

# THE WORKING POOR FAMILIES PROJECT

---

POLICY BRIEF  
WINTER 2006

## Using Data from the American Community Survey to Strengthen State Policies

KERRI L. RIVERS<sup>1</sup>

Information is increasingly the driver of the U.S. and world economy. It is also the foundation of effective public policymaking. The transfer of power from federal to state and local governments, together with rapidly changing demographics and a society now accustomed to instant access to information, have created the demand for current and reliable data to support effective policymaking at the state and local levels.

Traditionally, state and local officials have used data from the decennial census to track changes in communities and to inform decisions about policies and the allocation of funds. Agencies have used decennial census data for many purposes, including determining where the greatest need for job training programs exists, how many people have high school diplomas or college degrees, how many people speak a language other than English, and where to build new schools. In today's rapidly changing world, waiting 10 years for data is an eternity and using outdated data can lead to costly mistakes. The American Community Survey (ACS) is the U.S. Census Bureau's answer to the call for regular, timely data at the state and local level.

The Working Poor Families Project (WFPF) is both a consumer of and advocate for ACS data. As a national initiative that supports state nonprofits to strengthen state policies on behalf of low-income working families, the WFPF encourages state organizations to identify policy issues based on objective, data-driven assessments of conditions within the state. These fact-based analyses are intended to foster policy discussions on key issues affecting low-income working families; issues such as the availability and affordability of education and training opportunities, benefits derived from state economic development investments, and conditions and incentives that both value and reward hard work.

Since its inception in 2002, the WFPF has used ACS data to identify and examine the conditions of low-income working families both nationally and at the state level. Expansions to the ACS in 2005, which are discussed below, made the ACS an even more valuable source of data. People already rely on the ACS to assess socio-economic conditions at the local level and this will only increase in the years to come. The ACS is the first nationwide, continuous measurement of socio-economic information for states and communities, and as such is a key resource for making objective, scientific data more readily available for informing policy options at the local level.

### THE WORKING POOR FAMILIES PROJECT

Strengthening State Policies for  
America's Working Families

Millions of American breadwinners work hard to support their families. But, despite their determination and effort, many are mired in low-wage jobs that provide inadequate benefits and offer few opportunities for advancement. In fact, more than one out four American working families now earn wages so low that they have difficulty surviving financially.<sup>2</sup>

Launched in 2002 and currently supported by the Annie E. Casey, Ford, Joyce, and Mott foundations, the Working Poor Families Project is a national initiative that works to improve these economic conditions. The project partners with state nonprofit organizations and supports their policy efforts to better prepare America's working families for a more secure economic future.

For more information:  
<http://www.workingpoorfamilies.org>

## ACS BASICS

Like the decennial census, the ACS gathers information through a questionnaire. The Census Bureau began testing the ACS in 1996 in four test sites. By 2000, the test had expanded to more than 1,200 counties, collecting data that could be compared with the 2000 Census. Testing continued through 2004 (collecting data from more than 700,000 addresses per year) and the Census Bureau published data every year for the nation, states, and counties with 250,000 or more residents.

The testing phase ended in 2004 and the ACS was implemented nationwide in 2005. The questionnaire is now mailed every month to approximately 250,000 addresses—about 3 million addresses per year—making it one of the largest surveys in the world. Questions on the ACS cover basic demographic information, as well as many topics relevant to economic self-sufficiency and workforce development:

- Race and Hispanic origin
- School enrollment
- Educational attainment
- Language spoken at home
- Employment status
- Occupation and industry
- Income and poverty status
- Home ownership
- Housing cost as a percentage of income

The ACS provides one-, three-, and five-year estimates of data, depending on the area's population size:

- One-year estimates of data are released for areas with 65,000 or more people;
- Three-year estimates will be released for areas with 20,000 or more people; and
- Five-year estimates will be released for all geographic areas down to the census tract and block group level.<sup>3</sup>

Currently annual estimates are available for areas with 65,000 or more people. This includes all states, large counties, large cities, all Congressional districts, and other geographic areas. By 2010, the three- and five-year estimates for smaller areas will be updated

annually, covering the most recent three or five years with each update.

