

# **America's Essential Economic and Social Data at Risk**

**A Vision to Preserve and Enhance  
the American Community Survey**

## INTRODUCTION BY THE CENSUS PROJECT

The U.S. Census Bureau's American Community Survey (ACS) is the premier source for information about America's changing population, households, and workforce—and a crucial component of the American democracy. It is the current fulfillment of James Madison's vision that the 1790 Census should add questions beyond "bare enumeration" so that Congress might "adapt the public measures to the particular circumstances of the community."

ACS data are pervasively used by federal, state, and local decisionmakers to power our economy and plan our communities. However, ongoing challenges in ACS design innovations, delayed investments to improve the survey, and postponements of data releases in 2021 have compromised the utility and reliability of the data essential to social and economic planning for the country.

### A Clarion Call: America's Essential Data Are at Risk

Since we first issued this report in 2022, America's essential data remain at risk. High-quality, trustworthy statistics are essential for our democracy. They empower policymakers, businesses, journalists, scientists, and other citizens to make data-based decisions that help meet the changing needs of the populace—decisions that otherwise would be based on anecdotal evidence, gut feelings, rumor, guesses, or worse—misinformation.

The ACS is the most comprehensive, robust, and current source of information about America's changing population, housing, and workforce. If roads, bridges, railways, and ports form the heart of America's physical infrastructure, then the ACS is the backbone of the country's data infrastructure. The ACS is unlike any other data source in the nation, providing critical social, economic, housing, and demographic data about our nation every year, for communities large and small.

The first edition of this report was undertaken by [The Census Project](#) upon the [news](#) that for the first time in its history, the Census Bureau could only release experimental data from its annual 2020 ACS 1-year survey and subsequently had to delay the 2016-2020 ACS 5-year products. Local planners, business leaders, and policymakers at all levels were consequentially hampered in updating their plans and models—at the very moment the country was most in need of trusted information to respond to multiple challenges: a once-in-a-century pandemic; a severe economic downturn; and rapidly rising inflation. The Census Project initiated this comprehensive review of the ACS to outline how it could be enhanced to better aid the nation as we address confounding changes in the labor force, the workplace, supply chains, social dynamics, and neighborhoods across America.

The coronavirus pandemic disrupted America's data infrastructure—including the ACS—and reminded us that our access to high-quality data for decision-making is not guaranteed. Our objective here is to pose the question of how we can ensure the quality and accessibility of ACS data for all those who rely on the data.

Before we can answer this question, we need to provide new insights and background on the ACS and why it's so important.

With this updated report, including additional detailed examples of ACS data uses for economic development, business decision making, and supporting veterans, we are putting greater focus on the need to invest in the ACS, to strengthen it and enable it to better serve the nation. We begin with discussion of the origin and many uses of ACS data, followed by the current limitations of the survey and potential opportunities to improve the quality, timeliness, and robustness of the data.

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The Census Project is a broad-based coalition of national, state, and local organizations that support an inclusive and accurate 2020 Census and American Community Survey (ACS) (the modern version of the census “long form”). Its member organizations, representing the private, public, non-profit, and academic sectors, rely on objective data that the Census Bureau produces to inform evidence-based investment, policy and planning decisions.

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## OUR AUTHORS

The Census Project is grateful for the leadership and authorship in their personal capacities on this comprehensive assessment of the American Community Survey from three experts with deep experience in the origins and uses of the ACS and other census data. The work here would not have been possible without the benefit of their decades of experience and willingness to share their vast knowledge about the history of the ACS and how it is used so pervasively in American society.

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## REPORT SUMMARY

### The ACS Is Central to America's Data Infrastructure

- The ACS is a nationwide, continuous survey designed to provide reliable and timely demographic, housing, social, and economic data *every year* for communities large and small.
- With an annual sample size of about 3.5 million addresses, the ACS is the largest survey of American households.
- Each year, the Census Bureau publishes more than 11 billion statistics from the ACS on a wide range of social, economic, housing, and demographic topics.

### Businesses Use the ACS for Planning and Economic Investment

- The ACS provides businesses with data to gauge the sales potential of products and services, better understand the workforce, and set strategies for growth.
- Entrepreneurs use ACS data to select new sites for their business.
- Many federal and state programs use ACS data to identify communities to prioritize for economic development.
- Businesses in the market research and data analytics industry depend on ACS data to help measure the U.S. media audience, define Designated Market Areas (DMAs), and set rates for advertising, publication, and programming across the country.

### State and Local Planners Use ACS Data for Decision Making

- ACS data help planners make decisions about new schools, hospitals, job training centers, emergency services, and many other community projects.
- ACS data are playing an important role in prioritizing projects with funding under the Bipartisan Infrastructure Investment and Jobs Act. ACS data help planners put broadband, road, bridge, and transportation investments in the right places.
- ACS data help federal, state, and local officials coordinate evacuations, conduct damage assessments, and plan for future emergencies.
- ACS data on presence and type of disabilities and health insurance coverage help guide health care programs and policies at the local, state, tribal, and federal levels.
- ACS demographic and economic data provide a detailed profile of our nation's veterans and their needs at the community level. ACS data about veterans help communities administer programs and estimate the future demand for programs and services.
- Urban, regional, and rural planners use ACS data to help develop short- and long-range forecasts of housing, energy, infrastructure, and transportation needs.

### The ACS Is Essential to Core Functions of the American Democracy

- All census-guided federal spending depends on the ACS in some way, shape, or form. For example, in 2017, 316 federal spending programs distributed \$1.5 trillion to states and local areas on the basis, in whole or in part, of data derived from the ACS.
- ACS data are used to monitor compliance with the Voting Rights Act and enforce bilingual election requirements.
- Federal agencies rely on ACS data to enforce civil rights laws, protect people from discrimination, and provide access to affordable housing.

### Current Limitations and Challenges in ACS Design and Data Dissemination

- The ACS budget has been relatively flat for years, overlooked in investments and efforts that have modernized the decennial and other Census Bureau surveys.

- Data quality challenges prevented the Census Bureau from releasing standard 2020 ACS 1-year estimates in 2021—leaving ACS data users without the timely annual estimates they rely on to track social, economic, and demographic change across the U.S. The 2016-2020 ACS 5-year estimates were delayed until March 17, 2022.
- The sample size of the annual ACS is much smaller than the sample size of the previous decennial “long-form” survey from which it evolved.
- The Census Bureau had to suspend many ACS data collection operations in 2020 during the peak months of the coronavirus pandemic, severely impacting ACS response rates and data quality.
- The ACS response rate declined steadily from 2014 through 2019 before the coronavirus pandemic and dropped markedly in 2020. Although response rates increased in 2021, they have still not returned to pre-pandemic levels. Further erosion in response rates may reduce the usability of ACS data.
- Relatively high undercount rates risk biased ACS statistics about young children, racial and ethnic subgroups, and small geographic areas (such as much of rural America).
- Improving, adding, or deleting questions on the ACS follows a complex and lengthy process, unlike experimental surveys—such as the Census Bureau’s Household Pulse Survey—that are not mandatory and are not specified as a required source for particular programs or legislative applications by local, state, or federal agencies.
- Many data users continue to report difficulty in finding the ACS data they need on data.census.gov.

### **Enhancements to Improve the Quality, Timeliness, and Robustness of ACS Data**

- Increasing the sample size and expanding nonresponse follow up operations to increase the number of final interviews of the ACS could reduce nonresponse bias and improve the precision of ACS estimates—particularly for small geographic areas and important population subgroups.
- The Census Bureau could improve ACS data quality and reduce both respondent burden and survey costs by accelerating ongoing research and incorporating more administrative records, third-party data, and Big Data technology in the ACS.
- Like the much smaller Current Population Survey (CPS), the ACS could be used to produce national and state level indicators on a monthly or quarterly schedule.
- Additional funding for the ACS Program could accelerate the release of estimates, which are published 20 months after the first month of data collection.
- New questions that capture the relationships between all household members could enable better identification of children living in complex households.
- Questions on parental place of birth would enable research on the characteristics of second- and third-generation immigrants.
- New questions on sexual orientation and gender identity, and revised questions on race and ethnicity, would provide better measures of these rapidly changing concepts of identity in American society and improve assessments of data equity.

### **New Data Products That Could be Derived from Modernizing the ACS Include:**

- New data products for small geographic areas derived from the combination of ACS and other data sources.
- Products that combine ACS and other data yielding “more accurate, granular and timely statistics at lower costs.”
- New products or tools that would enable data users to measure trends more easily.
- An enhanced microdata access system that would enable data users to create custom, privacy-protected estimates from the full internal microdata file.

- A product that would allow data users to easily combine estimates to produce custom geographic areas and calculate margins of error for derived estimates.
- Products that provide data users with more up-to-date estimates, such as selected monthly statistics.
- Greater exploration of modeled or synthetic estimates to serve small areas and subpopulations while protecting against disclosure risks.



## THE ACS IS CENTRAL TO AMERICA'S DATA INFRASTRUCTURE

When local planners make decisions on how, or why, new roads, schools, senior centers, or hospitals are placed in specific communities, they need data. Have you wondered what makes some communities more attractive to new businesses or tourists or why there is no ATM or bike-share kiosk on a certain street corner? The answers often lie in statistics that reflect what our communities look like, how our communities have changed, and how those changes impact our daily lives.

Every 10 years, the Census Bureau conducts a census to count the number of people living in the United States. From 1940 to 2000, two census questionnaires were used to collect information: a “short form” with only basic questions such as age, sex, race, and Hispanic origin; and a “long form” that included some 50 additional questions on social, economic, and housing characteristics.

This changed with the 2010 Census, because the long form had been replaced in 2005 by a new annual survey, the ACS—a nationwide, continuous survey designed to provide reliable and timely demographic, housing, social, and economic data *every year*.

With an annual sample size of about 3.5 million addresses, the ACS is the largest survey of American households. No other data source provides such a rich source of information about American society.

The Census Bureau releases two types of ACS estimates, covering different time periods: 1-year estimates and 5-year estimates.

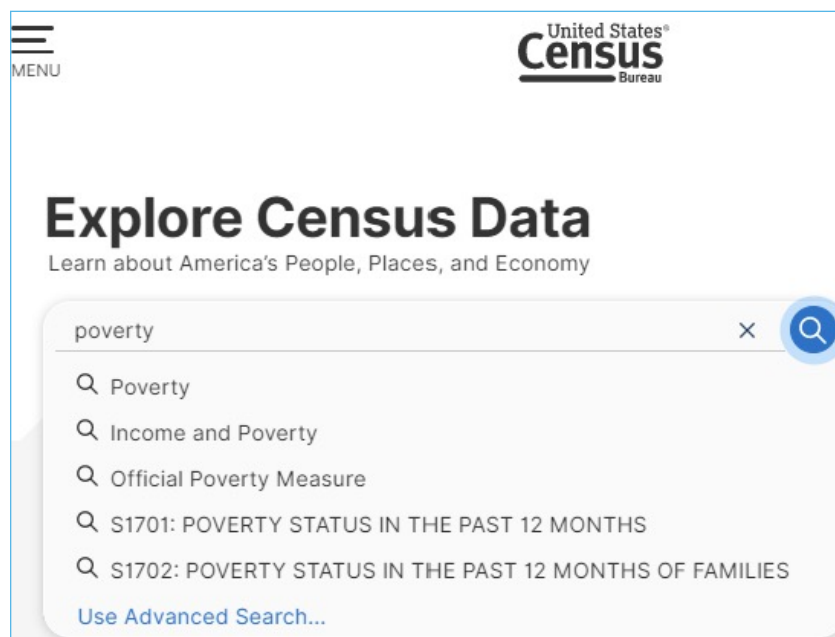
Since 2005, the Census Bureau has published ACS 1-year estimates for geographic areas with populations of 65,000 or more. One-year estimates are especially useful for areas with rapidly changing characteristics because they're based on data from the previous year. For example, ACS 1-year data were used to [compare social and economic patterns before and after the Great Recession](#) (2007–2009). Similarly, 1-year estimates from the 2021 ACS—released in fall 2022— provided key information about [how America changed in the wake of the coronavirus pandemic](#).

For areas with smaller populations, the ACS sample isn't large enough to provide reliable 1-year data. For these areas, several years of data are pooled together to create more precise multiyear estimates. Since 2010, the ACS has published 5-year data (beginning with 2005–2009 estimates) for geographic areas as small as block groups.

