

# **America's Essential Economic and Social Data at Risk 2024 Update**

**The Urgent National Need to Enhance  
the Quality and Timeliness of American  
Community Survey Data**

## INTRODUCTION BY THE CENSUS PROJECT

This report is the second annual update of our [March 2022](#) comprehensive report on the U.S. Census Bureau's American Community Survey (ACS)—the premier source for information about America's changing population, households and workforce—and a crucial component of the American democracy. The alarm we raised then is no less urgent today. Our findings below reflect the most current assessment of what constitutes the 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.”

The American Community Survey (ACS) represents one of the most significant innovations in the history of the Census Bureau. When launched in 2005, it replaced the once-a-decade decennial “long form” with an annual survey providing estimates for every community in the country every year on measures of ancestry, citizenship, educational attainment, income, language proficiency, migration, disability, employment, housing characteristics, and more. These data are extensively used by those in public, private, and not-for-profit roles to allocate funding, measure shifting demographics, plan for local services, and to inform investments by businesses large and small. However, ongoing challenges including declining response rates, rising costs for nonresponse follow-up, timely processing issues, and delayed investments to modernize and improve the survey 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 serious 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 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 first edition of this report was undertaken by [The Census Project](#) in 2022 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 estimates delayed release of 2016-2020 ACS 5-year products—both resulting from the major disruptions caused by the COVID-19 pandemic. 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 unprecedented pandemic, economic, supply chain and inflation challenges. We initiated this comprehensive review of the ACS to highlight its myriad uses and outline how it could be enhanced to better aid the nation as we address confounding changes in the labor force, the workplace, 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.

Earlier this year, we [released](#) a summarized version of this report in an Action Brief for our stakeholders, policymakers and the public. Other ACS resources can be found on The Census Project [website](#). 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 and providing seven recommended enhancements 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 2030 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 improved in 2021 and 2022, 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**

- The Census Bureau has undertaken an agency-wide transformation to modernize its infrastructure and operations to create a new data-centric ecosystem that enables the delivery of accurate, timely, and relevant data products to meet the needs of diverse data user communities.
- The ACS is the heart of the new data-centric ecosystem and needs to be fully integrated in the Census Bureau’s enterprise transformation initiatives.
- The Census Bureau should consider enterprise enhancements that could accelerate the development of new ACS data products and tools that upgrade data users’ access to ACS data and address more complex public policy challenges.
- With declining ACS survey response rates and rising costs for nonresponse follow up, it is vital for the Census Bureau to accelerate research to advance the use of administrative records and alternative data sources in the ACS, which will improve data quality and reduce respondent burden and long-term costs.
- The Census Bureau must optimize ACS nonresponse follow up operations to achieve higher response rates, reduce data collection costs, and address inequitable data quality.
- An increase in the annual survey sample size combined with enhanced nonresponse follow up operations could improve the precision of ACS estimates to better serve rural, remote and underserved areas of the country.
- ACS content should be revised to improve data quality through the addition of revised questions on race and ethnicity and new questions on disability and on sexual orientation and gender identity (SOGI), which together would provide better measures of these rapidly changing concepts of identity in American society and improve assessments of data equity. New questions that capture the relationships between all household members could enable better identification of children living in complex households while expanded questions on parental place of birth would enable research on the characteristics of second- and third-generation immigrants.
- Implementing these enhancements requires increased funding and support from Congress for the ACS program overall.

## Develop New ACS Products and Tools

- New data products for small geographic areas derived from the combination of ACS and other data sources including administrative records.
- New monthly measures reported at the national or state level, similar to those produced through [the Current Population Survey](#), but for topics that are not yet measured in other surveys.
- 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 data through the Census data application programming interface (API) which provides direct, automated access to data files, and other tools to help data users access 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.
- New features and functionality to improve access to data through the [data.census.gov](#) interface, which continues to present usability challenges.
- 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

- **SOCIAL**  
Educational attainment, marital status, place of birth, veteran status, and more
- **ECONOMIC**  
Employment status, health insurance coverage, income and earnings, and more
- **HOUSING**  
Computer and internet use, owner/renter status, home value, and more
- **DEMOGRAPHIC**  
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 the 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 with 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, \$1.2 trillion in federal funding for 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 an [article](#) in The Washington Post explaining 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.<sup>1</sup> In May 2024, it totaled nearly \$142 billion.<sup>2</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. However, 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:

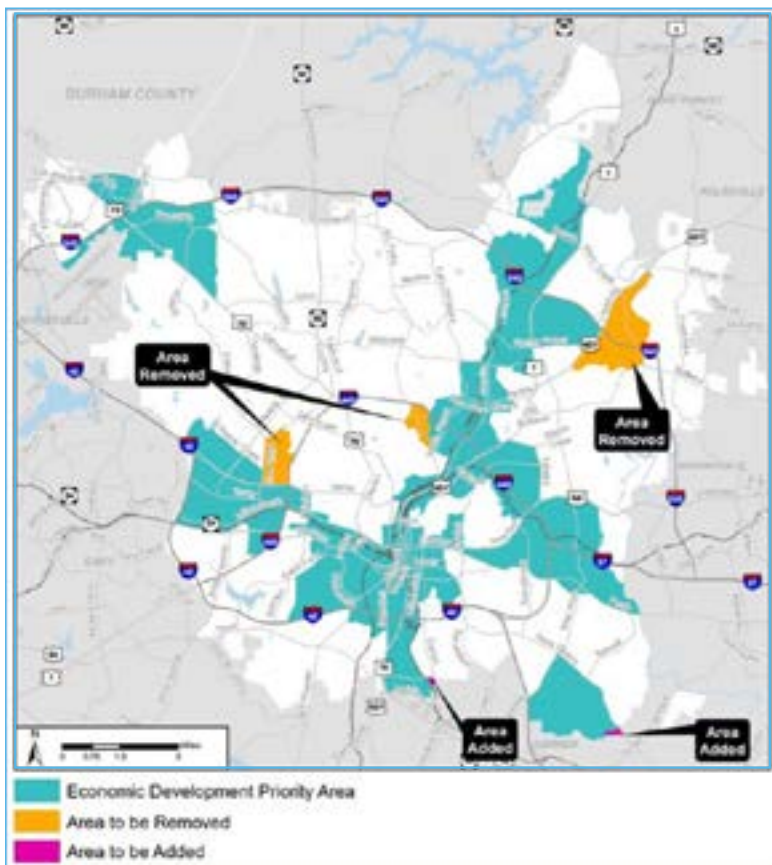
- Labor force and veteran status (e.g., employment, unemployment, and full-time/part-time status).
- Means of transportation to work and travel time to work.
- Income and occupation (e.g., household income, earnings, occupation, and industry).
- Education (e.g., highest level).
- Internet (e.g., access 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 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 [Commuter 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 Greater Houston Partnership uses ACS data as a key component of overview [reports](#) designed to help promote economic development and foreign trade and investment in the 12-county greater Houston region.