There are several advantages to using data from the ACS. First and foremost, the data are more current than 2000 Census data. For example, data collected during 2005 were made available to the public in August 2006. Second, the ACS is updated every year, providing the opportunity not only to present current, timely information, but also to track changes over time. Third, data are comparable across geography, making it easier to assess how your state or local community is faring relative to other areas. Finally, ACS data are accessible to the public in an easy, user-friendly format (See Appendix 1 for additional information).

The WFPF 2004 national report, "Working Hard, Falling Short," illustrates the use and value of ACS data. The analysis conducted for the report found that 27.4 percent of all working families with children in the United States—more than 1 out of 4—were low-income (i.e., annual family income was below 200 percent of the poverty threshold).<sup>4</sup> ACS data also allowed for the same analysis at the state level, which resulted in data for all 50 states and revealed a significant range among the states of 14.6 percent to 42.5 percent.

## ACCESSING CORE ACS DATA PRODUCTS

The most recent information from the ACS was released in August 2006, providing detailed social, economic, and demographic estimates from the 2005 ACS. Because of the expanded sample in 2005, the ACS went significantly beyond providing data for states and provided data for large counties, large cities, and all Congressional districts at mid-decade.

The Census Bureau provides ACS data in a number of ways. There are literally hundreds of predefined tables available online with summary information on a range of topics for various geographic areas. In addition to the predefined tables, some data are available graphically in maps. See Appendix 1 for additional information on the predefined tables and thematic maps.

The Census Bureau also provides data files containing individual records of a sample of households that responded to the survey. These data files are called Public Use Microdata Sample, or PUMS.<sup>5</sup> The PUMS files afford data users the ability to create unique custom tabulations of the data. For example, as noted above, the WFPF is interested in the characteristics of low-income working families. The WFPF defines a low-income working family as a family with one or more children with income below 200 percent of the federal poverty threshold, and where the combined work effort of all family members age 15 or older is at least 39 weeks in the prior 12 months, or is between 26 and 39 weeks in a prior 12 month period, and one currently unemployed parent looked for work in the prior four weeks. No data for this specific subgroup are available through predefined summary tables. However, using the PUMS, one can identify this particular group of people and examine their characteristics.<sup>6</sup> Typically, software packages such as SAS, SPSS, and STATA are used to process the PUMS files. As an alternative, the Census Bureau has an online data tool called DataFerrett that non-programmers can use to create custom tabulations.<sup>7</sup>

There is one additional point to make regarding the PUMS. Because the Census Bureau must maintain the confidentiality of individual information, the PUMS files do not contain detailed geographic information. Estimates can be created at the state level and at one substate level – the Public Use Microdata Area (PUMA) level. Each state is subdivided into PUMAs,<sup>8</sup> which are defined by the Census Bureau and in many cases comprise an aggregate of adjacent counties. In some cases, a PUMA may represent one county and in other cases (where a county has millions of residents, for example) a county may be divided into more than one PUMA.

In general, the benefits to obtaining data from the published tables include the ease of use and the levels of geography for which data are produced. The main advantage to using the PUMS is the ability to extract unique, customized data.

## USING ACS DATA TO INFORM STATE POLICIES

The WFPF began using ACS data at the national and state level at the inception of the project in 2002.<sup>9</sup> As noted above, the project has used ACS data to examine the economic conditions facing low-income and poor working families, to establish a baseline of data for state organizations to use to monitor education and economic trends, and to illustrate the usefulness of the survey.

Educational attainment and post-secondary enrollment are important WFPF issues that can be examined using ACS data. In the past, the WFPF has looked at this issue by comparing national and state outcomes. For example, ACS data in 2004 showed that 14.3 percent of adults ages 18-64 do not have a high school degree or equivalent; the range among states is a low of 7.42 percent to a high of 19.88 percent. The ACS now makes it possible to look within a state to assess the difference in conditions across the state.

