Introduction to Census Surveys and Data ACS Demographic Data Analysis

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Dr. Brombos is the Data Dissemination Specialist for the state of New York. Her federal service began in 2018 as New York State's Partnership Coordinator for the 2020 Decennial Census.

Dr. Brombos spent over 20 years working in academia as a Teacher, District Data Specialist, CIO, Academic Researcher, and University Professor, teaching courses in Data Use for Continuous School Improvement, State and Federal Compliance, University Accreditation, and Strategic Planning.

Dr. Brombos is a graduate of the University of Hawai'i at Manoa and D'Youville University with Master's Degrees in Interdisciplinary Biomedical Sciences and Secondary Science Education, and a Doctorate in Leadership in Higher Education.

In 2021 she was awarded the Bronze Medal from the Department of Commerce for Leadership throughout the Decennial Census and the COVID Pandemic.



- The Census Bureau is the federal government's largest statistical agency.
- Our mission is to serve as the leading source of quality data about America's people and economy.
- We conduct more than 130 censuses and surveys each year.
- More than \$2.8 trillion in federal funding distributed to states, communities, tribal governments and other recipients using Census Bureau data in whole or in part.



Selected Tools to Access Data

data.census.gov My Community Explorer Community Resilience Estimates Opportunity Project On The Map

Census Business Builder

SAIPE and SAIHE Interactive Tools

LEHD Suite of Tools

QuickFacts

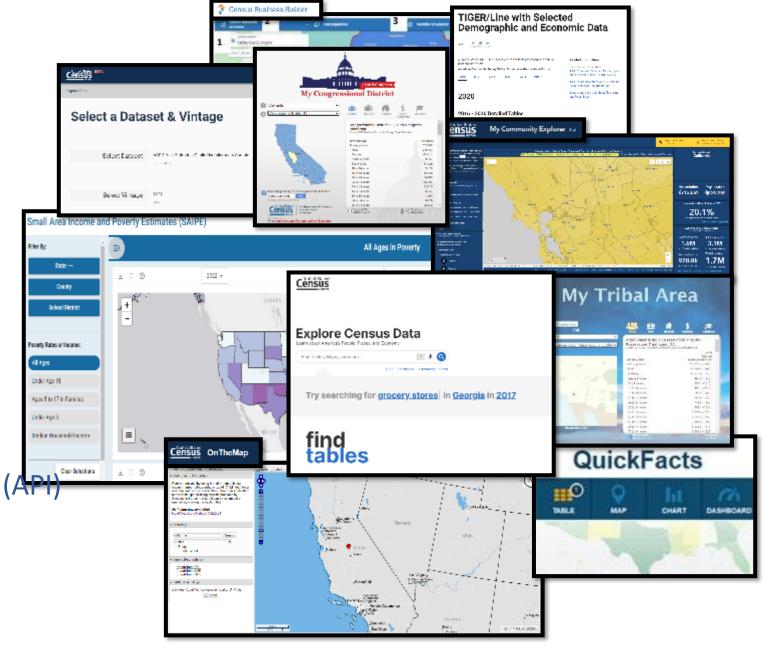
Narrative Profiles

Application Programming Interface (API)

Microdata Access (MDAT)

My Congressional District

My Tribal Area



The Decennial Census

- ✓ Every 10 Years Ending in Zero
- ✓ 100% or Complete Data
- ✓ Point in Time
- ✓ Available at Block Level
- ✓ Official Population Count

DATA COLLECTED

DEMOGRAPHIC

- ✓ Total Population
- ✓ Age
- ✓ Race
- ✓ Hispanic Origin
- ✓ Sex

HOUSING

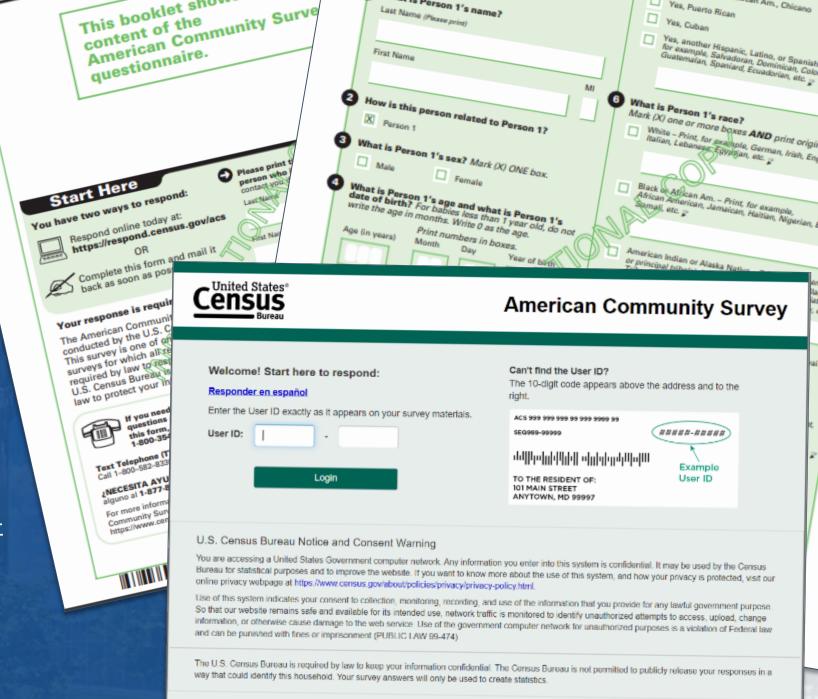
- ✓ Tenure
- ✓ Housing type
- ✓ Units in structure