### 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 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 [Cuyahoga County Planning Commission](#) uses ACS data as a major source of information in an annual data book created for Cleveland and 58 other cities, villages, and townships that is used by local governments, community organizations, and others to prepare grant applications, understand community changes, and identify issues to address.
- 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?

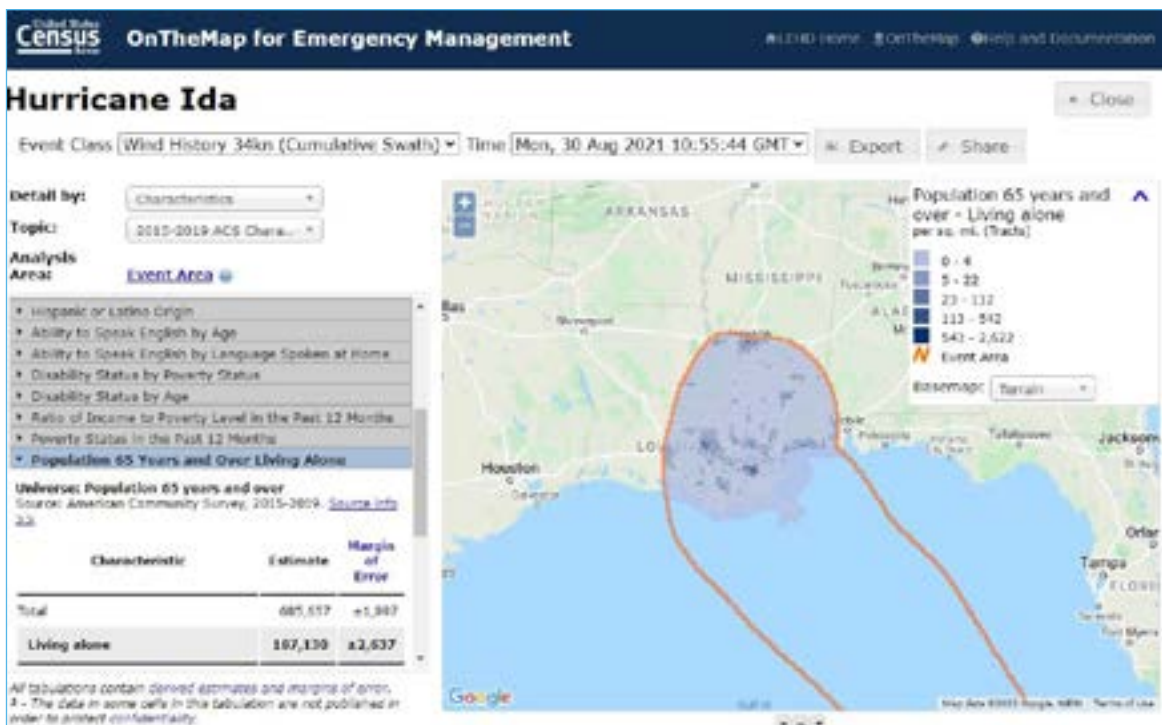
ACS data can help federal, state, and local officials as they coordinate evacuations, conduct damage assessments, carry out recovery plans, and plan for future emergencies. Scientists use ACS data to

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

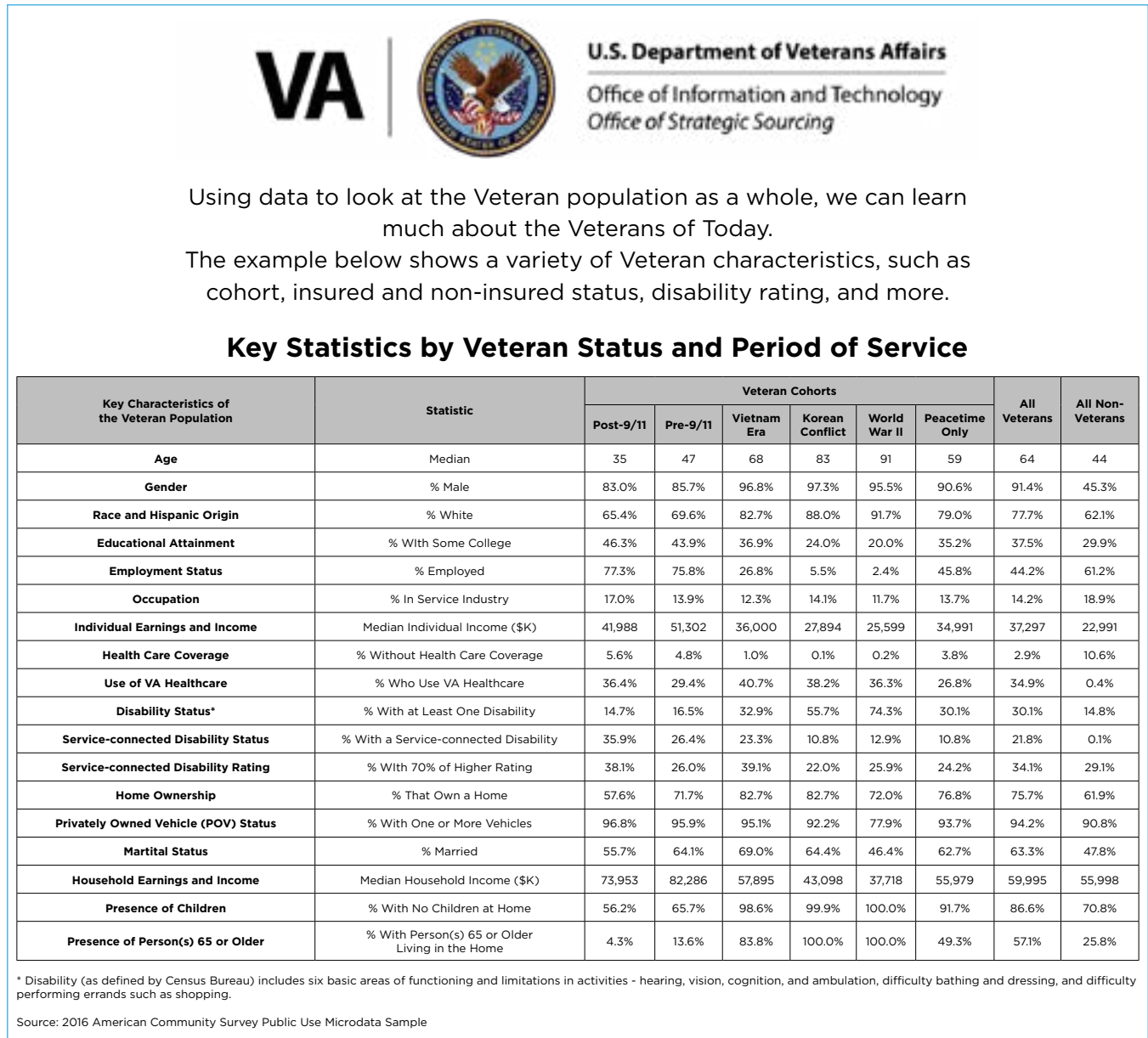
*“The Minnesota Department of Veterans Affairs depends on ACS data to plan how best to meet the education, employment, and long-term care needs of Veterans and their families in Minnesota. The ACS is the only source of information we have that gives us a comprehensive view of the current economic circumstances 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).