Five-year estimates are not as current as 1-year estimates because they cover a longer time period, but they are the best and only source of detailed data for smaller geographic areas and small population groups.

[Data.census.gov](https://data.census.gov) is the Census Bureau's primary tool for accessing ACS data (see Figure 1).

**Figure 1: Data.census.gov**



Source: U.S. Census Bureau, <https://data.census.gov/cedsci/>.

## 11 Billion Statistics Each Year: The Topics Covered in the ACS

Each year, the Census Bureau publishes more than 1,000 tables for states, counties, cities, tribal lands, and communities of all sizes, resulting in *11 billion individual estimates* from the ACS on a wide range of topics and providing a detailed tapestry of the American social, demographic, and economic landscape.

The content collected through the ACS can be grouped into four main types of characteristics: social, economic, housing, and demographic. Figure 2 lists selected subjects covered in the survey. A [comprehensive list of subjects](#) in the ACS is provided on the Census Bureau's website.

**Figure 2: Selected Population and Housing Data Collected in the ACS**

ACS SUBJECTS	
• <b>SOCIAL</b>	(Educational attainment, marital status, place of birth, veteran status, and more)
• <b>ECONOMIC</b>	(Employment status, health insurance coverage, income and earnings, and more)
• <b>HOUSING</b>	(Computer and internet use, owner/renter status, home value, and more)
• <b>DEMOGRAPHIC</b>	(Age, race/ethnicity, relationship to householder, and more)

Source: U.S. Census Bureau, Subjects Included in the Survey, <https://www.census.gov/programs-surveys/acs/guidance/subjects.html>.



ACS content is designed to meet the needs of federal government agencies, and [every question in the ACS is asked for a reason](#). For example, questions about how people get to work, when they leave, and the length of their commutes are used for planning improvements to roads, highways, rail lines, transit systems, and bus routes, as well as planning emergency response routes.

Some people are reluctant to respond to the ACS not only because of its length, but also because of concerns about the confidentiality of the data. However, strict confidentiality laws protect all ACS information that could be used to identify individuals or households under [Title 13 of the U.S. Code](#).

Over time, [questions have been added, revised, or removed](#) from the survey. For example, in 2008, three new questions on marital history, health insurance coverage, and veteran's service-connected disability were added to the questionnaire, while the questions on disability were significantly revised. A new question on bachelor's field of degree was added in 2009, and in 2013, three new questions on computer ownership and internet access were added. In 2022, the Census Bureau conducted both cognitive and field testing of new and revised questions for the 2025 ACS questionnaire. The three new questions ask for information about electric vehicles, sewage disposal, and solar panels.

In September 2022, the Census Bureau posted a [Federal Register Notice](#) (FRN) inviting public comments on proposed changes to data collection operations and question wording for the 2024 ACS, including addition of an internet self-response option to group quarters data collection, wording changes to questions on condominium fees, home heating fuel, and journey to work, and use of administrative data for the property acreage question.



## BUSINESSES DEPEND UPON THE ACS FOR PLANNING AND INVESTMENT

Businesses depend on high-quality data for decision making. Suppose a bike shop owner wants to find the best location to open a second store. Managers at a construction firm want to move their headquarters but need more information about the local workforce. The owner of a department store needs information about customers in a region to determine the best product mix to include in the store.

Every day, ACS data are helping businesses like these grow. The ACS provides corporations, small businesses, and individuals the detailed social, economic, housing, and demographic data they need to gauge the sales potential of products and services, better understand the workforce, and set strategies for growth.

### Implementing Infrastructure Investments Leans on ACS and Geospatial Data

In 2021, Congress passed the Infrastructure Investment and Jobs Act, a \$1.2 trillion investment in U.S. roads, bridges, ports, water pipes, and internet connections. ACS data are playing an important role in prioritizing projects for funding and later will help to assess the impact of these investments on communities.

*"The first step in upgrading American infrastructure? Make a map..."* reads a recent [headline](#) in the Washington Post which explains how the ACS and other census data displayed on advanced geospatial mapping tools help planners put broadband, road, bridge, and transportation investments in the right places.

*"Augmented with census data, imagery and a flood of other newly-updated geospatial information, the map will also allow local government leaders, internet providers, the public and other stakeholders to make critical ongoing corrections through an online dashboard."*

### Entrepreneurs Use ACS Data for Site Selection

Construction is a major driver of U.S. economic growth. In 2022, the value of commercial construction totaled nearly \$115 billion—a number that is likely to increase as the economy and business investments bounce back after the COVID-19 pandemic.<sup>1</sup>

With so many dollars at stake, businesses often conduct extensive research before starting a new business or expanding an existing one. Site selection—the evaluation of business needs measured against the merits of potential locations—is a complex process that requires detailed information about local communities. But decision-making is easier when you have the ACS—the premier source of data for local communities.

The ACS provides businesses with a wealth of free information that they can use for selecting a new location or for evaluating the performance of existing locations:

- Social and economic characteristics (e.g., educational attainment, employment status, language spoken at home, and income).
- Housing characteristics (e.g., homeownership, housing costs, average household size, age of housing, and computer/internet use).
- Demographic characteristics (e.g., age, sex, and family structure).

Many businesses also need workers with specific degrees. They need to know where potential workers live, how long it would take them to get to work, and whether they have access to high-speed internet to work from home. Other businesses want to recruit qualified veterans.

The ACS provides detailed information about the population and workforce in local communities that can help businesses choose appropriate locations for a new store, office, warehouse, or shopping center including:

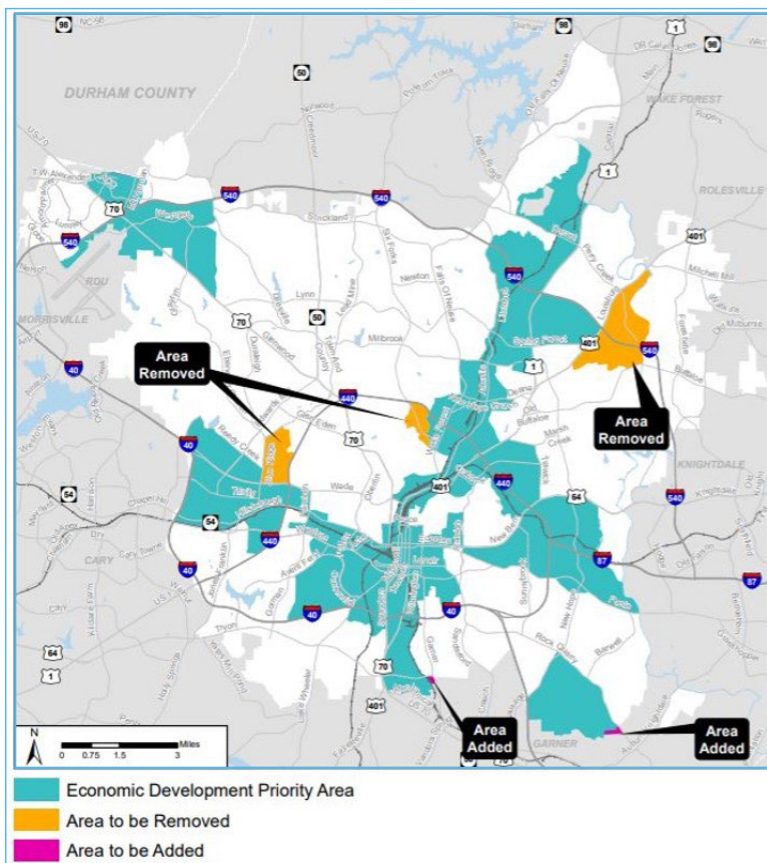
- Labor force and veteran status (e.g., employment, unemployment, and full-time/part-time status).
- Means of transportation to work and travel time to work.
- Income and occupation (e.g., household income, earnings, occupation, and industry).
- Education (e.g., highest level).
- Internet (e.g., access to broadband service).

FRANdata, a market research firm in Arlington Virginia, uses ACS data to help franchise owners [identify the best locations for their businesses](#) based on the characteristics of the population in different communities.

National Grid, an energy company trying to increase the deployment of Electric Vehicle (EV) charging infrastructure in Upstate New York, used ACS data on tenure, and type and age of housing units to both [size the residential market of customers](#) capable of installing a home charging station, and to estimate the total costs for charger installation across their market.

### ACS Data Are Used to Support Economic Growth

Many federal and state programs use ACS data to identify underserved communities to prioritize for economic development. For example, Raleigh's Department of City Planning used ACS poverty data to identify priority areas for investment (see Figure 3). A high-poverty block group (shaded teal on the map) is one where the percentage of people with income below the poverty line exceeds 150% of the citywide average.



**Figure 3: Priority Areas for Economic Development in Raleigh, NC**

Source: Raleigh Department of City Planning, 2030 Comprehensive Plan Amendment, <https://raleighnc.gov/services/zoning-planning-and-development/2030-comprehensive-plan>.

ACS data are also widely used by regional planning agencies around the country to support economic development:

- The Maricopa Association of Government's [Commute Shed Reports](#) show the areas from which workers can commute in 30 minutes or less to a given location. These reports—provided for cities, counties, and American Indian areas—support businesses by providing them with granular data on the population living in local commuting zones.
- The San Francisco Municipal Transportation Agency (SFMTA) uses the ACS to [monitor bicycle volumes and commute trends](#) to inform planning decisions and enhance the economy and quality of life in the city.
- The Bureau of Economic and Business Research at the University of Minnesota – Duluth uses ACS data for the [Regional Economic Indicators Forum](#) (REIF)—an ongoing comprehensive research initiative that helps drive growth, prosperity and collaboration across the 15-county region it covers in Northeast Minnesota and Northwest Wisconsin.

### Businesses Use ACS Data to Measure and Expand Markets

Businesses in the market research and data analytics industry, such as Nielsen and Kantar, depend on ACS data to measure the U.S. media audience, define Designated Market Areas (DMAs), and set rates for advertising, publication, and programming across the country. Without ACS data, ad spending and media programming might target the wrong areas and demographic segments or not be produced at all. Firms like Ipsos who conduct public opinion polling provide important information for policymakers and stakeholders alike.

They use ACS data to help determine how representative their survey results are of the total population as well as important demographic sub-groups—such as Black women between ages 30 and 45.



**Christine Pierce**  
Senior Vice President,  
U.S. Media Operations &  
Data Science, Nielsen

*“ACS results are critical inputs to Nielsen’s audience measurement business. At Nielsen, these results are used to estimate the size of various markets and segments. They are also used to ensure that our data sets are balanced properly to reflect the country’s demographic representation and to project audience estimates for key demographic segments.”*

Real estate developers use ACS data not only to determine where, what, and when to build, but also for sales forecasting, trade area delineation, target marketing and supply chain management.



**Nadia Evangelou**  
Senior Economist, Director Real Estate Research | National Association of REALTORS®

*“We use ACS data to identify key demographic trends affecting the housing market and provide these insights to our members so they can improve their businesses.”*

The National Association of REALTORS® uses ACS data to benchmark its home sales figures and to analyze trends in both household formation and migration among recent movers.

Retail companies like Target use ACS data to better understand their local stores’ customer bases, helping them to decide where

and how to stock certain goods in specific stores, as well as track changes in consumer preferences between urban, suburban, and rural communities.

Another way that businesses use ACS data is for consumer segmentation—the process of dividing

potential customers into groups, or segments, based on their distinctive characteristics helping deliver the right products to the right customers. Consumer segmentation data provide businesses with unique insights into customer lifestyles and behaviors, and how they vary across different communities. They help businesses find their “ideal customers” and determine the best ways to market specific products and services to them. Community segmentation profiles can also help businesses understand why some existing or potential locations may perform better than others.

Consumer segmentation systems are widely used in the private sector because they enable more precise identification and targeting of potential customers than demographic data alone. Data intermediaries—companies like Esri and Claritas—provide consumer segmentation data to their customers by combining ACS data with other sources. Data are often provided for very small geographic areas—such as ZIP codes—and may be derived from a combination of ACS estimates and from other public and private sources. However, nondisclosure agreements and trade secrets often prevent full disclosure of the role of ACS data in developing these products.

Esri’s [Tapestry Segmentation](#) divides America’s neighborhoods into 14 broad “LifeMode” groups sharing similar demographic, socioeconomic, and consumer behavior patterns (see Figure 4).