American Community Survey

- Monthly
- 3.5 million addresses per year
- Vintage 2005
- Estimates released annually
- https://www.census.gov/programssurveys/acs



OMB Numbers: 0607-0810, 0607-0936



What Topics Are Available in the ACS vs. Decennial Census?

Social (DP02)

- ✓ Ancestry
- ✓ Citizenship Status
- ✓ Disability Status
- ✓ Educational Attainment & School Enrollment
- ✓ Fertility
- ✓ Grandparents as Caregivers
- ✓ Language Spoken at Home
- ✓ Marital History; Marital Status
- ✓ Migration/Residence 1 Year Ago
- ✓ Period of Military Service
- ✓ Place of Birth
- ✓ Undergraduate Field of Degree
- ✓ Veteran Status
- ✓ Year of Entry

Demographic (DP05)

- ✓ Age
- ✓ Race
- √ Hispanic Origin
- √Sex

Economic (DP03)

- ✓Income
- ✓ Benefits
- ✓ Employment Status
- ✓ Occupation
- ✓ Industry
- ✓ Commuting to Work
- ✓ Place of Work

Housing (DP04)

- ✓ Tenure
- ✓ Housing Value
- ✓ Occupancy
- √ Taxes and Insurance
- ✓ Household Size
- ✓ Utilities

What topics can you get from the 2020 Census?

- ✓ Age
- ✓ Race
- √ Sex
- ✓ Hispanic or Latino Origin

- ✓ Household Relationship
- ✓ Tenure (Owned vs. Rented
- √ Vacancy Characteristics