Using substate data from the ACS may illuminate which areas have a greater need. For example, Table 1 shows that in four Connecticut counties 10 percent or more of the adults aged 18 to 64 residing in those counties do not have a high school diploma or equivalent. This provides important insights into the overall preparedness of the community's adult workforce. Table 2 shows the number of adults aged 18 to 64 in each county without a high school diploma or equivalent. This reveals the magnitude of the need for each county and shows how that need is distributed throughout the state. The data indicate that there are three or four counties in Connecticut where the educational attainment of the working age population lags behind other counties. This finding can inform the discussion of state policies that are both more targeted and offer greater resources to address the overall need.

**TABLE 1: PERCENT OF ADULTS 18-64 WITHOUT A HIGH SCHOOL DIPLOMA OF EQUIVALENT, 2005**

	Percent of Adults 18-64 Without a High School Diploma or Equivalent	Margin of Error
Connecticut	10	± 0.4
Fairfield County	11	± 0.8
Hartford County	11	± 0.8
Litchfield County	7	± 1.2
Middlesex County	6	± 1.3
New Haven County	10	± 0.8
New London County	7	± 1.2
Tolland County	4	± 1.1
Windham County	14	± 2.2

Source: 2005 American Community Survey

**TABLE 2: NUMBER OF ADULTS 18-64 WITHOUT A HIGH SCHOOL DIPLOMA OF EQUIVALENT, 2005**

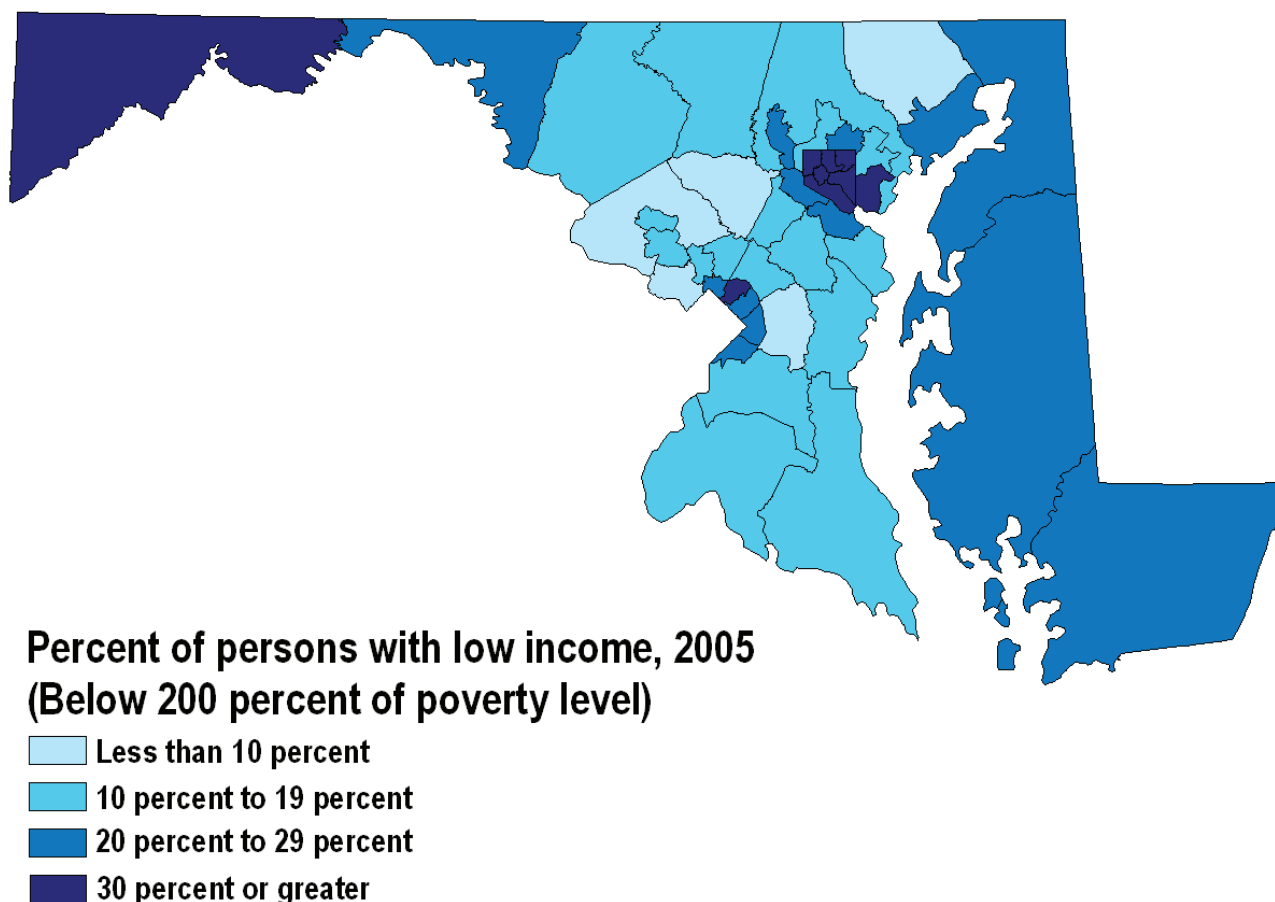
	Number of Adults 18-64 Without a High School Diploma or Equivalent	Margin of Error
Connecticut	208,974	± 4,864
Fairfield County	59,437	± 2,590
Hartford County	56,622	± 2,480
Litchfield County	8,030	± 867
Middlesex County	6,083	± 779
New Haven County	53,429	± 2,609
New London County	11,762	± 1,118
Tolland County	3,807	± 575
Windham County	9,804	± 982