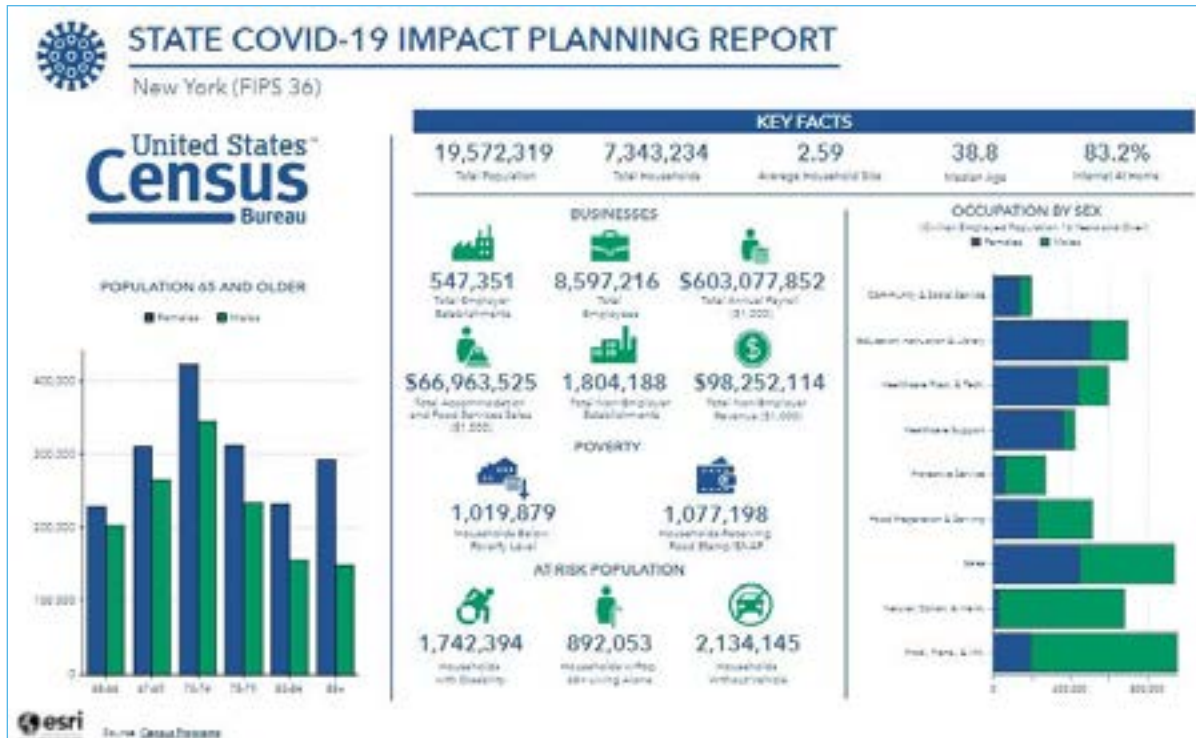
Here are some examples of how ACS data have been used to inform health care policies and programs:

- 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 featured ACS data to help guide decision-making related to the COVID-19 pandemic. The site included 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). The Data Hub is no longer available for use since the national emergency related to the COVID-19 pandemic was terminated in April 2023. Instead, the Census Bureau now recommends using [My Community Explorer](#) to get Resilience, Demographic and Economic Data.

**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 may have hampered recovery efforts, but since ACS data collection is ongoing, we will be able to compare population and housing characteristics before, during, and after the pandemic. Did some parts of the country bounce back faster than others? What were 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, 2024 Chair, Census  
Bureau 2030 Census  
Advisory Committee

*“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

The U.S. Census Bureau [last year](#) released a new comprehensive report estimating that more than \$2.8 trillion in federal funding was distributed in fiscal year 2021 to states, communities, tribal governments and other recipients using Census Bureau data in whole or in part. The report, *Uses of Decennial Census Programs Data in Federal Funds Distribution: Fiscal Year 2021*, analyzed federal assistance program spending that used Census Bureau data in whole or in part to determine how much money to allocate or eligibility for an assistance program. For the purposes of this analysis, Decennial Census Programs data include data produced by the decennial census, the American Community Survey (ACS), geographic programs supporting the decennial census and ACS, and related programs such as the annual population estimates.

The new funding estimate and report was produced in consultation with Andrew Reamer of the George Washington Institute of Public Policy at George Washington University and author of [Counting for Dollars 2020: The Role of the Decennial Census in the Geographic Distribution of Federal Funds](#), a co-author here, who has been studying the federal funding programs for years.

Reamer has reported that 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>3</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

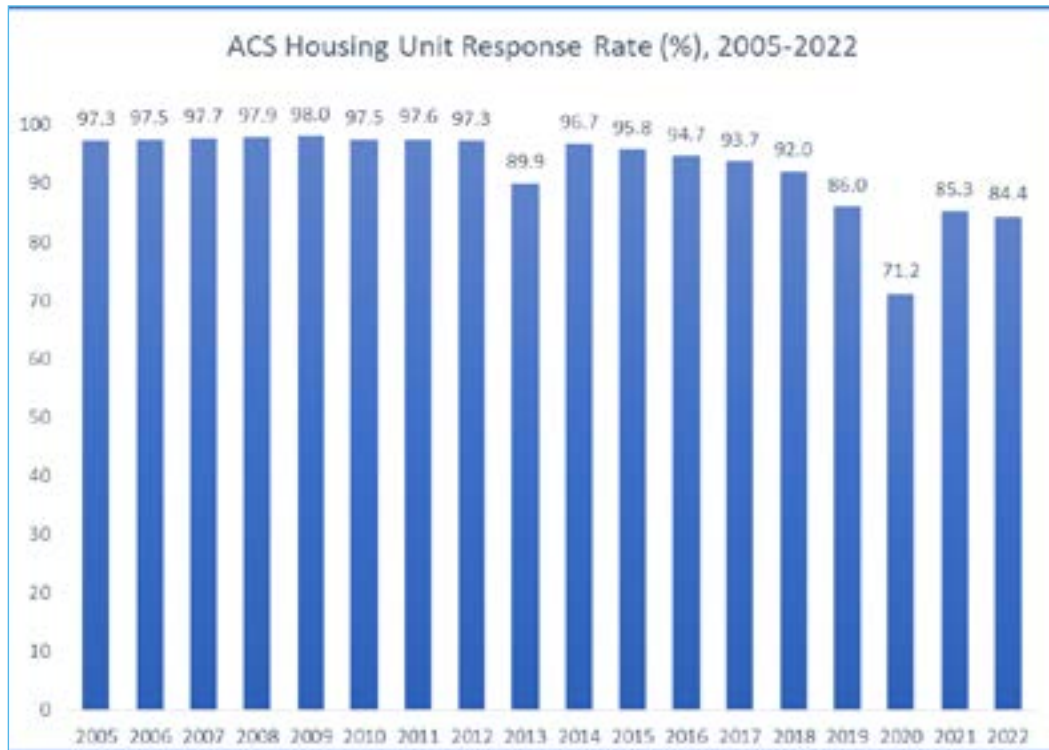
To interview the same *proportion* of housing units in 2015-2019 as in 2000, the ACS would have needed approximately 21.8 million final interviews over this five-year period—almost 11 million more than the actual number of final interviews reported.