ACS Period Estimates

1-Year Estimates

Geographies of 65,000 or more

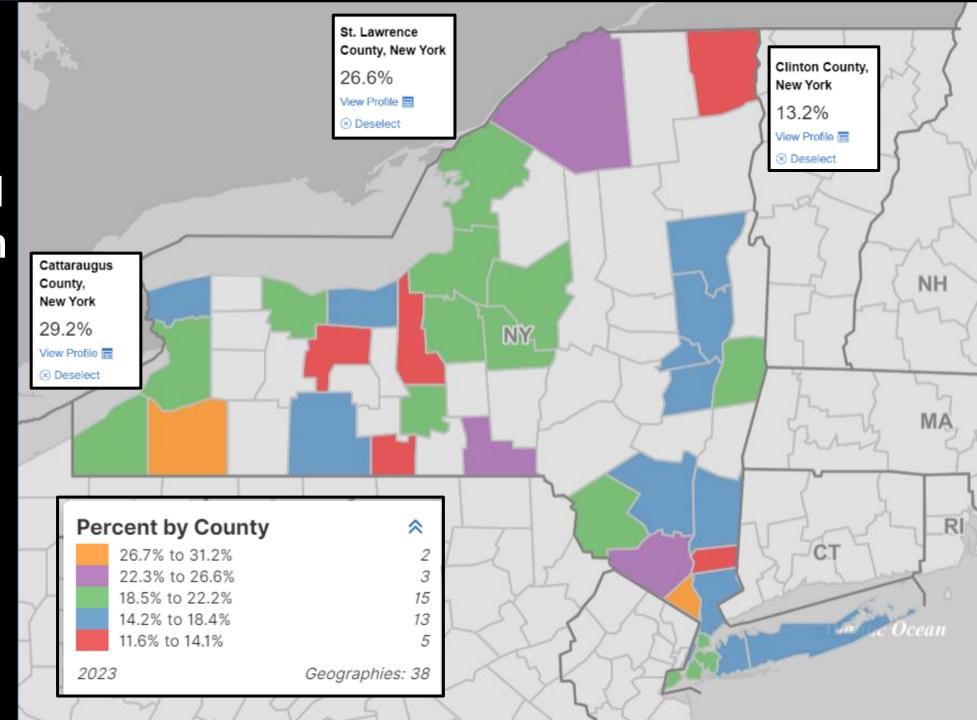
5-Year Estimates

All geographies



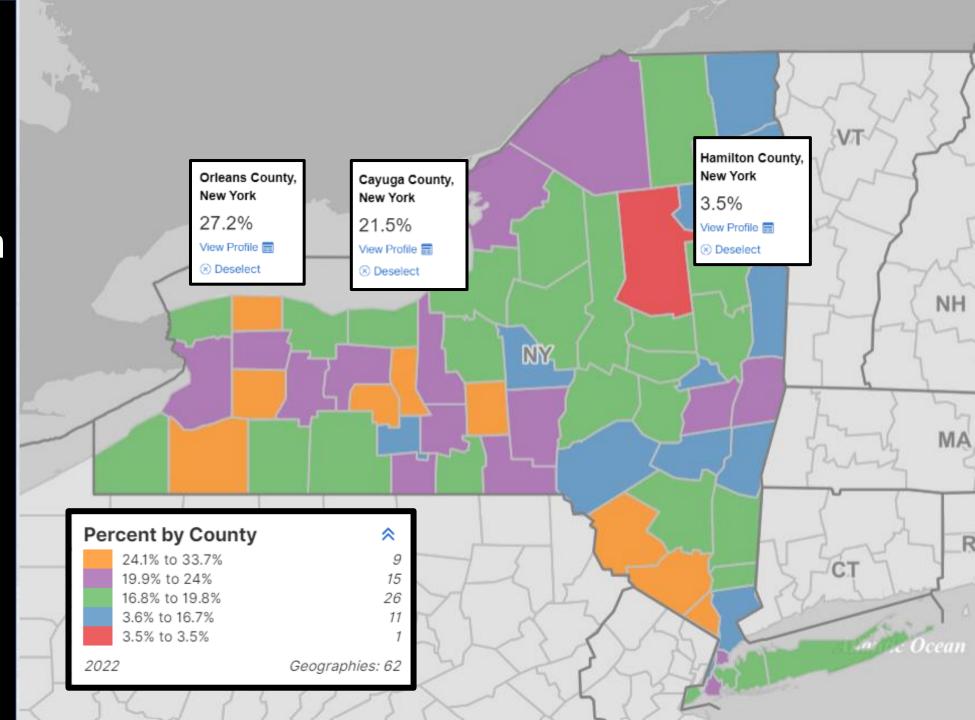
Married-couple family household with own children aged 6- 18 years

1-yr estimates



Married-couple family household with own children aged 6- 18 years

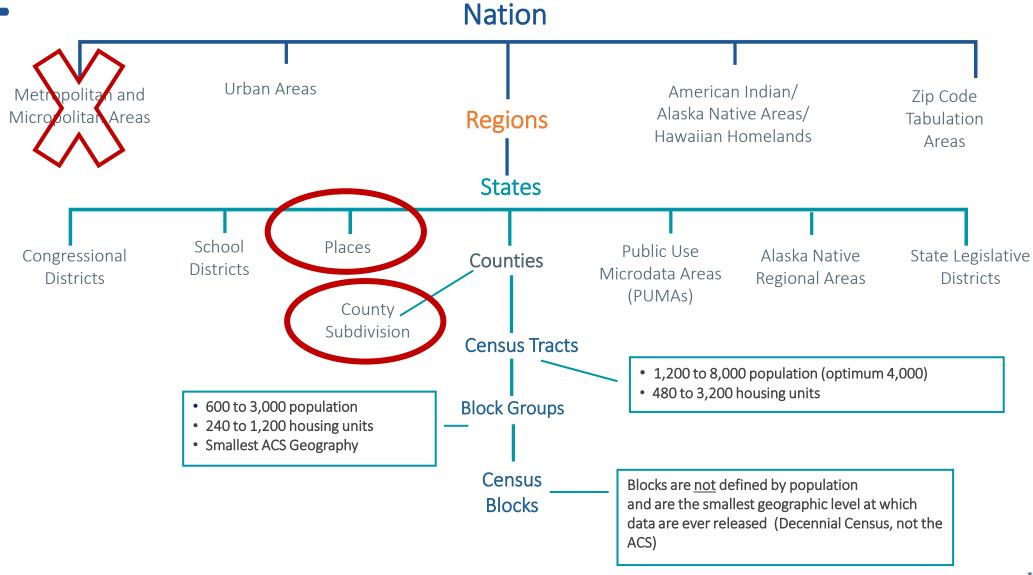
5-yr estimates



0 Filters ? Q Search for a filter Geographies Nation > State > County > County Subdivision > Place > ZIP Code Tabulation Area > Metropolitan/Micropolitan Statistical Area Census Tract > Block > Block Group > All Geographies >

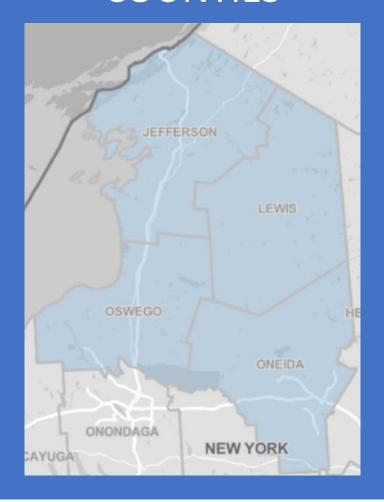
Select Geographies Geographic Entities Summary Levels Search Geographies Region > School District (Elementary) > School District (Secondary) > School District (Unified) > School District Administrative Area > State > State Legislative District (Lower Chamber) > State Legislative District (Upper Chamber) > Subminor Civil Division > Super Public Use Microdata Area > Tribal Block Group >

