=NAME,POP

**Add Your Geography**

&for=place:\*&in=state:35

Get /datasets available

<https://api.census.gov/data/2019.html>

Variables:

<https://api.census.gov/data/2019/pep/population/variables.html>

Geography:

<https://api.census.gov/data/2018/pep/charagegroups/geography.html>



# Putting it All together - API

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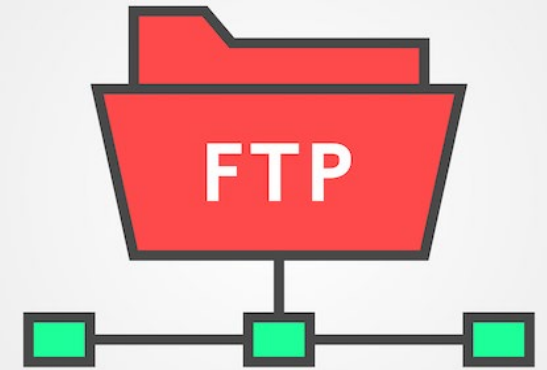
ANNUAL ESTIMATES OF THE RESIDENT POPULATION: APRIL 1, 2010 TO JULY 1, 2019  
for all places in New Mexico

[https://api.census.gov/data/2019/pep/population?get=NAME,POP&for=place:\\*&in=state:35&key=YOUR\\_KEY\\_GOES\\_HERE](https://api.census.gov/data/2019/pep/population?get=NAME,POP&for=place:*&in=state:35&key=YOUR_KEY_GOES_HERE)



# FTP – How to find it!

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FTP webpage link: <https://www.census.gov/programs-surveys/acs/data/data-via-ftp.html>

FTP: <https://www2.census.gov/>

FTP for PEP:

1. Estimates <https://www2.census.gov/programs-surveys/popest/>
  - a) Table of Contents in folder is [FTP2\\_Key.xlsx](#) updated 12/22/2020
2. Projections (2018?) <https://www2.census.gov/programs-surveys/popproj/>





# BUREAU OF BUSINESS & ECONOMIC RESEARCH

## Thank You!

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