**Figure 4: Esri LifeMode Groups**

<ul style="list-style-type: none"> <li>• LifeMode 1 Affluent Estates</li> <li>• LifeMode 2 Upscale Avenues</li> <li>• LifeMode 3 Uptown Individuals</li> <li>• LifeMode 4 Family Landscapes</li> <li>• LifeMode 5 GenXurban</li> <li>• LifeMode 6 Cozy Country Living</li> <li>• LifeMode 7 Sprouting Explorers</li> </ul>	<ul style="list-style-type: none"> <li>• LifeMode 8 Middle Ground</li> <li>• LifeMode 9 Senior Styles</li> <li>• LifeMode 10 Rustic Outposts</li> <li>• LifeMode 11 Midtown Singles</li> <li>• LifeMode 12 Hometown</li> <li>• LifeMode 13 Next Wave</li> <li>• LifeMode 14 Scholars and Patriots</li> </ul>
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Source: Esri, Tapestry Segmentation, <https://doc.arcgis.com/en/esri-demographics/data/tapestry-segmentation.htm>.

Similarly, Claritas’ [PRIZM lifestyle segmentation system](#) classifies U.S. households and neighborhoods (block groups, ZIP Codes, ZIP+4 areas) into more than 60 different socioeconomic categories based on a combination of ACS estimates, consumer surveys, and other public and private sources.





## STATE AND LOCAL PLANNERS USE ACS DATA FOR DECISION MAKING

Imagine if you were an urban transportation planner working with the mayor's office to develop a plan for a new mass transit system in your city. How would you determine what kind of system is needed and who it should serve?

To make these decisions, you would need to know where people are commuting to and from and how they get there. You may need to conduct an equity analysis to ensure that people identifying with different racial and ethnic groups would share in the costs and benefits of the new mass transit system.



**Joseph J. Salvo, Ph.D.**  
Fellow, University of Virginia  
Biocomplexity Institute  
Former New York City  
Chief Demographer

*"With limited resources a fact of life for local community planners, ACS data help put scarce resources to work in the right places, making the most of what is available to address local needs. As the premier data source for establishing local priorities, it is second to none!"*

The ACS would provide the neighborhood-level data you need to make decisions about a new rail, bus, or light transit line in your community. ACS data also help state and local planners and government officials make decisions about new schools, hospitals, job training centers, emergency services, broadband internet, and many other community projects.

Here are some recent examples of how ACS data are being used in infrastructure projects across the country:

- The Twin Cities Metropolitan Council uses ACS data to [target infrastructure investments and service improvements](#) in areas that have been neglected historically and have experienced under-investment.
- The City of Flagstaff, Arizona used ACS data on mode of commuting to [develop a plan to enhance walking and biking in the city](#).
- The Centre County Board of Commissioners (in Pennsylvania) used ACS data to identify gaps in high-speed internet access and to [develop a comprehensive plan to expand broadband internet infrastructure in rural areas](#).
- Many metropolitan and regional planners also use data from the [Census Transportation Planning Products](#), or CTPP, which provide a wealth of small-area estimates based on ACS 5-year data for transportation analysis and planning. The CTPP program is designed to help transportation analysts and planners understand where people are commuting to and from and how they get there.

### ACS Data Help the Nation Respond to Disasters and Other Emergencies

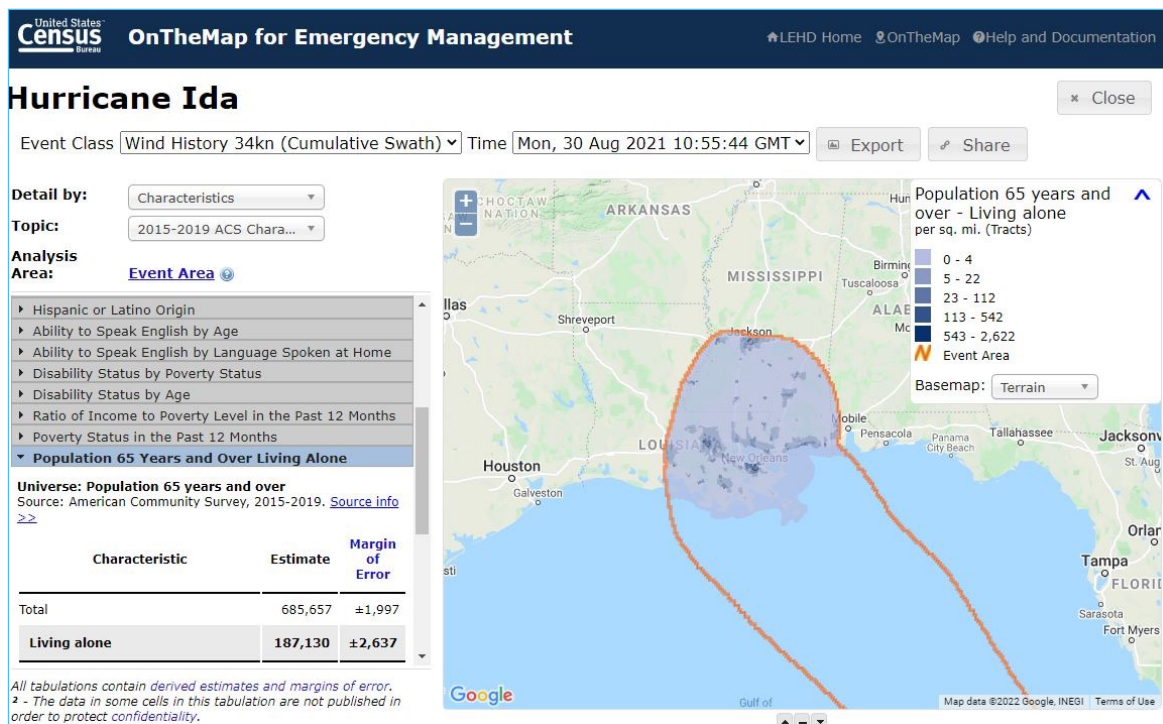
2021 was among the [worst years for weather disasters](#) in the United States; hurricanes, tornados, heat waves, and wildfires caused hundreds of deaths and billions of dollars in property damage. Nearly one in three Americans lived in a disaster declaration zone. How do organizations such as FEMA tailor their recovery efforts to the people, homes, and businesses in affected communities?

ACS data can help federal, state, and local officials as they coordinate evacuations, conduct damage assessments, carry out recovery plans, and plan for future emergencies. Scientists use ACS data to assess the long-term consequences of natural disasters on affected populations, including migration patterns, changes in socio-economic status, and demographic shifts in local communities.

The Census Bureau's [OnTheMap for Emergency Management](#) tool combines data from the ACS with other sources to show the potential effects of disasters on the U.S. workforce and population. Users can easily retrieve online reports containing detailed population and housing characteristics for areas affected by hurricanes, floods, wildfires, winter storms, and federal disaster declaration areas.

Figure 5 displays ACS data on older adults living alone and residing in areas most affected by Hurricane Ida, which made landfall in Louisiana in August 2021.

**Figure 5: OnTheMap for Emergency Management**



Source: U.S. Census Bureau, OnTheMap for Emergency Management, <https://onthemap.ces.census.gov/em/>.

Policymakers and planners have also used pre-pandemic data from the ACS data to measure communities' ability to cope with effects of the COVID-19 pandemic. For example, the Census Bureau's [Community Resilience Estimates](#) include neighborhood-level ACS estimates on:

- Poverty
- Caregivers available in households
- Household crowding
- Communication barriers
- Households without full-time, year-round employment
- People with disabilities
- Health Insurance coverage
- Population ages 65 and older
- Vehicle access
- Broadband internet access

## ACS Data Are Used to Profile Characteristics and Identify the Needs of Veterans

America's veterans experience [higher rates](#) of mental health, substance use, and post-traumatic stress disorders than their civilian counterparts. ACS data about active-duty service, the period of active duty, and service-connected disability status and rating combined with ACS demographic and economic data provide a detailed profile of our nation's veterans and their needs at the community level. ACS data about veterans help communities administer programs such as the VA Loan Guarantee program, the post-9/11 GI Bill, and job training and hiring preference programs, and estimate the future demand for these programs and services. Local communities and the federal government need to know the number of veterans eligible to use VA health care, in combination with age, disability, and service-connected disability ratings, to estimate the future demand for health care services and facilities. Communities in need of major VA medical facilities throughout the country make a case for new construction projects using these data to estimate the expected usage of new facilities.



**Larry Herke**  
Commissioner  
Minnesota Department of  
Veterans Affairs

*"The Minnesota Department of Veterans Affairs depends on ACS data to plan how best to meet the education, employment, and long-term care needs of Veterans and their families in Minnesota. The ACS is the only source of information we have that gives us a comprehensive view of the current economic circumstances of Veterans and their families along with detailed information about where they live within the state."*

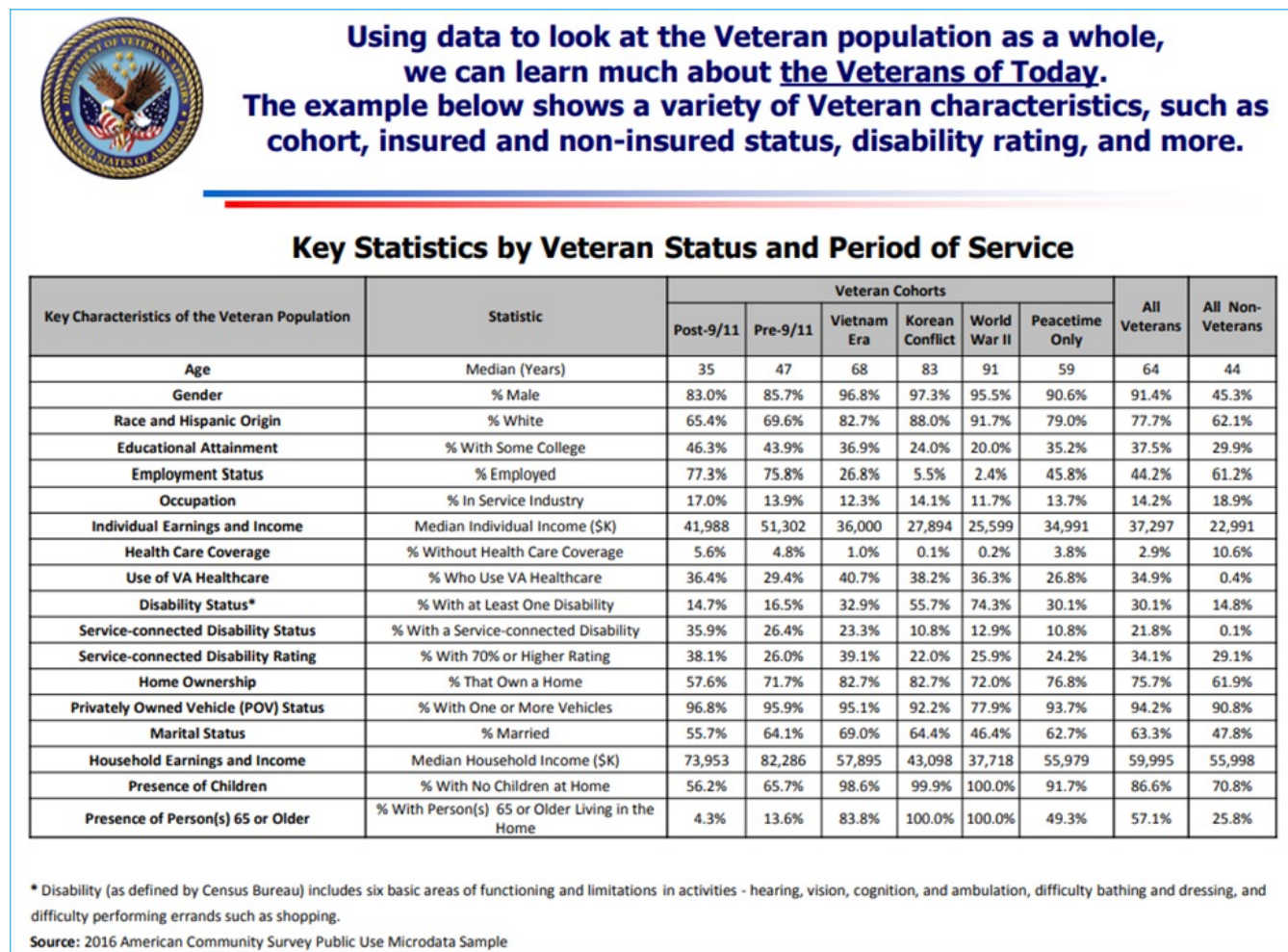
The Department of Veterans Affairs (VA) uses ACS data about where veterans are living toward the end of their lives to estimate the number of nursing home and domiciliary beds needed based on the concentrations of eligible veterans over age 65. ACS data about the characteristics of veterans returning to civilian life have been combined with administrative data produced by shelters to understand and document which interventions reduce homelessness among veterans.