Available Geographies





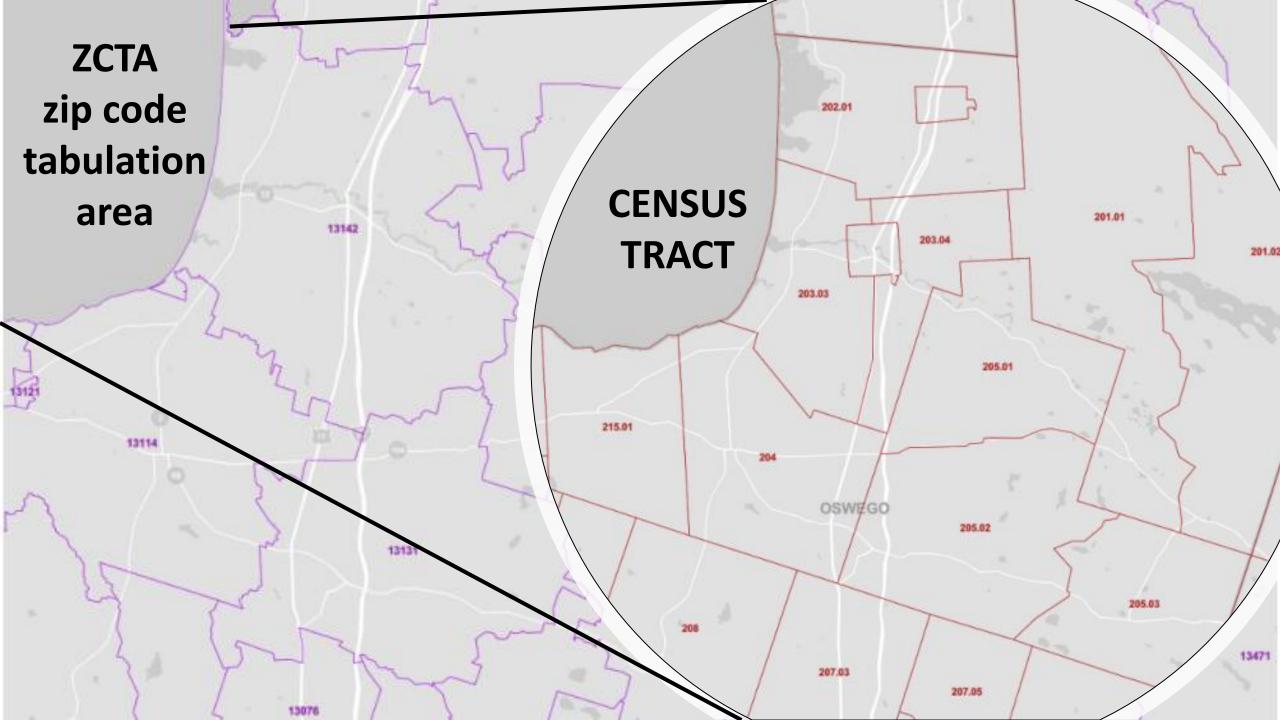
COUNTIES



COUNTY SUBDIVISIONS







Census Data as a Strategic Initiative

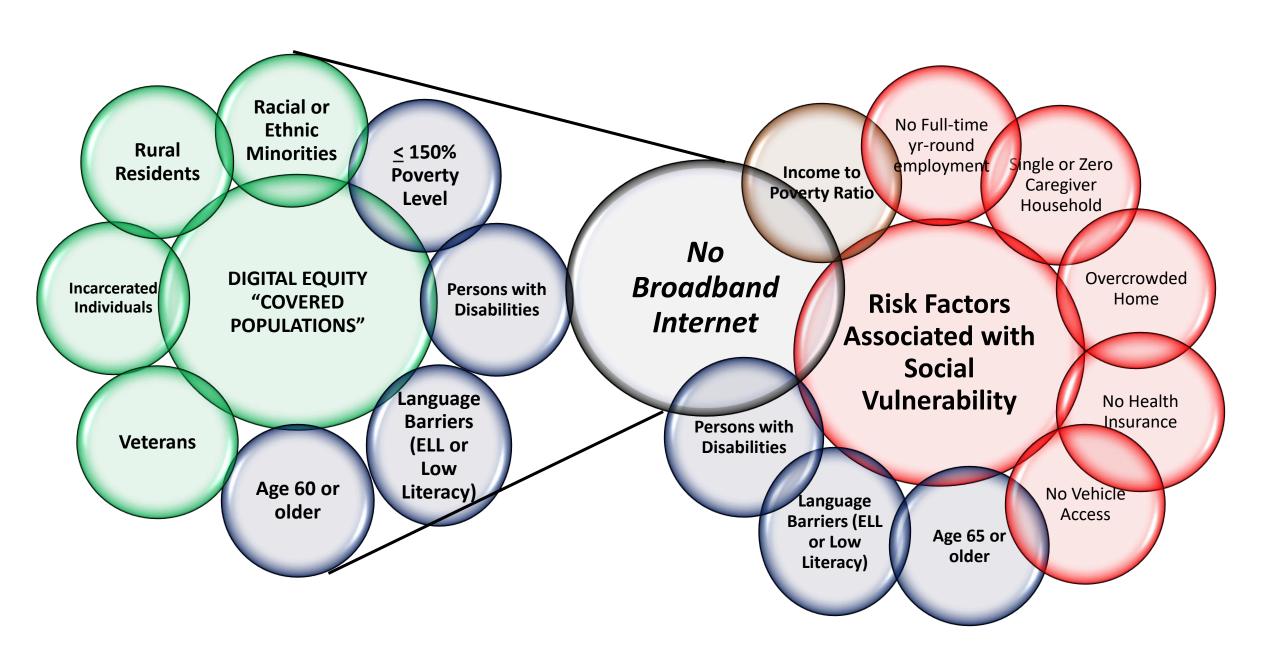
Key Value Propositions:

- Population-Level Insights: Who needs services and where they are located
- Educational Baseline: Current attainment levels by demographics and geography
- Trend Analysis: longitudinal patterns showing community trajectory
- **Equity Identification**: Gaps between different population groups
- Resource Targeting: Data-driven allocation of limited training resources

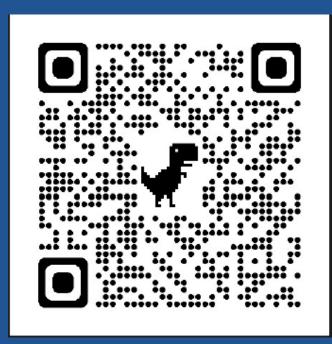
The Problem Without Census Data:

- Programs designed on assumptions rather than evidence
- Misaligned training offerings and community needs
- Inequitable resource distribution
- Poor performance outcomes





QuickFacts



- Compare up to Six Geographies Side-by-Side
- Easy to access to common data
- data table, chart, map or dashboard
- Share, Embed and Download
- Useful for Community Profiles



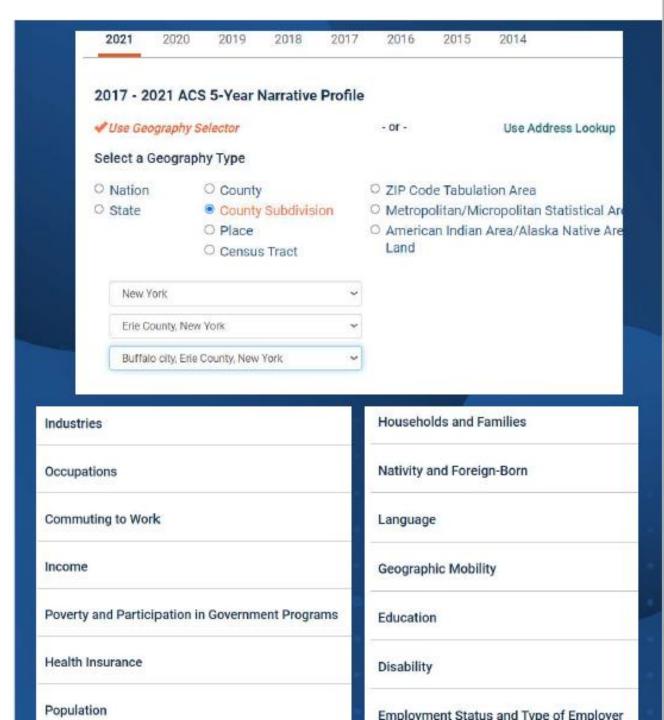
All Topics	Watertown town, Q Jefferson County, New York	Q Watertown city, New York	Q Jefferson County, New York
1 Population estimates, July 1, 2024, (V2024)	△ 5,464	 24,038	(113,140
Dopulation estimates base, April 1, 2020, (V2024)	△ 5,916	△ 24,677	△ 116,716
Population, percent change - April 1, 2020 (estimates base) to July 1, 2024, (V2024)	△ -7.6%	▲ -2.6%	△ -3.1%
1 Population, Census, April 1, 2020	5,913	24,685	116,721
1 Population, Census, April 1, 2010	4,470	27,023	116,229
Age and Sex			
1 Persons under 5 years, percent	▲ 8.0%	△ 7.0%	△ 7.3%
1 Persons under 18 years, percent	△ 24.1%	△ 22.5%	1 24.0%
1 Persons 65 years and over, percent	△ 19.7%	△ 15.4%	△ 15.6%
Female persons, percent	▲ 50.4%	4 9.5%	△ 47.3%
Race and Hispanic Origin			
1 White alone, percent	▲ 84.5%	△ 81.5%	△ 87.1%
Black alone, percent (a) (a)	▲ 2.8%	▲ 5.7%	△ 6.5%
American Indian and Alaska Native alone, percent (a) (a)	▲ 0.2%	▲ 0.6%	▲ 0.7%
Asian alone, percent (a) (a)	₫ 6.7%	1 .9%	△ 1.8%
Native Hawaiian and Other Pacific Islander alone, percent (a) (a)	▲ 0.0%	▲ 0.0%	▲ 0.4%
1 Two or More Races, percent	▲ 3.7%	▲ 8.5%	▲ 3.5%
Hispanic or Latino, percent (b) (b)	△ 2.4%	▲ 6.8%	▲ 8.0%
White alone, not Hispanic or Latino, percent	▲ 84.3%	▲ 80.2%	⚠ 81.0%
Population Characteristics			
① Veterans, 2019-2023	398	1,939	9,485
Foreign-born persons, percent, 2019-2023	6.6%	4.3%	4.7%
Housing			
1 Housing Units, July 1, 2024, (V2024)	Х	Х	62,169
① Owner-occupied housing unit rate, 2019-2023	56.1%	41.6%	54.1%
Median value of owner-occupied housing units, 2019-2023	\$204,700	\$149,800	\$181,000
Median selected monthly owner costs - with a mortgage, 2019-2023	\$1,717	\$1,315	\$1,510
Median selected monthly owner costs -without a mortage,	٨٥٥	ÅEE0.	٨٤٦٨