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>4</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 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 declined again slightly in 2022. Both response rates were 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. Stakeholders are encouraging the Census Bureau to explore new and innovative strategies to promote awareness of the ACS as a means to encourage response and help address the declining response rates. A key emphasis is engaging more with community-based organizations, local governments, and business leaders year round to help expand understanding of the importance for the ACS survey.

### 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>5</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.

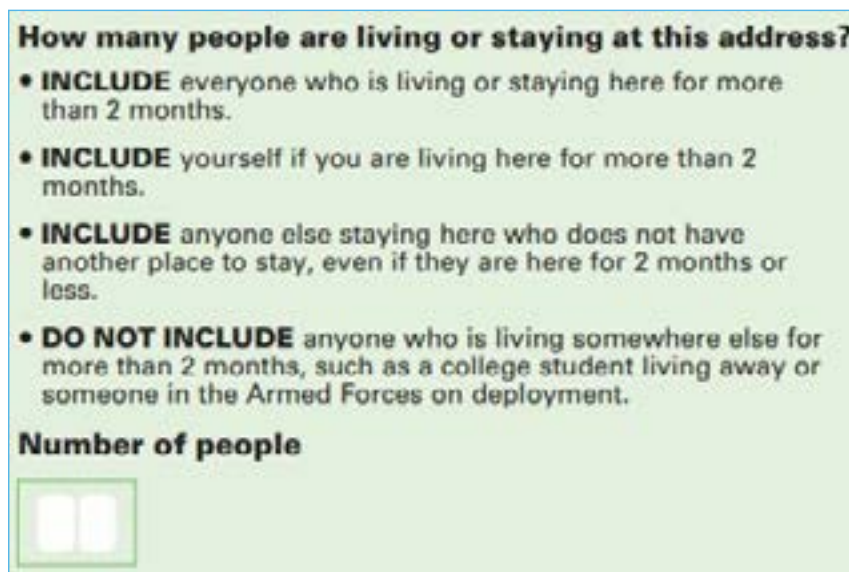
Census Bureau simulations indicated that these changes in the ACS sample design reduced differences in the precision of estimates between small and large tracts. An analysis of 2008-2012

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>6</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>7</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 2021 ACS Questionnaire Instructions**



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>8</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>9</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>10</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>11</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>12</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>13</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.

A primary reason for developing 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 using it in their applications. But ACS data prior to 2010 are not available on 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.

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 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

Sent to roughly 3.5 million addresses annually, the ACS is the largest household survey that the Census Bureau administers. Despite the success of the ACS innovation, and the pervasiveness of its use since 2005, the modernization investments it deserves have been delayed. At the same time, the ACS, like all public surveys, is facing challenging headwinds of both declining response rates (See Figure 9 on page 26) and rising nonresponse follow-up costs.

The COVID-19 pandemic exacerbated these challenges by causing major disruptions in data collection that ultimately resulted in the Census Bureau being [unable to release](#) 2020 ACS 1-year estimates due to data quality issues. 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 for the response to unprecedented challenges; including a once-in-a-century pandemic; a severe economic downturn; and rising inflation. Although ACS response rates rebounded in 2021 and 2022, they were still lower than pre-pandemic levels in 2014 through 2018.

As a consequence, The Census Project first released this report [in 2022](#) (with an [update in 2023](#)) raising the alarm that America's essential data are at risk and that significant new investment in the ACS is urgently needed. The Census Project and our stakeholders have made modernizing the ACS one of our highest priorities. Here we address seven major efforts to secure the future of the ACS.

### The Census Project's Recommended ACS Enhancements

- Fully integrate the ACS in the Census Bureau's enterprise transformation initiatives.
- Develop new ACS data products and tools to upgrade data users' access to ACS data and address more complex public policy challenges.
- Accelerate research to advance the use of administrative records and alternative data sources in the ACS to improve data quality and reduce respondent burden.
- Enhance ACS nonresponse follow up operations to achieve higher response rates, address inequitable data quality and upgrade local community stakeholder engagement to promote response.
- Increase the annual survey sample size to better serve rural, remote and underserved areas of the country.
- Revise ACS content to improve data quality.
- Increase funding by Congress to the ACS program overall.

### The ACS and the Census Bureau's Transformation Initiatives

Fortunately, even in the face of declining response rates, rising survey costs, and an increasing demand for more timely statistical information, the Census Bureau has undertaken an agency-wide [transformation](#) to modernize its infrastructure and operations. The goal is to create a new [data-centric ecosystem](#) that leverages technology and enables the Census Bureau to deliver accurate, timely, and relevant data products that meet the needs of diverse data user communities. These transformation efforts are also providing the Census Bureau with opportunities [“to break down the barriers between the program directorates and to streamline processes across the entire organization”](#).

Census Bureau leaders have undertaken this modernization to support a new era which will produce statistical data through what it calls a [“Statistical Product First”](#) approach. This approach begins with public engagement to identify what purposes and uses people need Census Bureau statistics to support. This is a major change from the historical approach of simply releasing discrete tabular results from each of its censuses and surveys. At its core, this overhaul of business processes involves

connecting and unifying them across more than 130 isolated surveys and censuses and thereby completely shifting from a historical framework of designing a survey to measure a singular social or economic experience, moving aggressively to a new way of thinking about what information (products) Census customers desire. Instead of designing a new survey to measure a changing social or economic condition in the country, this new approach first asks what data already exists across the whole enterprise to address the question and better inform the desired statistical products.

These modernization efforts are already transforming outdated, legacy business processes. Census is simplifying and standardizing data collection, creating frames to link datasets, storing and processing of data in the cloud, and developing [state-of-the-art tools for dissemination of statistical products to the public](#).

The new data-centric ecosystem seeks to curate and integrate existing and new data sources from the Census Bureau and external parties. This will create a comprehensive information base that would enable the Census Bureau to nimbly respond to emerging questions from policymakers and the public and develop new statistical products specifically designed to meet emerging and evolving stakeholder needs.