Source: 2005 American Community Survey

This type of analysis is now possible for a number of critical factors of importance to the WFPF. States can look at the location and distribution of the low-income population within a state, for example. Too often, low-income and poverty are perceived by state policy makers as a problem confined to the urban center of the state. This perception can make it difficult to generate the attention needed to build the broad-based support across a state that is often needed to effectively strengthen appropriate state policies.

For example, in Maryland many perceive that low-income is primarily a problem of Baltimore City. In fact, ACS data show that the problem exists in a number of other areas and extends from one end of the state to another.

**Figure 1: Low-income is widespread in Maryland<sup>10</sup>**



Source: 2005 American Community Survey

Overall, the ACS can generate timely data and insights into a number of factors associated with low-income working families. These factors provide critical information that can better inform state policymaking processes.

Clearly, WFPF state organizations have a need to present these data and conditions as they work to strengthen relevant state policies. New York's Center for an Urban Future recently did this. Their report, "Lost in Translation," analyzed the number of state residents for which English is a second language and compared that to the state's investment in services to foster a more literate population.<sup>11</sup>

It is also important that state agencies be encouraged to generate and present data on a regular basis. Just as states generate regular data on unemployment, they can also generate regular data on the conditions of working families, with a particular focus on low-income working families. Similarly, education attainment rates can and should be made available on a regular basis. There are any number of important conditions that should be regularly examined by the state.

## CONCLUSION AND RECOMMENDATIONS

As state and local governments create and implement policies and programs to help people achieve economic self-sufficiency, and as demographic changes continue to occur, the need for current data at the state and local levels will only become more important. The ACS is the first nationwide, continuous measurement of socio-economic information for states and substate areas, and as such is a key resource for making objective, scientific data more readily available for analysis of policy options at the local level.

The WFPF recognizes that the new and expanded ACS offers the opportunity to look within states to identify conditions of low-income working families at the local level. This is an important tool for fostering in-depth policy discussions. All WFPF states are encouraged to extend their analysis to the local level.

Good policymaking requires sound and objective analysis based on credible and timely data. The ACS now provides such data. The challenge is to make sure that it is used to advance effective policymaking at all levels of government.

### WORKING POOR FAMILIES PROJECT RECOMMENDATIONS:

*State groups can also promote greater use of ACS data in the policymaking process. To that end, we recommend state groups take action in two ways.*

- 1) Encourage state agencies to generate data from the ACS on an annual basis to assess the conditions within the state that affect low-income and poor working families. Clearly, there is a wealth of information on a number of key issues such as work, income, and education that can be gleaned from the ACS to inform policy, either through published summary tables or through the use of PUMS. State agencies should be mining the data constantly and reporting to the public regularly.
- 2) Support the continued development and expansion of the ACS. It is important that federal officials understand the importance and value of ACS data to policymaking at all levels of government. It is particularly notable that small communities and rural areas may stand to benefit the most, as annually updated socioeconomic data for small, local areas becomes available through the ACS. For the ACS to gain widespread support at the federal level, decision makers representing America's small towns, cities and states need to communicate the potential benefits of ACS data and be vocal with their support.