NARRATIVE PROFILES



Can obtain more data in smaller geographies





Data.census.gov



Tables Maps Pages Microdat

Explore Census Data

Learn about America's People, Places, and Economy

Find Tables, Maps, and more ...







Help Feedback Advanced Search

Try searching for poverty in Georgia in 2020





Topics

Business and Economy >

Education >

Employment >

Families and Living Arrangements >

Government >

Health >

Housing >

Income and Poverty >

Populations and People >

Race and Ethnicity >

Search Housing

Financial Characteristics >

Health and Safety Characteristics >

New and Existing Units >

Occupancy Characteristics >

Owner/Renter (Householder) Characteristics >

Physical Characteristics >

Vacancy >

Absorption Rate

Homeownership Rate

Housing

https://censusreporter.org/

Census Reporter

Topics

Learn more about the concepts and tables covered by the Census and American Community Survey. We want to help you use this data better, so <u>let us know</u> if there are topics you'd like to see us explain.

<u>Getting Started</u>	About the Census	<u>Geography</u>
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<u>Table Codes</u> <u>Age and Sex</u> <u>Ancestry</u>

<u>Children</u> <u>Citizenship</u> <u>Commute</u>

<u>Computers and Internet</u> <u>Disability</u> <u>Education</u>

<u>Employment</u> <u>Families</u> <u>Group Quarters</u>

<u>Health Insurance</u> <u>Housing</u> <u>Income and Earnings</u>

<u>Language</u> <u>Marital Status</u> <u>Migration</u>

<u>Poverty</u> <u>Public Assistance</u> <u>Race and Hispanic Origin</u>

Seniors Sexual Orientation and Gender Technical Tables

Housing

In addition to questions about people, Census collects extensive data about housing, including costs and physical characteristics of homes.

Overview

While people often think of the Census as asking questions about people, the American Community Survey also gathers extensive data about the housing conditions of respondents, including whether they own or rent their home, how much they spend on housing, and the homes. The ACS primarily reports housing data in tables with codes beginning with 25.

Most of the tables count the number of housing units for a given characteristic. However, a few tables estimate the number of people living in owned or rented housing units.

A housing unit is anything from a house to an apartment or even a boat if a person is currently living there.

Basic Counts

The Census provides a couple of tables which establish basic counts of housing units, as well as their occupancy status.

Code	Title
B25001	Housing Units
B25002	Occupancy Status

Sample survey questions on this topic

1	Which best describes this buildin
	Include all apartments, flats, etc., eve
	vacant.

- A mobile home
- A one-family house detached frother house
- A one-family house attached to more houses
- A building with 2 apartments
- A building with 3 or 4 apartmen
- A building with 5 to 9 apartmen
- A building with 10 to 19 apartm
- A building with 20 to 49 apartm
- A building with 50 or more apar
- Boat, RV, van, etc.

Tenure

Occupied housing units in the ACS are split into two categories: renter-occupied and owner-occupied. This distinction is known as "tenure" (think "tenant"). There are dozens of tables in the primary "housing" category which crosstabulate tenure with other responses.