Engagement and collaboration with stakeholders are essential throughout the process. For example, the Census Bureau is [engaging](#) with American Indian and Alaska Native (AIAN) stakeholders to identify what questions and issues they may need future Census statistical products to support. Similarly, the Bureau has engaged with a range of experts to reduce the undercount of children in a collaboration around alternative data sources and methods to better measure this population.

The ACS is a prime beneficiary of the Bureau's enterprise-wide reforms, especially linked data assets, modernized data processing tools, and enhanced analytical capabilities. However, the Census Bureau must receive more funding dedicated to supporting the ACS to fully exploit the enterprise modernization while at the same time enhancing the reliability, timeliness and quality of ACS data products. Since it is the largest survey the Bureau conducts, the ACS sits at the center of the Bureau's planned transformation. It is both a beneficiary of and significant contributor to the success of the enterprise effort, and therefore needs additional support to ensure it is providing the entire Bureau and the public with the highest quality infrastructure and data products. In a true sense, the ACS is the heart of the data-centric ecosystem and therefore critical in determining how well the Bureau achieves its modernization goals. The uses of ACS data continue to expand. The ACS will be essential to fulfilling the ambitions of the [Federal Data Strategy](#).

## Develop New ACS Data Products and Tools

The Census Project encourages the Bureau to consider enterprise enhancements that could accelerate the production of new ACS products and tools—or improvements to existing ACS products—that could upgrade data users' access to ACS 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. These include:

- 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 monthly measures reported at the national or state level, similar to those produced through [the Current Population Survey](#), but for topics that are not yet measured in other surveys.
- New products or tools that would enable data users to measure trends.
- 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 data through the Census data application programming interface (API) which provides direct, automated access to data files, and other tools to help data users access 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.
- New features and functionality to improve access to data through the data.census.gov interface, which continues to present usability challenges.

Additional funding specific to the ACS should be intended to accelerate these new customer-focused solutions that are anticipated from enterprise modernization. Here we focus on ACS-specific investments that are needed to both secure its future and fulfill the ambition of the enterprise transformation at the Bureau.

## Employing Multiple Data Sources

In 2018, the Census Bureau issued a comprehensive [report](#) laying out a plan to begin using administrative data to supplement survey responses in the ACS. At the time, the Bureau crafted a vision for how this innovation would work:

*“The Census Bureau is considering several approaches to use administrative records to enhance the ACS program:*

- **Reduce the burden on our respondents** by using information already available to the federal government instead of asking questions.
- **Improve data quality** by drawing upon administrative records for data editing and imputation, rather than statistical approaches to assigning values.
- **Create blended data products**, including merging administrative data on topics not currently asked about on the ACS to provide even more detailed information about each of America's communities and creating complimentary products for small geographies to improve the quality of community-level estimates such as median income.”

Now, more than five years later, the Bureau has only this year begun to use some administrative data to supplement ACS survey responses. The Bureau's ACS Office clearly needs additional resources to hire or contract out to expert data scientists, analysts, and other IT professionals to accelerate research and use of administrative and third-party data in the ACS.

While administrative data are not being widely used to supplement 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 to replace invalid survey responses, edit survey responses, and impute missing responses.
- Blending ACS and alternative data to create new data products.

For example, in January 2024, the ACS began using an adaptive approach to collect data on property acreage that uses administrative data primarily from property tax data. If the administrative data meet quality standards, respondents who answer the survey online or during an in-person interview will not be asked the acreage question. However, respondents who use the paper survey will still be asked the acreage question. When data collection is complete, ACS staff will use the best data to develop the final estimate—either from the respondent or administrative data.

The Census Bureau's most recent [Agility in Action](#) report indicates that the ACS program will also explore the use of administrative data for the following topics:

- Allocation and imputation for sex, age, citizenship, race, and Hispanic origin;
- Full or partial removal of the agricultural sales question;
- Full or partial removal of housing characteristics questions;
- Evaluation of nonresponse bias in survey response data and other data quality checks; and
- Modeled estimates for income.

With declining ACS survey response rates and rising costs for nonresponse follow up, it is vital for the Census Bureau to accelerate research to advance the incorporation of administrative records and alternative data sources in the ACS, which will reduce respondent burden and long-term costs while increasing data quality.

### 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. To fully address this decline, Census Project Co-Directors Mary Jo Mitchell and Howard Fienberg state that “it is beyond time for the Census Bureau to invest more in nonresponse follow up (NRFU) operations,” expanding the current 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 more modest ACS NRFU operation is a consequence of staffing, workload, and budget limitations.

To improve the quality of ACS estimates—especially for smaller geographies and population subgroups—the Census Bureau has begun exploring new NRFU strategies. The costs of in-person interviewing are rising due to wage and overhead cost increases and declines in respondent cooperation requiring more visits to complete an interview. In response, the Census Bureau has had to implement cost-saving strategies while still trying to maintain data quality.

To maximize the data collection efforts of field staff, the Bureau began using administrative data in 2023 to inform contact strategies and operational decisions such as when to decrease or stop field interview efforts. For example, the ACS program is now prioritizing contacts by geographic area based on prior response rates, administrative data, and respondent demographic characteristics. Using data from the U.S. Postal Service, IRS, Medicare, and the Census Bureau’s Master Address File (MAF), the Bureau’s ACS Office staff have developed a model to better predict which housing units have a higher probability of being vacant. For such units, interviewers are alerted to make the initial contact in person rather than by phone and are limited to only two contact attempts. Drawing on models and strategies currently used successfully in other surveys, such as the Survey of Income and Program Participation (SIPP) and National Survey of Family Growth (NSFG), ACS staff are also adapting contact efforts in the Computer-Assisted Personal Interviews (CAPI) workload.

In the face of ongoing declines in survey response rates, the Census Bureau must optimize CAPI operations to reduce data collection costs, mitigate nonresponse bias, and improve the quality of ACS data.

### Increasing the Annual Sample Size of the ACS

The annual sample size of the ACS understandably cannot be as large as the former census long-form sample because it would be prohibitively expensive to replicate every year, undermining the whole point of the rolling sample innovation. However, the current ACS sample size cumulated across five years is now much smaller than the last long-form sample in the 2000 Decennial, in part because the nation’s population has increased since 2000 by more than 51 million people and the number of housing units by almost 28 million more. Some degree of reduced precision in ACS 5-year estimates relative to those from the 2000 Census long form was accepted in the 2005 innovation to provide more-timely annual data, 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 old long-form census, a report from the [National Research Council](#) called for “increasing the annual sample size to about 4.8 million housing units.” That would result in a total sample of 24 million housing unit addresses when pooled across five years, closer to the 20 million addresses sampled with the long form in the 2000 Census.

It is not just increasing the sample size, but rather increasing the number of final interviews that improves precision. Increasing the sample size without new and improved methods to address both survey and NRFU nonresponse rates may not significantly improve the precision of ACS estimates.