## APPENDIX 1

### Where to Find Data From and Additional Information about the ACS

American FactFinder is the main portal to all ACS data. It can be accessed through the Census Bureau website ([www.census.gov](http://www.census.gov)). Data are presented in general overview tables (Data Profiles, Selected Population Profiles, Subject Tables, Ranking Tables), very detailed tables (Detailed Tables), and in Thematic Maps. Individual record data can be downloaded and used to create custom tabulations of the data. The data products discussed here can all be accessed from DATA SETS in the left navigation panel of the FactFinder main page.

#### ACCESSING BASIC INFORMATION FOR ONE GEOGRAPHIC AREA

**Data Profiles** contain four basic tables with general demographic, social, economic, and housing information about a particular geographic area. A fifth type – the Narrative Profile – uses text and charts to highlight data from the four tabular Data Profiles. Data Profiles are available for the United States, all states, the District of Columbia, and other geographic areas.

FactFinder » Data Sets » American Community Survey » Select year and Data Profiles » Select one geographic area

**Subject Tables** display percent distributions for a range of topics, including educational enrollment and attainment, employment, income, language, poverty, and others. Subject Tables are available for the United States, all states, the District of Columbia, and other geographic areas.

FactFinder » Data Sets » American Community Survey » Select year and Subject Tables » Select one geographic area » Select subject area of interest

#### ACCESSING INFORMATION FOR ONE OR MORE GEOGRAPHIC AREAS

**Selected Population Profiles** have tables with general data on a range of topics for race, ethnic, and ancestry groups. The topics include family type, educational enrollment and attainment, place of birth, citizenship, English ability, employment status, income, poverty, and others. Selected Population Profiles are available for the United States, all states, and the District of Columbia.

FactFinder » Data Sets » American Community Survey » Select year and Selected Population Profiles » Select one or more geographic areas » Select race, ethnic, or ancestry group of interest

**Ranking Tables** compare states on a selected characteristic. The characteristics available cover a range of topics, including educational attainment, employment status, income, poverty, English ability, and others.

FactFinder » Data Sets » American Community Survey » Select year and Ranking Tables » Select subject area of interest

**Detailed Tables/Base Tables** consist of hundreds of predefined tables covering the entire range of questions asked on the ACS. They contain all of the published detailed data from the ACS. Detailed Tables are shown for every available level of geography: nation, states, counties, county subdivisions, places (cities), Congressional districts, school districts, Public Use Microdata Areas, metropolitan areas, and urban areas.

FactFinder » Data Sets » American Community Survey » Select year and Detailed Tables » Select one or more geographic areas » Select table of interest

**Thematic Maps** show the geographic distribution of a selected characteristic in a color-coded map. Topics include dependency ratios, foreign-born population, educational attainment, language ability, income, poverty, and housing cost burden. Thematic Maps have many useful features that allow users to customize the map.

FactFinder » Data Sets » American Community Survey » Select year and Thematic Maps » Select Nation (map states within the U.S.) or State (map counties within a state) » Select characteristic to map

#### DOWNLOADING DATA AND CREATING CUSTOM TABULATIONS

Many of the tables outlined above have a download feature that allows users to download the data as a comma delimited or Excel file. This allows you to calculate sums, percents, averages, and create maps and charts for your own purposes.

**Public Use Microdata Sample (PUMS)** files contain a sample of the actual responses to the ACS. There are two types of PUMS files: housing unit and person record files. Each of these is available for download in comma delimited, PC SAS, and UNIX SAS formats.

FactFinder » Data Sets » American Community Survey » Select year and Download PUMS data

#### ADDITIONAL INFORMATION

If you want additional information about the ACS, such as sample sizes, formulas for calculating statistical significance or confidence intervals, and methodology, you can find all of that and more at [www.census.gov/acs](http://www.census.gov/acs).