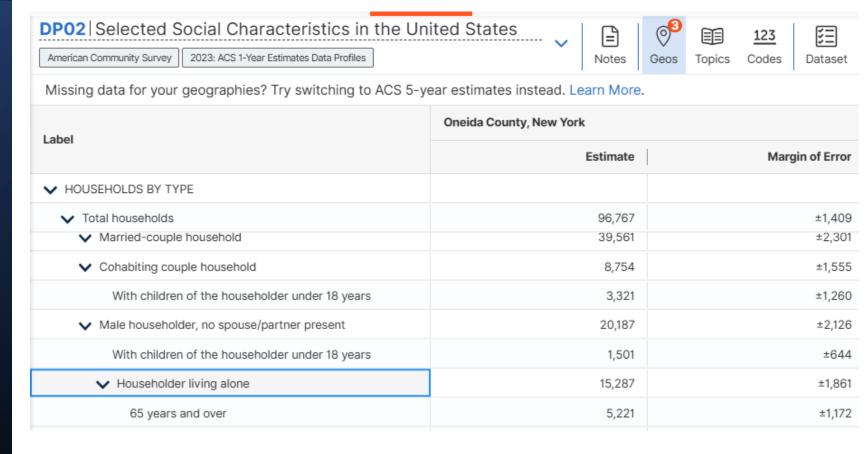
Code	Title
B25003 [†]	Tenure
<u>B25007</u>	Tenure by Age of Householder
<u>B25008</u> †	Total Population in Occupied Housing Units by Tenure
<u>B25009</u>	Tenure by Household Size
<u>B25010</u> [†]	Average Household Size of Occupied Housing Units by Tenure
<u>B25011</u>	Tenure by Household Type (Including Living Alone) and Age of Householder
B25012	Tenure by Families and Presence of Own Children
<u>B25013</u>	Tenure by Educational Attainment of Householder
<u>B25014</u> [†]	Tenure by Occupants Per Room
B25015	Tenure by Age of Householder by Occupants Per Room
B25016	Tenure by Plumbing Facilities by Occupants Per Room
B25020	Tenure by Rooms
B25021	Median Number of Rooms by Tenure
B25022	Aggregate Number of Rooms by Tenure
B25026	Total Population in Occupied Housing Units by Tenure by Year Householder Moved Into Unit



MARGINS OF ERROR

ACS estimates are at a 90 percent confidence level.

Using the MOEs, data users can calculate a range expected to contain the value of an estimate 90 percent of the time.



This Data Profile for Oneida County ACS 1-year estimates indicate that there were 15,287 one-person households in 2023 with an MOE of +/-1861.

By adding and subtracting the MOE from the point estimate, we can calculate the **90 percent confidence interval** for that estimate are:

(15,287 – 1,861) between 13,426 and 17,148 (15,287 + 1,861)

Data.Census.Gov

The town of West Monroe is preparing for a massive investment from Micron.

Can the town and surrounding area supply Micron with qualified employees? (S1501, (S2404, S2413 industry))

Can the town and surrounding area provide Micron employees with substantial housing? (S2506)

What is the current income and poverty rate of people in the area? (S1902, S1701)

Will relocating families find successful schools? (Central Square Central School District, data.nyseg.gov Oswego County)