- The VA's [National Center for Veterans Analysis and Statistics](#) (NCVAS) uses ACS data to profile the demographic, disability, health insurance, and economic characteristics of veterans as shown in Figure 6. NCVAS also used ACS data to produce a [special report](#) comparing poverty rates for veterans and non-veterans by disability and service-connected disability status.
- The Congressional Budget Office (CBO) used ACS data to analyze the levels and sources of [income of Vietnam veterans](#) in retirement compared with non-veterans.

The Department of Veterans Affairs (VA) commissioned [a report](#) from RAND describing the current and projected characteristics and health care needs of the U.S. veteran population as whole, as well as the population of veterans who receive health care from VA. The report uses data from the ACS, the VA and other federal sources to estimate the total number of Veterans and VA patients, to project the size of these populations over time, and to estimate the health care needs of these populations.



**Figure 6: Profile of Veterans' Characteristics**



Source: U.S. Department of Veterans Affairs, National Center for Veterans Analysis and Statistics, <https://www.va.gov/vetdata/docs/SpecialReports/KeyStats.pdf>.

## ACS Data Inform Health Care Programs and Policies

The ACS is a critical resource for health officials and planners. ACS data on presence and type of disabilities and health insurance coverage, combined with information on demographic characteristics and economic well-being, help guide health care programs and policies at the local, state, tribal, and federal level. ACS disability data are used to: Plan and fund programs for people with disabilities; Evaluate other government programs and policies to ensure that they fairly and equitably serve the needs of all groups; and Enforce laws, regulations, and policies against discrimination. ACS data on disability status, income, and health insurance status are used by communities to help identify and enroll eligible families in programs designed to assist them, such as the federal Health Insurance Marketplace, Medicaid, and the Children's Health Insurance Program (CHIP).

Here are some examples of how ACS data have been used to inform health care policies and programs:

- The St. Joseph Community Health Foundation focuses on achieving quality health and wellness for underserved populations in Northeast Indiana. To [target its grant funding](#) in the local community, the Foundation analyzed ACS data for Zip Code Tabulation Areas (ZCTAs) to identify geographic concentrations of vulnerable populations in Allen County, Indiana. Based on the analysis, the Foundation funded a Hispanic Health Advocate program to assist people

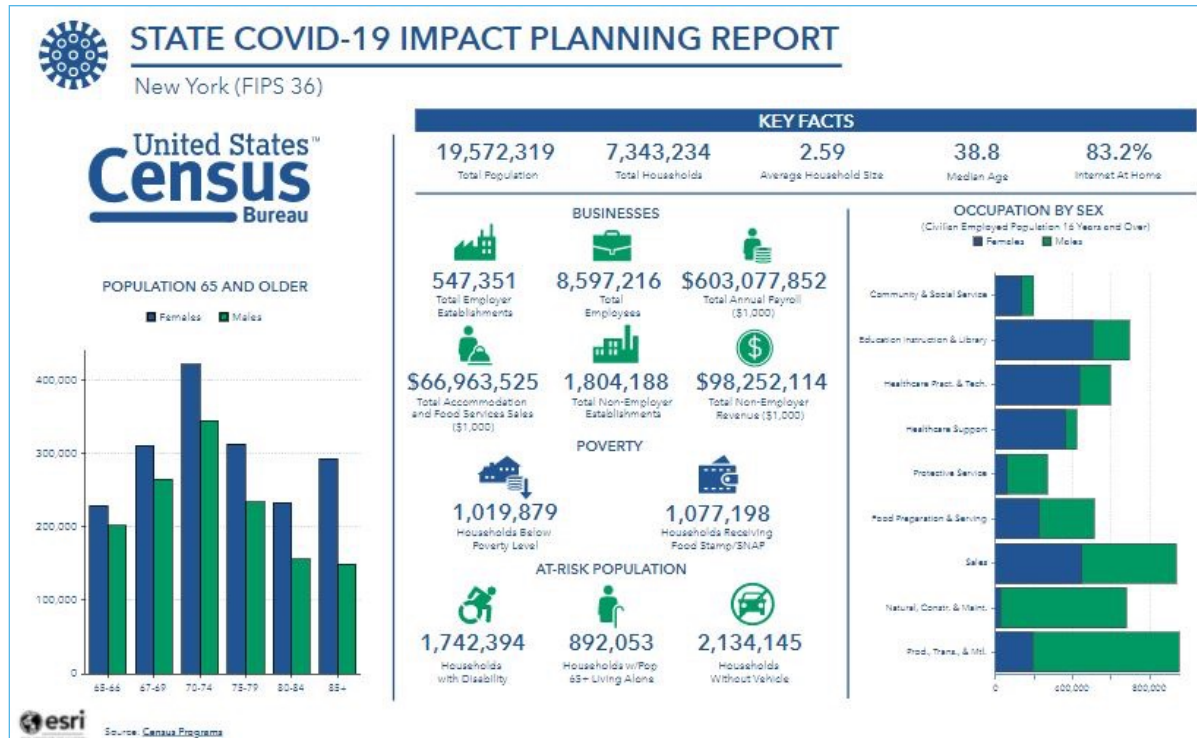
needing Spanish-translation services so they can communicate clearly with medical providers and receive appropriate treatment without the risk of miscommunication due to a language barrier. ACS data enable The St. Joe Foundation to make data-informed decisions and put its dollars to work in the areas of greatest need.

- The demand for mental health services rose sharply during the coronavirus pandemic, particularly among racial and ethnic minorities. The American Psychological Association (APA) Center for Workforce Studies uses data from the ACS to [analyze the psychology workforce](#) and education pipeline, how it has changed over the years, and whether it is adequate to address population health needs. While APA found that the number of racial/ethnic minorities within the psychologist workforce more than doubled between 2000 and 2019, the current and projected future supply of psychologists is insufficient to address the unmet need for mental health services, especially among racial and ethnic minorities. APA used these results to help secure a \$3 million increase for psychology education and training to build a more robust and diverse workforce.
- The State Health Access Data Assistance Center (SHADAC) is a state health policy research and technical assistance center housed within the School of Public Health at the University of Minnesota. SHADAC used 5-year ACS data at the state, MNSure Health Insurance rating area, legislative district, county and ZIP code levels to produce the [Minnesota State Uninsured Profile](#). This resource puts local-level information about the uninsured—who they are and where they live—in the hands of health insurance navigators, policymakers, and other stakeholders to better target outreach, enrollment, and other policy efforts targeted at Minnesota’s remaining uninsured.
- Staff at the Centers for Medicare & Medicaid Services (CMS) linked ACS data on language spoken at home with CMS administrative data for Medicare beneficiaries at the ZCTA/ZIP code level [to identify language needs by race and ethnicity](#). Understanding the language needs of Medicare beneficiaries is important because communication and language barriers are associated with clinical challenges and poorer health outcomes. In addition, limited English proficiency may also contribute to a lower quality of care and a lack of equity in the provision of healthcare.

### ACS Data Have Been Essential for Understanding and Responding to COVID-19

The Census Bureau also developed a [COVID-19 Data Hub](#) that features ACS data to help guide decision-making related to the COVID-19 pandemic. The site includes state-by-state reports highlighting populations that may be particularly vulnerable to COVID-19 and the pandemic’s effects on the economy (see Figure 7).

**Figure 7: Census COVID-19 Impact Reports**



Source: Census COVID-19 Data Hub, <https://covid19.census.gov/>.

ACS data can be used to provide a pre-pandemic baseline of population and housing characteristics but measuring characteristics *during* the pandemic is more complicated. The coronavirus pandemic not only had unprecedented effects on Americans' health and livelihoods, but it also disrupted our data infrastructure—including the ACS.

In 2021, the Census Bureau announced that it would *not* be releasing the standard 2020 ACS 1-year data products in September as planned due to the impact of the pandemic on data quality. Instead, the Bureau released a series of [experimental estimates](#) for a limited set of tables and geographic areas. The release of 2020 ACS 5-year data, originally planned for December 2021, was postponed until March 17, 2022.

These issues with the 2020 ACS estimates have hampered recovery efforts, but since ACS data collection is ongoing, we will eventually be able to compare population and housing characteristics before, during, and after the pandemic. Will some parts of the country bounce back faster than others? What are the long-term effects on employment, poverty, and inequality for different population groups?

### ACS Data Are Used for Program and Project Evaluation

While the ACS was not designed specifically for program evaluation, the comprehensive and timely nature of the data can make it a valuable resource for policymakers, planners, and scientists who want to assess conditions before and after a policy or plan change.

Since ACS data are collected using the same methods across the United States, program evaluators can also compare outcomes in communities where a policy change has occurred with communities that have similar characteristics but have not implemented the policy change. A city may use ACS commuting data to track trends in bicycle commutes to work before and after expanding a network of local bikeways.



**Arturo Vargas**  
CEO, NALEO Educational  
Fund

*“For policymakers, ACS data are essential to making policy decisions that meet the needs of their constituents. By knowing the full characteristics of the population they are serving, NALEO members are able to efficiently direct resources and services to help improve the lives of the people they represent.”*

## Forecasting Population and Housing Needs

Urban, regional, and rural planners also use ACS data to help develop short- and long-range forecasts of housing, energy, and transportation needs.

- The National Center for Smart Growth used ACS data to help [project the demand for housing in Maryland by 2030](#) and to develop a framework for improving access to affordable housing in the state over the next decade.
- Metropolitan Council and MetroTransit use ACS data to [improve transit planning](#) in the Minneapolis-St Paul metro area by analyzing neighborhood characteristics and predicting statistically which neighborhoods have the greatest potential ridership response to transit service offerings. They also use ACS data in siting new bus stops and identifying neighborhoods that need customer communications in additional languages.
- The California Energy Commission used ACS data on the number of households in the state and the characteristics of those households (size, income category, and number of vehicles) as a baseline for [forecasting changes in energy demand across multiple transportation sectors](#).
- The Skagit Council of Governments (Washington) used ACS data as a baseline for their [2021 population, employment, and housing forecast](#) for urban and rural areas in the region.

Planners can also use ACS data to help ensure that projects meet environmental justice and social equity goals. For example, the Puget Sound Regional Council used ACS estimates to help ensure that their [long-range economic strategy](#) would also promote a healthy environment and the well-being of people living in King, Pierce, Snohomish and Kitsap Counties, Washington.

GTrans, a municipal transit provider in the City of Gardena in Los Angeles County, used tract-level ACS data on race and ethnicity, language spoken at home, and English proficiency to [develop a plan](#) to provide language assistance to persons with limited English proficiency (LEP).





## THE ACS IS ESSENTIAL TO CORE FUNCTIONS OF AMERICAN DEMOCRACY

The ACS is a crucial ingredient in American democracy. Thomas Jefferson wrote extensively about education and is generally understood to have propounded the notion that an educated citizenry is a vital requisite for our survival as a free people. Especially in an information society, trusted, independent and reliable data are the “coin of the realm” in public policy debates, whether online or in the corridors of Congress. ACS statistics provide a feedback loop for the American public, allowing us to assess how things are going and to make course corrections when the data show we’re moving in the wrong direction. For policymakers, the data are needed to make funding decisions and to help ensure fair political representation and equal opportunity under the law.

### The ACS Plays a Central Role in the Fair Distribution of Federal Funds

All census-guided federal spending depends on the ACS in some way, shape, or form. The George Washington University research project [Counting for Dollars 2020: The Role of the Decennial Census in the Geographic Distribution of Federal Funds](#) finds that in Fiscal Year (FY) 2017, 316 federal spending programs distributed \$1.504 trillion to states and local areas on the basis, in whole or in part, of data derived from the ACS.