According to unofficial estimates, the Bureau needs additional funding of no less than \$45 million to increase the sample size by at least 1 million housing units. However, increasing the ACS sample size would also increase the size and cost of the nonresponse workload. Given that the Census Bureau estimates each case in their ACS Non-Response Follow Up operations costs about \$200 to complete, more precise cost estimates are needed to ensure the Bureau has the necessary funding to meet the needs of a larger sample size.

### Changing Content in the ACS Survey to Enhance Data Quality

As part of its periodic review of ACS survey questions, the Census Bureau conducted a [National Content Test](#) in 2022. Question or instruction changes were tested in seven topic areas: the household roster, educational attainment, health insurance coverage, disability, income, labor force, and Supplemental Nutrition Assistance Program (SNAP). Three new questions on solar panels, electric vehicles, and sewage disposal were also tested for addition to the ACS.

Based on field test results, the Census Bureau recommended adding the three new questions and making changes to the instructions for the household roster and labor force, and to the questions for educational attainment, health insurance coverage, and disability. Public comment on these proposed additions and changes was solicited from October 20, 2023, through December 19, 2023. The Census Bureau received more than 12,000 comments—most of which expressed concerns about the proposed changes to the disability questions. The Census Bureau began posting these public comments to [Regulations.gov](#) in January 2024. Based on this public feedback, the Census Bureau—with the concurrence of the Interagency Council on Statistical Policy Subcommittee on the ACS—decided to retain the current ACS disability questions for the 2025 ACS. The Census Bureau prepared a proposal to move forward with the other revisions to the ACS which was accompanied by a [Federal Register Notice](#) on March 25, 2024 with a deadline for comments of April 25. After reviewing the feedback, the Census Bureau submitted the final proposed content for the 2025 ACS to the Office of Management and Budget (OMB) for approval.

### IMPROVING MEASUREMENT OF HOUSEHOLD RELATIONSHIPS IN THE ACS

The Census Bureau has conducted extensive research to better understand why young children under age 5 are missed in the decennial census and ACS and to identify ways to reduce this undercount.<sup>14</sup> Despite these efforts, the undercount of young children was even higher in the 2020 Census than in the 2010 Census.

Although household living arrangements have become more complex and fluid over the past several decades, the Census Bureau's roster instructions have remained virtually unchanged since the late 1990s, potentially contributing to decreasing coverage of young children, complex households, nonrelatives, and other persons with tenuous household connections. New sets of rostering instructions for the paper questionnaire and revisions to the roster questions for the Internet and

interviewer-administered instruments were developed and tested in the 2022 ACS National Content Test to determine if they would improve the rostering procedure and ensure that all household members were included in the survey.

Content Test [results](#) did not show a significant difference between the current instructions (Control version) and revised instructions (Test version) in the number of young children ages 0-4 on the final roster. However, the revised instructions did result in a significantly larger number of young children being added to the roster on the Internet and interviewer-assisted modes. The percentage of complex households was also significantly higher in the Test version. With these results, the Census Bureau recommended moving forward with the Test version of roster instructions in the 2025 ACS.

While these revisions of household roster instructions may improve the 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 stakeholders](#) have recommended adding questions to the ACS that capture the relationships between all household members rather than just those to Person 1. However, at a minimum, the ACS could add questions similar to the "parental pointers" in the Current Population Survey (CPS) to establish the relationship of children to *all* adults in a household. A [detailed analysis](#) concluded that, "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."

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 noted](#) that, "The new CPS family relationship variables are essential for studying cohabiting families."

## Improving Measurement of Race and Ethnicity in the ACS

In 2022, OMB [launched a formal review](#) of the 1997 standards for collecting and reporting race and ethnicity data across federal agencies. Drawing on [extensive research](#) on potential modifications to these questions conducted by the Census Bureau, an Interagency Technical Working Group (ITWG) [issued](#) a set of initial proposals for revising these statistical standards in 2023. These initial proposals were [open for public comment](#) through April 27, 2023. In addition, the ITWG and OMB held listening sessions, virtual Town Halls, and in-person meetings with stakeholder groups to solicit feedback on the initial proposals. Based on this feedback, together with more than 20,000 public comments, the ITWG submitted [final recommendations](#) to OMB's Chief Statistician.

On March 28, 2024, OMB [published](#) the revisions to the standards that include collecting race and ethnicity information together in a single question, adding a Middle Eastern and North African (MENA) response category, and requiring federal agencies to collect additional detail beyond the minimum required race and ethnicity categories in most cases. Federal agencies must begin updating their surveys and administrative forms as soon as possible and have until September 2025 (18 months) to submit to OMB a publicly available action plan for achieving complete compliance with the new standards by March 28, 2029.

Adoption of the new standards should improve the quality of racial and ethnic data in both the ACS and the 2030 Census, but the Census Bureau still faces significant challenges in developing implementation and tabulation plans, which deserve strong support from Congressional appropriators.

## Improving Measurement of Disability in the ACS

The current ACS questions on disability were added to the survey in 2008. In response to a request from the National Center for Health Statistics (NCHS), the Census Bureau evaluated the Washington

Group Short Set on Functioning (WG-SS) disability questions as possible replacements in the 2022 National Content Test. The WG-SS questions are similar to the ACS questions in asking respondents about difficulties seeing, hearing, remembering or concentrating, walking or climbing stairs, bathing or dressing, and doing errands alone such as shopping or visiting a doctor's office. The WG-SS series also includes a question asking if the respondent has difficulties communicating. In contrast to the simple Yes/No response options in the ACS questions, the WG-SS questions have four response categories that measure the **degree** of difficulty with each task: *No difficulty; Some difficulty; A lot of difficulty; and Cannot do at all.*

In the ACS, respondents are considered to have a disability if they answer "Yes" to any one of the six questions. In contrast, the WG-SS definition only considers those who indicate "A lot of difficulty" or "Cannot do at all" to at least one of the seven questions to have a disability. Content Test results showed that the percent with disability is significantly lower with the WG-SS questions (8.1%) than the ACS (13.9%).

Based on results from the 2022 Content Test, the Census Bureau had proposed to change the current six disability questions in the ACS to the seven questions in the WG-SS series. Numerous U.S. disability interest groups and advocates opposed these changes, arguing that they would result in an undercount of the disability community while also failing to improve measures of mental health and other disabilities including chronic disabling conditions, such as long-COVID.