Census Bureau and NTIA

Digital Equity Act

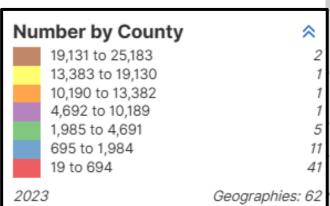
Data and Funding Allocations

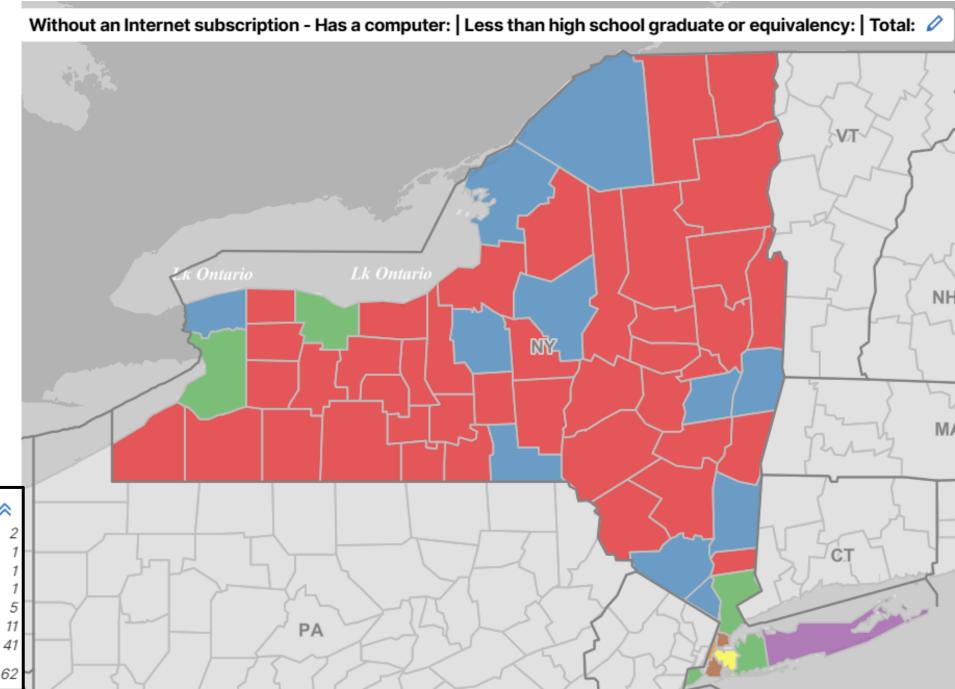


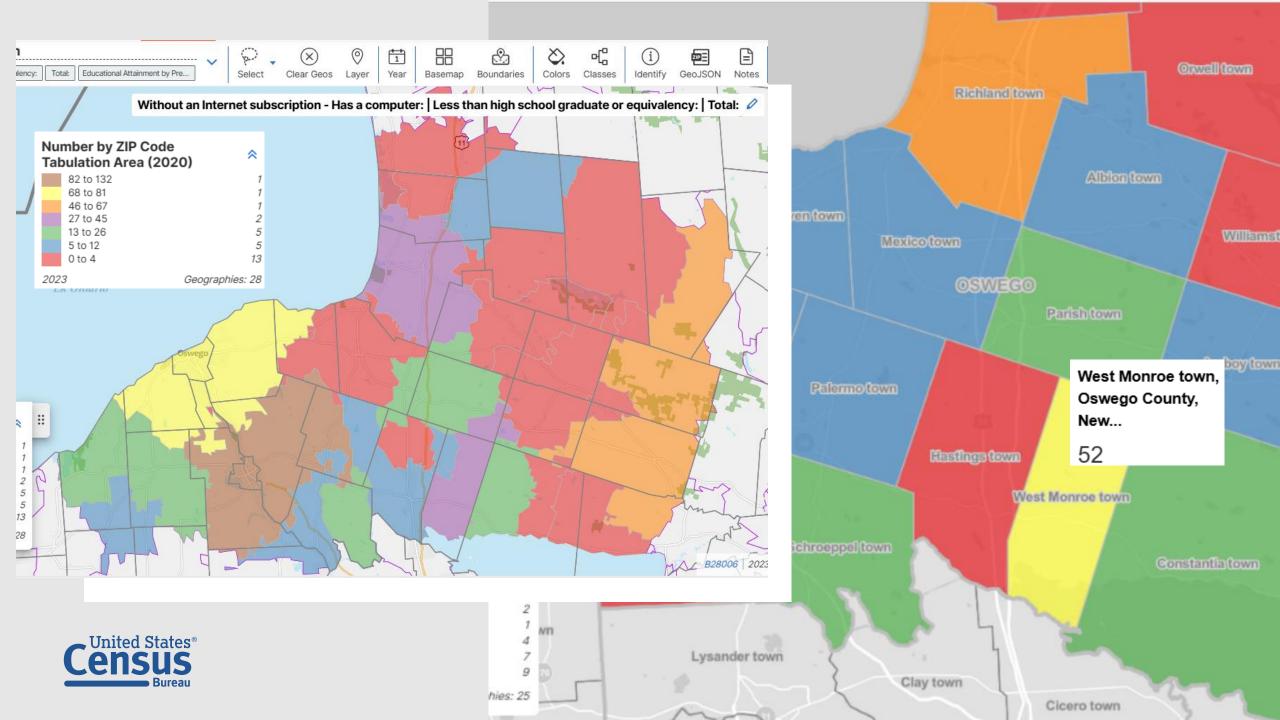
Educational-Digital Gap Analysis

- Educational Attainment by Presence of a Computer and Type of Internet
- ACS Table B28004:
 Computer Access by Household Income
- Geographic Analysis:

 Rural vs. urban digital
 access patterns using
 census tract data









Suggested Strategic Response:

- Target digital literacy programs in census tracts with <70% high school completion
- Coordinate infrastructure investment with educational gaps using census tract mapping
- Align with Workforce Development Agencies to provide digital literacy training.

Federal Integration:

- Digital Equity Act funding prioritized using Census demographic analysis
- WIOA digital literacy training aligned with Skilling America technology priorities

Data Integration and Analysis Best Practices: Practical Implementation Strategies

Census Data Collection Protocol:

- Start with ACS 5-year estimates for stable demographic baselines
- 2. Use 1-year estimates for large geographic areas needing current data
- 3. Supplement with PUMS for custom analysis needs
- **4. Integrate Decennial Census** for long-term trend analysis

Analysis Methodology:

- Geographic Layering: Census tract → County →
 Regional analysis for comprehensive understanding
- Demographic Cross-Tabulation: Age + Education + Income + Geography for precise targeting
- Longitudinal Tracking: Compare multiple ACS releases to identify trends and emerging needs
- **Equity Assessment**: Systematic comparison across racial, ethnic, and socioeconomic groups



Get in Touch

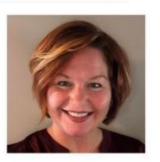
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Measuring America—People, Places, and Economy

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