As the decennial census is carried out once a decade and collects data on a small number of demographic characteristics, Congress recognizes that the decennial numbers, on their own, cannot guide the fair, equitable geographic distribution of federal funds. As a result, Congress has authorized a series of more current and descriptive datasets derived from the decennial census to serve that purpose, especially the ACS.

The ACS is one of 52 census-derived datasets upon which federal funding decisions are made, and each of the other 51 is built using data from the ACS.

The **four types of census-guided programs** include:

- *Financial assistance programs* that provide direct payments, grants, loans, and loan guarantees to state and local governments, nonprofits, businesses, and households **(305 programs, \$1,465.2 billion)**.
- *Matching payments* from states to the federal government required by financial assistance programs **(3 programs, \$16.5 billion)**.
- *Tax credit programs* that allow a special exclusion, exemption, or deduction from gross income **(7 programs, \$14.9 billion)**.
- *Procurement programs* that award federal contract dollars to small businesses located in areas selected using census-derived data **(1 program, \$7.5 billion)**.

The **three uses of census-derived data** to guide the distribution of federal spending include:

- *Program eligibility designations* (areas and households).
- *Geographic allocation formulas*.
- *Award of points* in grant competition scoring.

The ACS variables most frequently used by federal programs to directly determine the distribution of federal spending are **median income, poverty rate, unemployment rate, median rent, and indicators of substandard housing**.

Of the 52 census-derived datasets used in federal funding decisions, the ACS, Population Estimates, Urban/Rural classification, and Core Based Statistical Areas—serve as the foundation for all others. The ACS serves as an input to the latter three, as follows:

- [Population Estimates](#) – the ACS is the source of international in-migration data and the distribution of demographic characteristics.
- Urban/Rural Classification and other measures of population density as indicated by the decennial census – the ACS is a key input to the [Census Planning Database](#), which is used to guide efforts to promote participation in the decennial census, for both the Census Bureau's outreach efforts, state and local government outreach, and non-profit "Get Out The Count" efforts.
- [Core Based Statistical Areas](#) – ACS commuting data are used to measure intercounty connectivity.

### Examples of Census-derived Datasets that Rely on the ACS as an Input Include:

- [State Personal Income](#) (Bureau of Economic Analysis), the basis for the allocation of Medicaid funding – the ACS is the source of interstate commuting data used to adjust earnings by place of work to earnings by place of residence; cash wages paid in private households; and various types of housing rents.
- [Small Area Income and Poverty Estimates](#) (SAIPE), the basis for allocation of Title I funding for public school systems—ACS income and poverty estimates by age are used to model the income and poverty estimates of each public school system's school-aged population.
- [Persistent Poverty Counties](#), Economic Research Service, USDA—estimates of persistent poverty are drawn from the ACS.
- [Income Limits and Area Median Income](#), HUD—based on ACS income data.
- [Fair Market Rents](#), HUD—based on ACS median rent data.
- [Local Area Unemployment Statistics](#) (LAUS), Bureau of Labor Statistics—estimates are based in part on ACS journey-to-work data (as well as ACS-derived Population Estimates).
- [Rural Classifications, Economic Research Service](#), USDA—based on ACS journey-to-work data (as well as ACS-derived Population Estimates).
- [Index of Medical Underservice/Health Professional Shortage Areas](#), HHS—based in part on ACS poverty estimates.
- [Qualified Census Tracts and Difficult Development Areas](#), HUD—based on ACS poverty, income, and other data.
- [HUBZones, SBA](#) (for federal procurement preferences)—based on ACS income data.

### ACS Data Help Ensure Fair Political Representation

The U.S. Constitution mandates that a census be taken every 10 years to count all people living in the United States. State population counts from the decennial census are used to reapportion seats in the U.S. House of Representatives, and state and local officials use decennial census results to help redraw congressional, state, and local district boundaries.

However, ACS data also play an important supporting role in the political process.

The Voting Rights Act includes provisions to ensure that legislative district boundaries reflect the racial and ethnic diversity of the people they represent, and ACS data are essential in producing the [Citizen Voting Age Population \(CVAP\)](#) measures relied upon by line drawers, legislatures and courts.

ACS statistics on language spoken at home are used to monitor compliance with the Voting Rights Act, especially since Congress has mandated its use to enforce [bilingual ballot requirements](#).

ACS data can also be a useful planning tool during the early stages of redistricting before official decennial census counts are available. Given the [delayed release of the 2020 Census redistricting data](#), some states relied on ACS estimates to identify areas with rapidly changing populations and started sketching preliminary maps so they could begin the lengthy process.<sup>2</sup>

## ACS Data Are Used to Help Enforce Anti-Discrimination Laws and Ensure Equal Opportunity

Federal agencies rely on ACS data to enforce civil rights laws, protect people from employment and hiring discrimination, provide fair access to affordable housing and provide the statistical foundation for federal enforcement of laws and regulations against discrimination in financial lending, housing development, and voting rights. The ACS is the essential source of population distributions by race, ethnicity, and language spoken to which business and electoral actions are compared, as noted below.

- ACS data on age, housing, employment, and education are used to help the government and communities enforce laws, regulations, and policies against discrimination based on age such as the [Age Discrimination in Employment Act \(ADEA\)](#).
- ACS data on housing characteristics, such as units in a structure, [kitchen and plumbing facilities](#), rent, tenure, and selected monthly owner costs, are used to implement and assess compliance with the National Affordable Housing Act.
- Home Mortgage Disclosure Act compliance relies on ACS data used by agencies of the Federal Financial Institutions Examination Council ([FFIEC](#)).
- Enforcement of the Community Reinvestment Act to encourage depository institutions to help meet the credit needs of the communities in which they operate [depends on ACS data](#).
- Small Business Lending Data Collection under the Equal Credit Opportunity Act (Regulation B) utilizes ACS data through the [Consumer Finance Protection Bureau](#).
- New rulemaking to deliver Enterprise Housing Goals for single-family and multifamily mortgages on housing that is affordable to low-income and very low-income families relies on the use of ACS data at the [Federal Housing Finance Agency](#).
- Data on age, sex, race/ethnicity, labor force status, and work status are used by federal agencies to monitor annual [compliance with Equal Opportunity and Civil Rights laws](#).
- Title VIII of the Civil Rights Act of 1968, known as the Fair Housing Act, requires the U.S. Department of Housing (HUD) and recipients of federal funds from HUD to affirmatively further the policies and purposes of the Fair Housing Act. HUD requires the [use of ACS data](#) for housing agencies to report and monitor on fair housing compliance.

## Members of Congress Use ACS Data to Learn About Their Districts

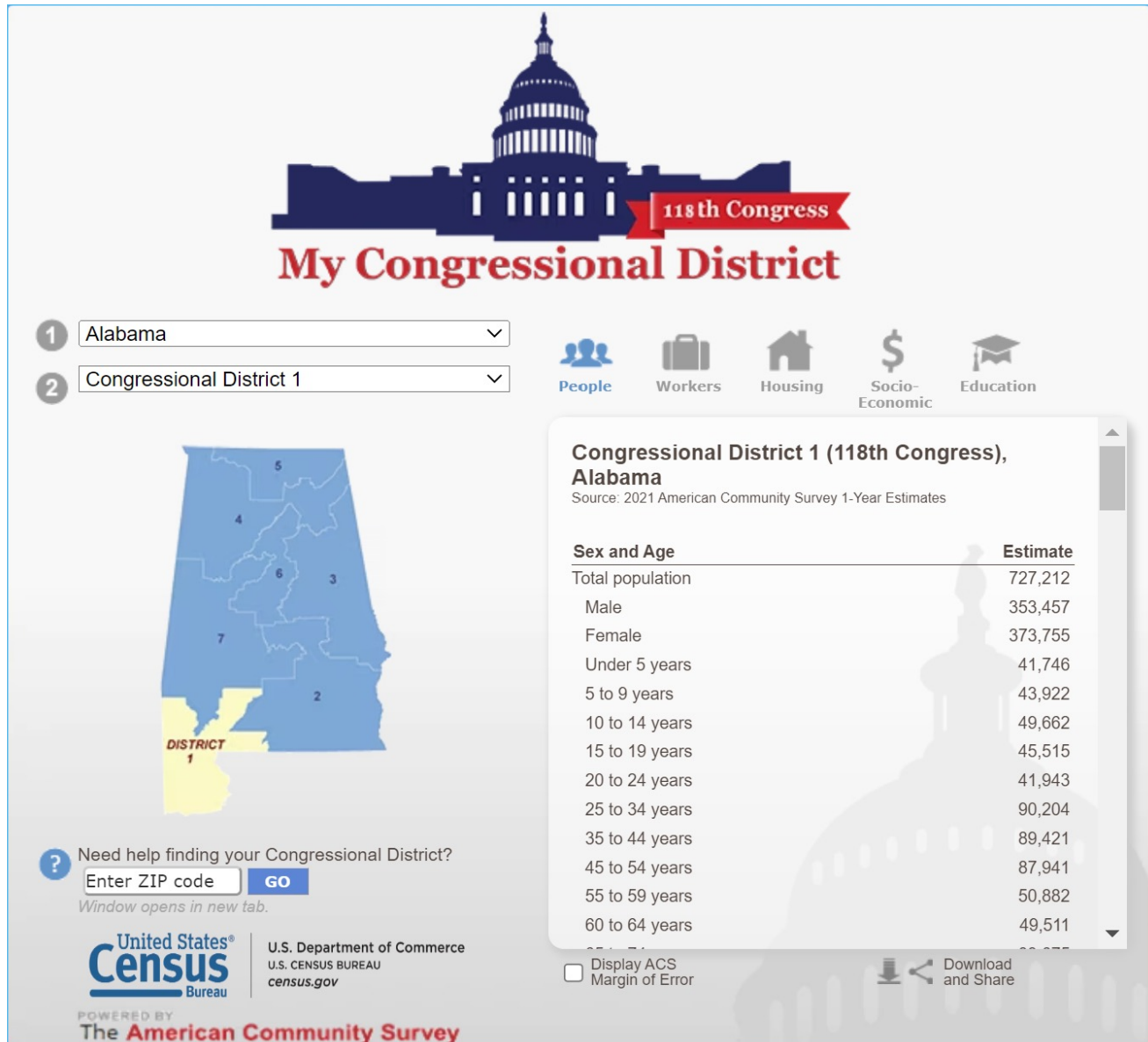
How do members of Congress learn about important issues in their districts? Some of the answers come from the ACS.

The Census Bureau releases annual ACS data for each of the 435 congressional districts. Members and staff use these data to produce current snapshots of the characteristics of their districts, and to look at trends over time.

The ACS provides a wealth of timely social, economic, housing, and demographic data for congressional districts that can be used in drafting legislation, press releases, statements, and constituent correspondence; conducting legislative research; and developing grant formulas for proposed programs.

[My Congressional District](#) is a specialized tool that allows members of Congress and their staff to easily access and view population and housing estimates for congressional districts from the most recent ACS 1-year estimates (see Figure 8).

**Figure 8: My Congressional District**



Source: U.S. Census Bureau, My Congressional District, <https://www.census.gov/mycd/>.





## CURRENT LIMITATIONS AND CHALLENGES IN ACS DESIGN AND DATA DISSEMINATION

### ACS Sample Size and Precision of Estimates

The ACS replaced the decennial census long form after the 2000 Census and provides critical social, economic, housing, and demographic data about our nation every year. However, the sample size of the annual ACS is much smaller than the sample size of the previous decennial “long-form” survey. For example, the 2000 Census long-form questionnaire was sent to approximately 20 million addresses, resulting in 18.3 million final interviews. In 2000, this represented about 1 in every 6 housing units. In contrast, the ACS is now sent to about 3.5 million addresses each year, resulting in just over 2 million final interviews annually.

When cumulated over five years, the goal was for the ACS to provide data with the same level of precision for small geographic areas as the decennial long-form sample. But the number of housing units in the United States continues to increase every year. Between 2000 and 2019, the number of housing units increased by 23.8 million or almost 21%. However, the ACS has sampled approximately the same *number* of addresses each year. During the five-year period prior to the pandemic (2015-2019), the ACS was sent to a total of 17.7 million addresses resulting in 10.9 million final interviews. This number of final interviews represents only about 1 in every 13 housing units in 2015-2019, compared with 1 in 6 for the 2000 Census long form (see Table 1).