On February 6, 2024, [the Census Bureau Director announced](#) a one-year delay in implementing any changes and promised further engagement with "*federal agency disability stakeholders, disability community representatives, data users, researchers and disability advocates to discuss data needs and data uses surrounding the topic of disability.*"

The Census Bureau is currently collaborating with NCHS, OMB, the National Council on Disabilities, the Leadership Conference on Civil and Human Rights, and the Consortium of Constituents With Disabilities to organize a meeting in 2024 to provide such engagement. Details about the meeting are expected later this summer. In the interim, the Office of Science and Technology Policy (OSTP) issued a Request for Information (RFI) through the [Federal Register](#) on May 30, 2024. OSTP is seeking input from the public to help inform the development of the [Federal Evidence Agenda on Disability Equity](#) whose purpose is to improve the Federal government's ability to make data-informed policy decisions that advance equity for the disability community. Comments were accepted through July 15, 2024. The Census Project vigorously supports greater stakeholder involvement in improving *any* vital measures the Bureau produces.

## Measuring Sexual Orientation and Gender Identity (SOGI) in the ACS

With the increasing social and political visibility of sexual and gender minority populations, a 2022 [Executive Order](#) stipulated an urgent need for federal data on the characteristics, geographic distribution, and well-being of these groups to measure and address any disparities lesbian, gay, bisexual, transgender, queer, and intersex (LGBTQI+) individuals, families, and households may face. 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 Census Bureau received a Fiscal Year 2023 (FY 2023) [appropriation of \\$10 million](#) specifically to research adding questions to measure SOGI in the ACS. The Census Bureau's research builds upon previous cognitive testing conducted for the CPS on the use of proxy reporting (i.e., when a person provides data for someone else). SOGI questions are not currently asked on any federal surveys that use proxy reporting (including the ACS, where one person at a sampled address typically answers questions about everyone living there).

The Census Bureau is continuing research into alternative question wording, response categories,

and placement of the questions on the survey. On September 19, 2023, the Census Bureau published a [Federal Register Notice](#) inviting public feedback on a proposed test of SOGI questions on the ACS to be conducted in 2024, funding permitted. This proposed test will draw on experience in the collection of SOGI data from other federal surveys and additional research efforts including:

- 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>15</sup>
- The recommendations on [best practices](#) for SOGI data collection in federal surveys recently released by OMB.

The public comment period ended on November 20, 2023. After reviewing this feedback, the Census Bureau published a [Federal Register Notice](#) on April 29, 2024 inviting public comment on the proposed plan for testing SOGI questions on the ACS that was submitted to OMB for approval. Comments were due May 30. Cognitive testing of SOGI questions is underway and the self-response test is on track to occur later this summer. Nonresponse follow-up via phone and in-person interviewing is scheduled for the spring of 2025. The ACS test of SOGI questions is part of broader research efforts at the Census Bureau [described by Director Santos](#) and outlined in a [SOGI data action plan](#) submitted to OMB.

The addition of SOGI questions to the ACS would enable use of the extensive social, economic, and disability data in the ACS to evaluate the characteristics and well-being of sexual and gender minority populations as well as regional differences in economic and health disparities for these groups. As it designs, implements, and evaluates results of the 2024 ACS SOGI test, the Census Bureau should continue to engage with stakeholders. The earliest date SOGI questions could be added to the ACS is 2026.

## 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 are 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 ACS to analyze trends in the characteristics and well-being of second- and third-generation immigrants.

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>16</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 for all ACS respondents would enable researchers and policymakers to use the rich social, economic, housing, and demographic ACS data to both study the characteristics of second- and third-generation immigrants—such as educational attainment, family structure, income, and disability status—and evaluate their well-being over time in comparison with other population groups.



## ENGAGEMENT WITH ACS DATA USERS

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](#).

### Disclosure Avoidance in the ACS

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>17</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.

## 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 type 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. Strengthening the ACS 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 evidence-based policy making.

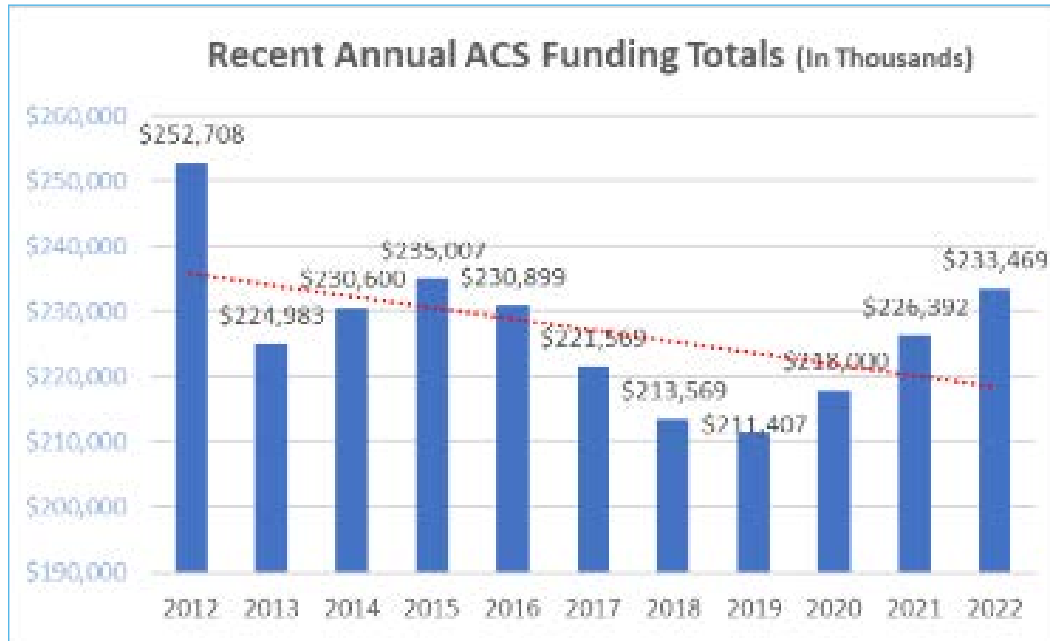
### What Cost Estimates Are Available for These Investments?

The Census Project's FY 2025 [funding recommendation](#) addressed not only the ACS, but other initiatives as well, including stabilizing the Survey of Income and Program Participation (SIPP), strengthening the Population Estimates program, and investing in modernizing enterprise data infrastructure at the Bureau. Altogether, these enhancements totaled approximately \$400 million, with the ACS accounting for most of this recommended amount.

Funding for the ACS has remained relatively stagnant in recent years, including a little over \$233 million in FY 2022. The Bureau needs additional funding (no less than \$45 million to increase the sample size by at least 1 million housing units, according to unofficial estimates) to thoughtfully plan and execute an expansion of the ACS. 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 detailed information from the Census Bureau.

Each year, The Census Project engages with Census Bureau staff, stakeholders, and Congressional staff to refine, improve, and make more specific budget proposals, endeavoring to produce a line-by-line estimate of individual operations. 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 NRFU operations costs about \$200 to complete. Increasing the sample size will logically increase the number of NRFU cases, 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. However, experimenting with the use of administrative records in NRFU could drive down the cost per case.

**Funding Has Not Kept Pace With Population Growth Or Inflation**



Source: Data compiled by The Census Project

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 has also consistently directed](#).