## REFERENCES

- [www.census.gov/acs](http://www.census.gov/acs)
- Colton, Tara. "Lost in Translation," Center for an Urban Future Schuyler Center for Analysis and Advocacy (2006).
- Rivers, Kerri L., Mark Mather, and Linda A. Jacobsen. "American Community Survey: A Guide for Data Users," The Population Reference Bureau. (2006).
- O'Hare, William, Mark Mather, and Melissa Scopilliti. "State Rankings on the Well-Being of Children in Low-Income Families: Some Preliminary Findings," KIDS COUNT Working Paper (2005).
- Finegold, Kenneth, Laura Wherry, and Stephanie Schardin. "Block Grants: Historical Overview and Lessons Learned," The Urban Institute, No A-63 (2004.)
- Waldron, Tom, Brandon Roberts, and Andrew Reamer. "Working Hard, Falling Short," Working Poor Families Project (2004).
- Kish, Leslie. "Rolling Samples and Censuses," *Survey Methodology* 16, no. 1 (1990): 63-79.

## ENDNOTES

- <sup>1</sup> Kerri L. Rivers is a research associate at the Population Reference Bureau. She has been a Working Poor Families Project team member since 2002, producing data for the Project from both the ACS and the Current Population Survey. Thanks to Andrew Reamer of The Brookings Institute; Deborah Povich and Brandon Roberts of the Working Poor Families Project; and Marlene Lee of Population Reference Bureau who provided comments on earlier drafts. Thanks also to Kelvin Pollard of Population Reference Bureau for assistance with the graphics.
- <sup>2</sup> Waldron, Roberts and Reamer. "Working Hard, Falling Short," Working Poor Families Project, October 2004, p. ii.
- <sup>3</sup> One-year estimates from the 2005 ACS were released in August 2006. Three-year estimates will be released for the first time in 2008 and will be updated every year thereafter. Five-year estimates will be released for the first time in 2010 and will be updated every year thereafter. The five-year estimates are designed to replace estimates from the decennial census long form.
- <sup>4</sup> Waldron, Roberts, and Reamer. "Working Hard, Falling Short, Working Poor Families Project," October 2004.
- <sup>5</sup> There are two PUMS files: a housing unit file and a person file. The housing unit file is comprised of 1 percent of the estimated housing units in each state, the District of Columbia, and Puerto Rico. For example, if a state is estimated to have 1,000,000 housing units, the housing unit PUMS file will contain records for 10,000 randomly selected households from the sample of housing units in that state. Records for all persons in the 10,000 households comprise the person PUMS file.
- <sup>6</sup> All of the measures that apply to working families are obtained through special tabulations using the full, confidential Microdata file.
- <sup>7</sup> See [dataferrett.census.gov](http://dataferrett.census.gov) for more information.
- <sup>8</sup> To view maps of Public Use Microdata Areas, see the 2005 ACS User's Guide online at [www.census.gov/acs/www/Products/users\\_guide/acs\\_2005\\_reference\\_maps.htm](http://www.census.gov/acs/www/Products/users_guide/acs_2005_reference_maps.htm).
- <sup>9</sup> The Census Bureau conducted a large-scale national test of the ACS in 2000. This large-scale testing continued through 2004. As a result, the Census Bureau has published ACS data since 2000 for all states, the District of Columbia, and other areas with a resident population of 250,000 or more. The testing phase ended in 2004 and full implementation began in January 2005.
- <sup>10</sup> This figure is based on Public Use Microdata Areas in Maryland. A county level map was not possible because the Census Bureau did not publish 2005 ACS data for the eight counties with populations less than 65,000.
- <sup>11</sup> The report, "Lost in Translation", is available at [www.nycfuture.org/images\\_pdfs/pdfs/LostInTranslation.pdf](http://www.nycfuture.org/images_pdfs/pdfs/LostInTranslation.pdf).

For questions about this policy brief or the  
Working Poor Families Project contact:  
Brandon Roberts  
[robert3@starpower.net](mailto:robert3@starpower.net)  
(301) 657-1480