**Table 1: Number of Interviews for 2000 Census Long Form and 2019 ACS 5-year Data Files**

Data source	Final interviews	Share of housing units interviewed
2000 Census long form	18.3 million	1-in-6
2015-2019 ACS	10.9 million	1-in-13

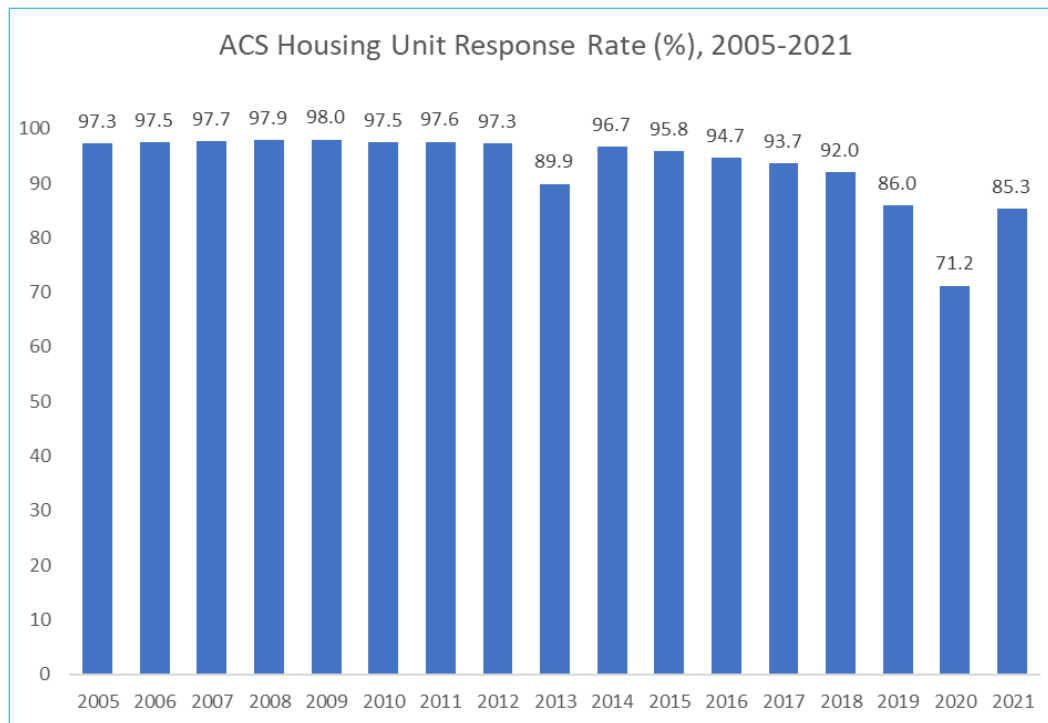
To interview the same *proportion* of housing units in 2015-2019 as in 2000, the ACS would have needed approximately 21.8 million final interviews over this five-year period—almost 11 million more than the actual number of final interviews reported.

Without an increase in sample size, the ACS will continue to interview a smaller *share* of U.S. housing units each year. And, as the U.S. population continues to grow, the number of census tracts continues to increase. A fixed sample size allocated across more census tracts results in fewer interviews per tract, reducing the precision of ACS estimates and impacting the ability of the ACS to fully replace the data previously provided by the census long form.<sup>3</sup>

### Declining ACS Response Rates

Another factor contributing to the decrease in the number of completed ACS interviews is a decline in the survey response rate. From 2005 through 2012, the ACS response rate was quite high—between 97% and 98%. This is due in large part to the fact that the ACS is mandatory rather than voluntary. The response rate dropped to 90% in 2013 when a government shutdown impacted follow up operations. The response rate jumped back up to 97% in 2014, but then declined steadily from 96% in 2015 to only 86% in 2019, prior to the onset of the COVID-19 pandemic (see Figure 9). The government shutdown in 2018-2019 also impacted follow up operations, causing a drop of about four percentage points in the national response rate in 2019.

**Figure 9: The ACS Housing Unit Response Rate Has Dropped Steadily Since 2014**



Source: U.S. Census Bureau, American Community Survey Response Rates, <https://www.census.gov/acs/www/methodology/sample-size-and-data-quality/response-rates/>.

The COVID-19 pandemic caused **major disruptions to the 2020 ACS**, resulting in a final response rate of only 71% and only 1.4 million completed interviews. While the response rate for the 2021 ACS improved, it was still well below the pre-pandemic levels from 2014 through 2018. Declining response rates are not unique to the ACS—they are being experienced in other federal surveys as well—but unlike the ACS, most of these other surveys are voluntary. Further declines in response rates may reduce the future representativeness and usability of ACS data—especially for small geographic areas and population groups.

### Recent Changes to ACS Sample Design

In 2011, the Census Bureau secured additional funding to increase the annual ACS sample size from 2.9 million to 3.5 million. In response to data user concerns about the low levels of precision in ACS estimates for small geographic areas, the Census Bureau also made changes in 2011 to the ACS sample design.<sup>4</sup> This re-design involved shifting sample from census tracts with larger populations to those with smaller populations to improve the precision of estimates for the smaller areas. The Census Bureau also increased the “nonresponse sampling rate”—the share of nonresponding households selected for follow up—to 100% in selected areas based on tract-level mail and telephone response rates.

Census Bureau simulations indicated that these changes in the ACS sample design reduced differences in the precision of estimates between small and large tracts. An analysis of 2008-2012 ACS data for New York City by a National Academy of Sciences (NAS) panel concluded that, “Under the current overall sample size limitations, sample reallocation to ensure CV equalization at the tract level achieves little benefit to precision, and it creates inefficiencies in the geographic aggregation of estimates.”<sup>5</sup> However, this is just one example, and the conclusion should not be generalized to all areas across the United States.

## Better Capturing Household Relationships in the ACS

Increases in cohabitation and births outside of marriage over the past several decades have made household living arrangements more complex and fluid.<sup>6</sup> So, it's understandable that some respondents are unsure who should be included as a household member when completing the ACS questionnaire. Figure 10 shows the instructions for counting the number of people living or staying at an address.

**Figure 10: Portion of 2022 ACS Questionnaire Instructions**

**How many people are living or staying at this address?**

- **INCLUDE** everyone who is living or staying here for more than 2 months.
- **INCLUDE** yourself if you are living here for more than 2 months.
- **INCLUDE** anyone else staying here who does not have another place to stay, even if they are here for 2 months or less.
- **DO NOT INCLUDE** anyone who is living somewhere else for more than 2 months, such as a college student living away or someone in the Armed Forces on deployment.

**Number of people**

Source: U.S. Census Bureau, 2021 ACS questionnaire, <https://www2.census.gov/programs-surveys/acs/methodology/questionnaires/2021/quest21.pdf>.

The instructions state that anyone who is living somewhere else for more than 2 months should *not* be included as a household member. While this exclusion rule may be clear in the case of college students living away or members in the Armed Forces who are deployed, it may be less clear in the case of children under age 18 who split their time between multiple households due to joint custody arrangements, parents who live in different households, or childcare arrangements that vary throughout the week.

Indeed, Census Bureau research estimates that about 13% of children under age 5 were missed in the 2015 ACS, and this figure was even higher for Hispanic/Latino children (18%) and non-Hispanic Black children (21%).<sup>7</sup> These high undercount rates could result in biased ACS statistics about young children, particularly if differences in the children who are included and those who are missed are associated with other social and economic characteristics such as poverty status or food insecurity. Census Bureau research suggests this may be the case. For example, young children who were missed in the 2010 Census were more economically disadvantaged than those who were included.<sup>8</sup>

In the ACS, respondents are instructed to list the name of a person living in the household who owns or rents the housing unit. This individual is called “Person 1,” and the relationship question for all other household members identifies their relationship only to Person 1. The relationships between Person 1 and other household members in turn determine whether a household is considered to be a family or a nonfamily household. While household structure in the U.S. has become more complex, *the current relationship question prevents data users from being able to determine if an adult other than Person 1 is the parent of any resident children*. This is problematic in cohabiting couple households where a child’s classification as an “own” child or “unrelated” child may differ depending on which unmarried partner is listed as Person 1.

Data users also can't determine if resident children are related to both cohabiting adults in a household—only to the one who is arbitrarily designated as Person 1.<sup>9</sup> Research on the causes of the undercount of young children in the 2010 Census finds that children are more likely to be missed if they live in complex households and those where they are not closely related to the householder.<sup>10</sup> The undercount of young children in the ACS could result in inaccurate assessments of children's living arrangements as well as their social and economic well-being.

## Expanding Measurement of Parental Place of Birth in the ACS

Parental place of birth is only captured in the ACS for children who are living with their parents, based on responses to the question on place of birth that is asked only of all household members. Therefore, data users cannot determine whether ACS respondents who do not live with their parents are second- or third-generation immigrants to the United States. This limits researchers' and policymakers' ability to use the rich social, economic, housing, and demographic data provided by the ACS to both study the characteristics of second- and third-generation immigrants—such as educational attainment, family structure, income, and disability status—and to evaluate their well-being compared with other population groups.

## Adding, Changing, or Dropping Questions in the ACS Survey

The Paperwork Reduction Act (PRA) of 1995 requires the Census Bureau to submit the ACS questions to the Office of Management and Budget (OMB) for approval prior to collecting any data from the public. Any content changes in the ACS are determined by OMB in consultation with the Census Bureau. The PRA requires that OMB determine the practical utility of all data proposed for collection and keep respondent burden to a minimum. Because participation in the ACS is mandatory, the Census Bureau will only ask, and OMB will only approve, "necessary" questions. To determine what questions are necessary, OMB considers the frequency with which requested data are needed, the level of geography for which they are needed, and whether there is any other data source that could meet the need in lieu of collection on the ACS. The Census Bureau's American Community Survey Office is also responsible for conducting periodic reviews of the justifications for all ACS questions and considering the addition, revision, or deletion of questions. The Census Bureau's goal is to limit the size of and type of content in the ACS so that data quality—indicated by survey and item response rates—remains high.<sup>11</sup>

OMB, in conjunction with the Census Bureau, co-chairs the Interagency Committee on the ACS that was established by the Interagency Council on Statistical Policy Subcommittee on the ACS (ICSP-SACS). This Committee participates in reviews of ACS content, including tests of new and/or revised questions, and makes recommendations to the ICSP-SACS on any additions, revisions, or deletions of questions on the ACS. With input from other Federal stakeholder agencies, the ICSP-SACS advises the Chief Statistician of OMB and the Director of the Census Bureau on any ACS content changes.<sup>12</sup>

**This formal process** helps ensure that the ACS provides the most useful and accurate information with the least amount of public burden. However, requests to test question revisions or add new questions must come from either the Census Bureau itself, another Federal agency stakeholder, or as the result of Congressional action such as a new law. This constrains the opportunity for non-Federal agency stakeholders to request consideration or testing of ACS content changes. In addition, even if the ACS Committee, the ICSP-SACS, and OMB's Chief Statistician recommend ACS content changes, final approval rests with OMB's Office of Information and Regulatory Affairs (OIRA) and the OIRA Administrator who is appointed by the President and confirmed by the U.S. Senate. Thus, even ACS content changes that are supported by research and recommended by the ICSP and OMB's Chief Statistician can be prevented by OIRA from approval and implementation.

## ACS Data Access: Limitations and Challenges

The primary tool for accessing ACS data is the Census Bureau's [data.census.gov](https://data.census.gov) online platform, which replaced American FactFinder in September 2019. Despite extensive data user feedback and ongoing system enhancements, many data users continue to report difficulty in finding the ACS data they need on [data.census.gov](https://data.census.gov).

A primary reason for developing [data.census.gov](https://data.census.gov) was to streamline and standardize data users' experiences in finding, analyzing, and using Census Bureau data. Putting all of the Census Bureau's data in one place should allow data users to spend less time searching for data and more time to using it in their applications. But ACS data prior to 2010 are not available on [data.census.gov](https://data.census.gov). Instead, ACS data for 2005 through 2009 must be obtained through the Census Bureau's Application Programming Interface (API) or from Summary Files available through the Census Bureau's FTP site, both of which are designed for advanced users. Thus, novice ACS data users may not be able to access the data from earlier years.