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 immediate infusion of \$100 to \$300 million to protect the ACS from further data quality deficiencies is imperative.

Major investments in modernizing and improving the ACS may be at risk given the federal government’s current dismal fiscal picture as well as recent attempts in Congress to undermine the survey’s mandatory response and NRFU operations.<sup>18</sup> The Census Bureau is not being funded at a sufficient level to maintain and expand all of its operations. Nonetheless, The Census Project encourages the Bureau to be transparent and share with Congress the substantial benefits that could be derived from investing in the ACS. We also urge Congress to consider the huge return on investment that increased ACS funding would deliver for the nation.

## ENDNOTES

- <sup>1</sup> U.S. Census Bureau, Monthly Construction Spending, February 2023, Table 4: Annual Value of Construction Put in Place in the United States. <https://www.census.gov/construction/c30/pdf/release.pdf>.
- <sup>2</sup> U.S. Census Bureau, Monthly Construction Spending, May 2024, Table 4: Annual Value of Construction Put in Place in the United States. <https://www.census.gov/construction/c30/pdf/release.pdf>.
- <sup>3</sup> Brennan Center for Justice, “Why States Should Wait for Census Data to Draw Voting Districts.” <https://www.brennancenter.org/our-work/analysis-opinion/why-states-should-wait-census-data-draw-voting-districts>.
- <sup>4</sup> National Research Council, Realizing the Potential of the American Community Survey: Challenges, Tradeoffs, and Opportunities. 2015. Panel on Addressing Priority Technical Issues for the Next Decade of the American Community Survey, Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press. <https://www.nap.edu/catalog/21653/realizing-the-potential-of-the-american-community-survey-challenges-tradeoffs>.
- <sup>5</sup> National Research Council, Realizing the Potential of the American Community Survey: Challenges, Tradeoffs, and Opportunities. 2015. See Chapter 2 and Appendix A for a detailed analysis of the precision of tract-level estimates from the 2008-2012 ACS. <https://www.nap.edu/catalog/21653/realizing-the-potential-of-the-american-community-survey-challenges-tradeoffs>.
- <sup>6</sup> National Research Council, Realizing the Potential of the American Community Survey: Challenges, Tradeoffs, and Opportunities. 2015. Page 45.
- <sup>7</sup> VanOrman, A. and P. Scommegna. 2016. “Understanding the Dynamics of Family Change in the United States.” Population Bulletin 71, no. 1. <https://www.prb.org/wp-content/uploads/2016/08/Population-Bulletin-2016-71-1-us-complex-families.pdf>.
- <sup>8</sup> Jensen, E. 2019. “Investigating the 2010 Undercount of Young Children – Examining Coverage in Demographic Surveys.” U.S. Census Bureau: <https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/plan/final-analysis/2020-report-2010-undercount-children-examining-coverage-demo-surveys.html>.
- <sup>9</sup> Fernandez, L. Shattuck, R., and Noon, J. 2018. “Using Administrative Records and the American Community Survey to Study the Characteristics of Undercounted Young Children in the 2010 Census.” U.S. Census Bureau, CARRA Working Paper Series #2018-05: <https://www.census.gov/library/working-papers/2018/adrm/carra-wp-2018-05.html>.
- <sup>10</sup> Jacobsen, L.A. 2017. Discussion. Journal of Official Statistics 33(4): 891-899: <https://doi.org/10.1515/jos-2017-0042>.
- <sup>11</sup> U.S. Census Bureau. 2017. “Investigating the 2010 Undercount of Young Children – Analysis of Census Coverage Measurement Results.” [https://www2.census.gov/programs-surveys/decennial/2020/program-management/final-analysis-reports/2020-2017\\_04-undercount-children-analysis-coverage.pdf](https://www2.census.gov/programs-surveys/decennial/2020/program-management/final-analysis-reports/2020-2017_04-undercount-children-analysis-coverage.pdf) and Jensen, E., et. al. 2018. “Investigating the 2010 Undercount of Young Children – Analysis of Complex Households.” <https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/plan/final-analysis/2020-report-2010-undercount-children-complex-households.html>.
- <sup>12</sup> U.S. Census Bureau. 2006. “Policy on New Content for the American Community Survey.” [https://www2.census.gov/programs-surveys/acs/operations\\_admin/ACS\\_Content\\_Policy.pdf](https://www2.census.gov/programs-surveys/acs/operations_admin/ACS_Content_Policy.pdf).

- <sup>13</sup> U.S. Census Bureau. 2018. "Charter of the Federal Interagency Committee on the American Community Survey." [https://www2.census.gov/programs-surveys/acs/operations\\_admin/ACS\\_Interagency\\_Committee\\_Charter.pdf](https://www2.census.gov/programs-surveys/acs/operations_admin/ACS_Interagency_Committee_Charter.pdf).
- <sup>14</sup> O'Hare, W.O., Griffin, D., and S. Konicki. 2019. "Investigating the 2010 Undercount of Young Children – Summary of Recent Research." U.S. Census Bureau: <https://www2.census.gov/programs-surveys/decennial/2020/program-management/final-analysis-reports/2020-report-2010-undercount-children-summary-recent-research.pdf>.
- <sup>15</sup> Federal Interagency Working Group on Improving Measurement of Sexual Orientation and Gender Identity in Federal Surveys. 2016. "Toward a Research Agenda for Measuring Sexual Orientation and Gender Identity in Federal Surveys: Findings, Recommendations, and Next Steps." [https://nces.ed.gov/FCSM/pdf/SOGI\\_Research\\_Agenda\\_Final\\_Report\\_20161020.pdf](https://nces.ed.gov/FCSM/pdf/SOGI_Research_Agenda_Final_Report_20161020.pdf).
- <sup>16</sup> Larsen, L.J., Grieco, E. M., and P. de la Cruz. 2012. "2012 American Community Survey Research and Evaluation Report Memorandum Series #ACS12-RER-04." U.S. Census Bureau: [https://www.census.gov/content/dam/Census/library/working-papers/2012/acs/2012\\_Larsen\\_01.pdf](https://www.census.gov/content/dam/Census/library/working-papers/2012/acs/2012_Larsen_01.pdf).
- <sup>17</sup> Daily, D. 2022. "Disclosure Avoidance Protections for the American Community Survey." U.S. Census Bureau: <https://www.census.gov/newsroom/blogs/random-samplings/2022/12/disclosure-avoidance-protections-acs.html>.
- <sup>18</sup> Letter from The Census Project to House CJS leadership expressing concerns that the subcommittee's proposed FY 2025 CJS Appropriations bill would undermine the ability of the Census Bureau to meet its constitutional mandate as the result of inadequate funding and a menacing policy provision. July 1, 2024. <https://thecensusproject.org/wp-content/uploads/2024/07/Census-Project-Letter-re-House-FY-2025-bill-7-1-2024-FINAL.pdf>.