The Census Bureau encourages data users to collapse variable categories and aggregate geographic units to improve the precision of ACS estimates from published tables. However, it is challenging for data users who perform these aggregations to calculate the new measures of precision or error. While the Census Bureau has developed and released a new tool for accessing and tabulating ACS microdata called [MDAT](#), there is no tool available that enables data users to collapse variable categories, create custom geographic aggregations from ACS tables, or calculate the new measures of error needed for these derived estimates. If the Census Bureau developed a tool enabling data users to collapse categories quickly and easily and/or aggregate geographies in published tables and calculate the standard errors for these new estimates, it would increase the ability of the ACS to meet data user needs for more precise small area data.

The successor to American FactFinder, [data.census.gov](https://data.census.gov) continues to present challenges. While more experienced data users can navigate to their tables of interest using the Advanced Search feature, novice users are often confused by the single search bar on the home page and the term(s) they should enter to find the information they need. The Census Bureau should continue to work with data users to improve the search and navigation functions on [data.census.gov](https://data.census.gov).

Finally, one of the main strengths of the ACS is that it provides access to estimates on an annual basis. However, viewing and/or downloading data for multiple years in [data.census.gov](https://data.census.gov) is often a cumbersome process, making it more difficult for data users to measure trends over time.



## ENHANCEMENTS TO IMPROVE THE QUALITY, TIMELINESS, AND ROBUSTNESS OF ACS DATA

### More Robust Follow Up Operations

The ACS has suffered from the same decline in response rates that has affected [other government and non-government surveys](#) over the last several decades. The COVID-19 pandemic only exacerbated this challenge. The Census Bureau has a nonresponse follow up model that reaches only about one-third of the nonresponding housing units, (unlike the goal in the decennial census nonresponse follow up operation to reach 100% of nonresponding housing units). This is due to staffing, workload, and budget limitations currently in place that limit follow up operations in the ACS.

Even without an increase in the ACS total sample size, the Bureau could potentially improve the quality of ACS estimates—especially for smaller geographies and population subgroups—with increased investment in nonresponse follow up operations. Of course, increasing the sample size of the ACS would also increase the size of the nonresponse workload, requiring even greater investment in new and improved methods to address the nonresponse challenge if the ACS is to [reliably and equitably](#) meet the needs of every community.

The COVID-19 experience is perhaps the most disruptive example of periodic challenges the Census Bureau confronts with all its survey follow up operations. The ACS, which has the unique mission to provide annual estimates that are comparable across time and all census geographies, faces a continuous challenge to address data collection impacts from natural disasters, extreme weather events, wildfires, civil disorders that lock down cities, public health events and more. When the decennial census confronts these same kinds of challenges, Congress grants the census professionals flexibility in spending to adjust operations and adapt follow up operations to ensure complete coverage and accuracy of data. Similar funding flexibility should be granted to the American Community Survey Office (ACSO) to help them adapt to local, regional, or national events that impact or degrade the self-response to the ACS and ensure future data releases are not delayed due to nonresponse to the survey impacting fitness for use.

### Increasing the Annual Sample Size of the ACS

The annual sample size of the ACS cannot be as large as the census long-form sample because it would be prohibitively expensive. However, the current size of the ACS sample cumulated across five years is much smaller than the 2000 Census long-form sample. Some degree of reduced precision in ACS 5-year estimates relative to those from the 2000 Census long form was expected as the tradeoff for providing more timely annual data updates. But standard errors for median-sized census tracts are 60% larger in the ACS than in the 2000 Census—a gap much larger than originally anticipated by the Census Bureau in the initial ACS design.

The precision of ACS estimates—particularly for census tracts and small governmental units—could potentially be improved by increasing the annual sample size. To reduce ACS standard errors to be only about 25% larger than those from the long-form census, one report calls for “increasing the annual sample size to about 4.8 million housing units,” which would result in a total sample of 24 million housing units when pooled across five years.<sup>13</sup> Of course, this report was written before the coronavirus pandemic impacted data collection operations and reduced response rates for the 2020 Census and ACS as well as other federal surveys. Increases in the number of addresses sampled in the ACS will not result in improved precision of ACS data if response rates remain lower. Rather, it is increases in the number of final interviews that could help to improve the precision of ACS data.

Although further changes to the ACS sample design might also be used to increase the precision of small-area ACS estimates, a recent NAS expert panel recommended that any future redesigns



carefully evaluate whether further deviations from proportional sample allocation are justified. The panel also concluded that, “The availability of additional funds to improve the precision of estimates would be better used to increase the initial designated sample size, rather than to increase the nonresponse sampling rate.”<sup>14</sup>

## Improving Measurement of Household Relationships in the ACS

The Census Bureau has conducted extensive research to better understand why young children are missed in the decennial census and to identify ways to reduce this undercount.<sup>15</sup> Methods identified through this research that are applicable to the ACS should be adopted. In addition, in 2022, the Census Bureau formed a new internal working group of subject matter experts focused on improving data for young children. They are expanding prior research to better understand why young children are more likely to be missed and looking for ways to improve data collection for this age group by changing the instructions, probes, and questions used to create household rosters.<sup>16</sup> As part of the 2022 American Community Survey Content Test, the Census Bureau conducted cognitive testing of changes to the instructions, probes, and questions for creating the roster of people living in the household. The goal is to ensure that all household members are included in the survey, especially young children, nonrelatives, and people with tenuous ties to the household. While these efforts may improve ACS *within household* coverage, they still will not enable data users to determine if an adult other than Person 1 is the parent of any resident children.

Some experts and ACS stakeholders have recommended the addition of questions to the ACS that capture the relationships between all household members rather than just those to Person 1.<sup>17</sup> However, at a minimum, the ACS could add questions similar to the “parental pointers” in the Current Population Survey to establish the relationship of children to *all* adults in a household. A detailed analysis concludes, “The new CPS measures represent an important development in the availability of data to accurately measure trends in the living arrangements and economic well-being of Americans over the life course.”<sup>18</sup> Adding such questions to the ACS would enable better identification of children who are residing in complex households as well as those living with one or two parents in cohabiting couple households, regardless of which adult partner is listed as Person 1. Researchers also note, “The new CPS family relationship variables are essential for studying cohabiting families.”<sup>19</sup>

## Improving Measurement of Race and Ethnicity in the ACS

In 1997, OMB revised the standards that all federal agencies must follow in collecting and reporting data on race and ethnicity. These standards require two separate race and ethnicity questions, with the ethnicity question collected first before the race question. However, in the years since 1997, racial and ethnic diversity has increased, and a growing number of people identify with more than one race or ethnicity. For example, many Hispanic/Latino groups have had difficulty answering the race question because they consider their ethnicity and race to be the same thing.

To improve the measurement of race and ethnicity in the 2020 Census and ACS, the Census Bureau conducted [extensive research](#) on potential modifications to these questions. They found that combining race and ethnicity in a single question and adding a new response category for Middle Eastern or North African (MENA) improved data quality. However, OMB decided to continue use of the two separate race and ethnicity questions for the 2020 Census and ACS.

In 2022, the new Chief Statistician of the United States [launched a formal review](#) of OMB’s 1997 standards for collecting and reporting race and ethnicity data across federal agencies. An Interagency Technical Working Group [recently issued](#) a set of initial proposals for revising these statistical standards, including collecting race and ethnicity information together in a single question and adding a MENA response category. These initial proposals are [open for public comment](#) through April 27, 2023, and OMB expects to complete the review process and have revised standards in place by the summer of 2024.

Adoption of the revised questions will improve the quality of racial and ethnic data in both the ACS and the 2030 Census. Report language for the Commerce Justice Science portion of the FY 2023 Omnibus appropriations bill requires the Census Bureau to provide a report to the Committees within 180 days on its plan for implementing updated race and ethnicity questions for its surveys—including the American Community Survey and the 2030 Census—and whether it believes that additional testing is necessary.

## Adding New Content to the ACS

To enhance the utility of ACS data, new questions in two additional areas could also be considered. The first is adding questions on parental place of birth for all ACS respondents. The Census Bureau previously tested the addition of questions on father's place of birth and mother's place of birth in the 2010 ACS Content Test. Based on results from this test, the Census Bureau initially recommended to both the American Community Survey Office and OMB that these questions be added to the 2013 ACS survey.<sup>20</sup> However, in a letter to OMB, the Director of the Census Bureau later requested these two proposed questions be omitted from the clearance package for the 2013 ACS previously sent to OMB. The addition of questions on parental place of birth would enable researchers and policymakers to use the rich social, economic, housing, and demographic data provided by the ACS to study the characteristics and geographic distribution of second- and third-generation immigrants and evaluate their well-being over time.

Second, with the increasing social and political visibility of sexual and gender minority (SGM) populations, a 2022 [Executive Order](#)—Advancing Equality for Lesbian, Gay, Bisexual, Transgender, Queer, and Intersex Individuals—stipulated an urgent need for federal data on the characteristics, geographic distribution, and well-being of these groups to measure and address the disparities LGBTQI+ individuals, families, and households face. Some voluntary federal surveys such as the [National Health Interview Survey](#) and the [National Crime Victimization Survey](#) already collect information on respondents' sexual orientation and gender identity (SOGI) while others—including the [Current Population Survey](#)—are researching the potential addition of such questions. Although the Census Bureau's [Household Pulse Survey](#) added questions to measure SOGI, the recent [Federal Evidence Agenda on LGBTQI+ Equity](#) calls for collection of SOGI data in the decennial census and American Community Survey. The extensive social and economic data in the ACS, along with data on disability, would enable research on the characteristics and well-being of SGM populations as well as regional differences in economic and health disparities for these groups.

The Census Bureau received an FY23 [appropriation from the Congress of \\$10 million](#) to research adding questions about SOGI to the ACS. The Census Bureau's research in FY23 will build upon previous cognitive testing conducted for the Current Population Survey on the use of proxy reporting—when a person provides data for someone else. SOGI questions are not currently asked on any federal surveys that use proxy reporting—such as the ACS where one person at a sampled address typically answers questions about everyone living there. The Census Bureau will also continue research into alternative wording for the questions, response categories, and placement of the questions on the survey. The Census Bureau can also draw on experience from other recent surveys and research efforts to help guide their decision making:

- The Household Pulse Survey, National Health Interview Survey, and National Crime Victimization Survey—as well as the Youth Risk Behavior and Behavioral Risk Factor Surveillance Systems.
- A [recent report](#) from the National Academies of Sciences, Engineering, and Medicine (NAS) on measuring sex, gender identity and sexual orientation.
- Extensive research by a Federal Interagency Working Group.<sup>21</sup>
- The recommendations on [best practices](#) for SOGI data collection in federal surveys recently released by OMB.



All potential new questions are routinely tested and must be approved by OMB before they can be added to the ACS.

## Incorporating Administrative Data in the ACS

The Census Bureau has been evaluating three major ways to use administrative records and third-party data with the ACS:

- Direct replacement: omitting some survey questions for households if the same information is reliably available from alternative sources.
- Improve editing and imputation routines by filling in missing data using alternative data sources.
- Blending ACS and alternative data to create new data products.

At a [NAS workshop](#) in 2018, the Census Bureau summarized the results of their administrative records research, and data users shared examples of how they use administrative records in their applications.<sup>22</sup> As detailed in a recent working paper, ACSO successfully used ACS data in combination with administrative records to develop the 2020 ACS 1-year experimental estimates during the COVID-19 pandemic.<sup>23</sup>

- Administrative data from the Bureau of Prisons were used in lieu of survey responses from federal inmates.
- Administrative data from several sources, including the U.S. Postal Service and property tax records purchased from third-party vendors, were used to more accurately capture the housing unit status of nonresponding addresses as occupied or vacant.
- Administrative data from the Internal Revenue Service, Social Security Administration, and other sources were incorporated into the weighting procedures to produce Entropy Balanced Weights (EBWs) that mitigated the effects of nonresponse bias in the 2020 ACS data. The 2016-2020 ACS 5-year housing unit weighting methodology was also modified to incorporate EBWs.

To reduce respondent burden and improve the quality of ACS data, the Census Bureau has been focusing initial efforts on supplementing or replacing ACS survey data for several housing characteristics with administrative data from other sources such as property tax records. At a minimum, administrative data will be used for the question asking about property acreage beginning in 2024. Implementation of administrative data for other housing items, such as agricultural sales and year built, may start later.

The [Census Bureau's Agility in Action](#) report also notes the following areas of ongoing research:

- Evaluating the use of administrative data to fill in missing demographic data.
- Comparing the differences between administrative and survey response data for multiple items, such as acreage, citizenship, veteran status, property value, and income.

Although challenges remain before all these types of administrative records can go into production, the Census Bureau expects incorporating these records into ACS processes will increase data reliability while reducing respondent burden and saving costs. With declining ACS survey response rates and rising costs for nonresponse follow up, it is important for the Census Bureau to accelerate research and continue to advance the implementation of administrative records use in the ACS—which may also require increased investment. In the longer term, incorporation of data from administrative records may be more cost effective in increasing ACS data quality than further expanding nonresponse follow up operations.



## NEW DATA PRODUCTS DERIVED FROM MODERNIZING THE ACS

For more than 15 years, the ACS has provided the most up-to-date statistics available on America's communities. However, the Census Bureau must constantly adapt to new technologies to meet the changing expectations from ACS data users. Over time, the Census Bureau has made significant strides in this area through:

- Regular improvements to American FactFinder and its successor, [data.census.gov](https://data.census.gov).
- Enhancements to the Census Bureau's [Application Programming Interface \(API\)](#).
- The release of new [ACS 1-year supplemental estimates](#).
- The development of a new microdata access tool, [MDAT](#).
- The development of a [Statistical Testing Tool](#) allowing users to test whether differences between ACS estimates are statistically significant.
- The development of specialized tools for particular stakeholder groups, such as [My Tribal Area](#), [COVID-19 Data Hub](#), [OnTheMap for Emergency Management](#), [My Congressional District](#), and [Census Business Builder](#).

The Census Bureau has organized [events](#) and provided training materials to help data users access the data they need, including a series of [14 ACS Data User Handbooks](#) tailored to different stakeholder communities. Bi-annual [ACS Data Users Conferences](#) have provided an opportunity for ACS stakeholders to engage with Census Bureau staff on important issues.

The Census Bureau has also regularly engaged with ACS data users to gather feedback on data products. In 2015, the Bureau established a Data Products Redesign Group—made up of data users representing different data user communities—that provided input on new or redesigned prototype products. Members of the Census Bureau's [ACS Online Community](#)—an online forum for sharing messages, materials, and announcements related to ACS data—have also provided regular, informal [feedback on ACS data products](#).

Many data users are concerned about the future impact of new disclosure avoidance procedures on the quality and availability of ACS data. At the Census Bureau, disclosure avoidance is a process used to protect the confidentiality of respondents' personal information. Since the 1990 Census, the Census Bureau has protected confidentiality by adding “noise”—or variations from the actual count—to the collected data. For the 2020 Census, the Census Bureau has taken new steps to modernize the procedures used to protect respondent data, including the use of a formally private methodology known as [differential privacy](#).

Although initial plans were to adopt differential privacy as the method of disclosure avoidance for the ACS by 2025 or later, the Census Bureau announced in December 2022 that they will *not* implement a formally private solution for the ACS because “the science does not yet exist to comprehensively implement a formally private solution for the ACS.”<sup>24</sup> Instead, the Census Bureau expects a multiyear development period extending beyond 2025 that will include data user review and feedback. In fact, report language for the Commerce Justice Science portion of the FY 2023 Omnibus appropriations bill directs the Census Bureau to continue to consult regularly with data users on disclosure avoidance methods under consideration for all data products and programs.

In the interim, to address some of the known vulnerabilities in the ACS PUMS data product, the Bureau is researching the feasibility of creating a high-quality, fully synthetic public-use microdata file and accompanying validation service. This approach would allow users to verify the validity of analyses run on the synthetic microdata file. Ongoing research to identify and develop a

comprehensive disclosure avoidance solution that mitigates the cumulative disclosure risk posed by the separate ACS data products is a significant undertaking with future cost implications.

The Census Bureau provides additional information on their [plans to apply disclosure avoidance procedures to ACS data](#) on their website.

## Products that Could be Developed to Better Meet the Needs of ACS Data Users

There are several new products and tools—or enhancements to existing products—that could improve data users' access to ACS data and the usefulness of the data. Some of these data products and tools have been discussed in workshops organized by the National Academy of Sciences while others were mentioned in previous surveys of ACS data users:

- New data products for small geographic areas (like those developed under the [Small Area Income and Poverty Estimates Program](#)) derived from the combination of ACS and administrative records data.
- New products or tools that would enable data users to measure trends more easily.
- An enhanced microdata access system that would enable data users to create custom, privacy-protected estimates from the full internal microdata file and generate associated margins of error.
- Easier access to ACS data through the Census API and tools to help data users access ACS estimates through free, open-source software.
- A product that would allow data users to easily combine estimates to produce custom geographic areas and calculate margins of error for derived estimates.
- Products that provide data users with more up-to-date estimates (e.g., selected monthly statistics, similar to those available from the Current Population Survey).
- New features and functionality to improve access to ACS data through the data.census.gov interface, which continues to present a challenge for many users.

The Census Bureau is also exploring ways to use [Big Data](#) to develop new data products. The use of such sources would enable the Census Bureau to produce “more accurate, granular and timely statistics at lower costs.”

More broadly, the Census Bureau recently launched an initiative called the “Frames Program” to create Enterprise-wide frames that are linkable in nature.<sup>25</sup> These frames include the Master Address File, the Business Register, the Job Frame, and the Demographic Frame. Linking these frames as part of a new enterprise infrastructure is expected to:

- Reduce respondent burden for both individuals and businesses by re-using data that already exist in one or more frames;
- Reduce duplication of effort within the Census Bureau; and
- Facilitate reproducibility by enabling the tracing of data and code through the linked frames.

As part of this new enterprise infrastructure, the Census Bureau is shifting from a primarily survey-centric approach to a more data-centric approach—where data from a variety of sources will be funneled together to produce the highest quality estimates that best meet data users' needs.

The initiative to develop a new enterprise infrastructure at the Census Bureau is taking place within the context of a broader effort to develop “a vision for a new data infrastructure for federal statistics and social and economic research in the 21st century.”<sup>26</sup> The [first report](#) from this NAS project—released in 2022—describes how the country can improve the statistical information critical to shaping the nation's future by mobilizing data assets and blending them with existing survey data. In a 2021 [letter](#), stakeholder groups called on the Census Bureau to “harness currently available Big

Data technology and methodology to reduce respondent burden and realign the Bureau's already-existing data from multiple sources into universal 'frames.'" Doing so, the groups acknowledged, would require a significant increase in funding for Census Bureau research and development.

## A CONCLUSION BY THE CENSUS PROJECT

As we have illuminated here, the ACS is the premier source for information about America's changing population, households, and workforce—and a crucial component of the American democracy. It is a pervasive and relied upon source of the very kind of information the Founders forecasted the new nation would need to successfully survive and expand across the American continent.

ACS data are pervasively used by federal, state, and local decisionmakers to power our economy and plan our communities. To strengthen it would call for a comparatively small national investment and mitigate the threats to the vital data relied upon by local communities, businesses, and the federal government. Here we try to estimate the scope of the investment required to rescue and expand the ACS in this new information economy and an era of evidenced-based policy making.

### What Cost Estimates Are Available for These Investments?

In 2021, [stakeholders](#) led by The Census Project first raised the alarm on the need for major new investments in the ACS—months before the Census Bureau announced the delays in releasing the 2020 ACS 1-year and 5-year estimates. It was the first, rough effort to assess how much new funding over the current base would be required to begin to modernize the ACS.

That funding proposal to the Congress (as they considered the FY 2022 budget) addressed not only the ACS, but other initiatives as well, including stabilizing the Survey of Income and Program Participation (SIPP), investing in modernizing enterprise data infrastructure at the Bureau, preparing for the 2022 Economic Census, and growing new survey innovations such as the 'Pulse Surveys'—and increasing the ACS sample size by one million. Altogether, these enhancements totaled \$335 million. Increasing the sample size of the ACS by an additional one million households was estimated to be \$45 million based upon a preliminary forecast from Census leaders consulted by The Census Project.

A more refined cost estimate today would require an in-depth conversation with Census operational leaders, data scientists, and survey methodologists on a comprehensive plan to modernize the ACS, including not just increasing the sample size, but a more robust follow up operation, incorporation of data from administrative records, additional questions, and decisions on producing new products, including national or state level estimates never before considered.

Cost estimates are dependent upon decisions about the survey's operational design that are interdependent. For example, the Census Bureau estimates that each case in their follow up operations costs about \$200 to complete. Increasing the sample size will logically increase the number of cases for nonresponse follow up, likely at the rate the Bureau is currently experiencing. Investing in more robust follow up operations for just the existing sample size will drive up that \$200/case estimate. Experimenting with the use of Administrative Records for nonresponse follow up could drive down the cost per case.

At the moment, the Bureau is in the midst of a transformation of all its survey operations. In the [words](#) of Director Robert L. Santos:



**Robert L. Santos**  
Director of the Census Bureau

*"We are reengineering our processes, our practices and indeed our thinking about how a federal statistical agency operates in the 21st century. We are moving towards a single enterprise, data-centric operation that enables us to funnel data from many sources in a single data lake using common collection and ingestion platforms."*

The ACS is both a keystone in this transformation, and a primary beneficiary of the transformation. As a result, it is difficult in this report to fully parse needed investments in the enterprise effort to modernize the Bureau writ large, with the investments required to modernize the ACS alone. For example, the Bureau needs to harness currently available Big Data technology and methodology to reduce respondent burden and realign the Bureau's already-existing data from multiple sources into universal "frames." The Bureau has numerous overlapping samples and products used by programs for different purposes, leading to inefficiencies, redundancies, and duplication. The Census Frames initiative will allow for more nimble operations across the enterprise, producing more granular and timely insights on people, places, jobs, or businesses. This initiative, consistent with the recommendations of the Commission on Evidence-Based Policymaking and utilizing authority granted by the Foundations for Evidence-Based Policymaking Act of 2018 (P.L. 115-435), will integrate data for streamlined use by all Census Bureau surveys, censuses, and products.

The Census Project has consistently recommended increased funding for initiatives proposed by the Census Bureau, such as the Census Frames initiative, to enhance the ACS. Specific to enhancing the ACS, The Census Project pointed out that early indications from the evaluation of 2020 Census data suggest that the disruptions to operations driven by COVID-19 will yield some geographic differences in data quality, such as in college and university towns and areas impacted by hurricanes, wildfires, and other natural emergencies, even as the historic differential undercount persists. States and localities especially cannot afford to wait another 10 years to remedy such potential shortcomings in the 2020 Census count. The Census Bureau needs the flexibility to combine data sources with the ACS; this would provide communities more timely data to fill in any gaps in the 2020 Census results.

Because ACS data "are especially important to small towns and rural areas across the country," the U.S. Senate Appropriations Committee has consistently [directed](#) the Census Bureau to "ensure that rural areas are covered with the same accuracy as urban areas to the maximum extent practicable." Authorizing these enhancements and increasing the sample size are the most feasible avenues for meeting that goal, since most rural and remote areas can only produce reliable ACS data by estimating across the most recent five years of data. The Bureau also needs to continue to use the ACS "as a testbed for innovative survey and data processing techniques," as Congress directed, once again, in [FY 2023](#).

Funding for the ACS has remained relatively stagnant in recent years. **The Bureau needs additional funding (no less than \$45 million to increase the sample size by at least 1 million housing units) to properly plan and execute an expansion of the ACS, beginning in FY 2024.** The investments in enterprise modernization are intricately related to investments that would enhance the ACS and produce more reliable data for the nation, and therefore are difficult to parse into a detailed, line-by-line ACS improvement plan without more in-depth details from Bureau officials and Congress.

Given the pervasive and comprehensive use of ACS data for business investment decisions, economic development, state and local planning, the fair and equitable distribution of federal dollars and administration of federal voting, civil rights, housing, and consumer laws, **an increase in ACS funding of some \$100 to \$300 million to protect the ACS from further data quality deficiencies would have a huge return on investment for the nation.**

Indeed, the uses of ACS data continue to grow. The White House recently [launched](#) a new tool, the "Climate and Economic Justice Screening Tool," which relies on ACS data to help target the benefits of Federal climate, clean energy, affordable and sustainable housing, clean water, and other investments to disadvantaged communities that are marginalized, underserved, and overburdened by pollution. The ACS will also be essential to fulfilling the ambitions of the [Federal Data Strategy](#).

All that is lacking now is a comprehensive plan of action to save America's most essential source of economic and social data.



## ENDNOTES

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