Finding Publicly Available Data for Extension Planning and Programming: Developing Community Portraits

Abstract
Although there have been calls for many years for Extension professionals to use secondary data in their work, finding appropriate data online can still be a challenge. With the multitude of data sources available online, it can be helpful to use the concept of developing a community portrait as the context for becoming proficient at locating secondary data. Once compiled, the data in a community portrait can have multiple uses. In this article, we provide direction for finding specific online data sources and using those sources to compile a community portrait, tips on using data websites, and a quick guide to help with locating data.

Keywords: data, Extension programming, data websites, American Community Survey, census

Introduction
Ever since computers entered the workplace, there have been calls for Extension professionals to use secondary data in their work (Curtis, Veroff, Rizzo, & Beaudoin, 2012a, 2012b; Patton, 1985; Preston, 1982; Sofranko, 1974, Teuteberg & Cummins, 2017; Zimmerman, 2013). Although there have been many advancements in accessing data through the Internet, finding accurate and official data can still be a challenge.

For Extension professionals and others who struggle with that challenge, we provide information herein to assist you in accessing trusted online public data sources. Included are tips for using data websites and a quick guide with URLs for the data sources discussed.

Given the multitude of data sources online, we apply the concept of developing a community portrait as a context in which to provide assistance with locating secondary data. Once you have compiled the data needed to create a community portrait, you can use the data in grant proposals, plans of work, program reviews, or parity assessments. Community portraits also allow you to see larger scale trends that become evident only in the composite.

Data Sources
The data sources described here are organized according to the categories of data they provide. For data from the U.S. Census Bureau's American Community Survey (ACS), individual table numbers are noted because the tables are the same every year. For additional information about each source, see the appendix. Also, Journal of Extension articles by Zimmerman (2013) and Curtis et al. (2012a) provide further information on using the ACS.
Population

There are two sources for finding the official number of people in your county—the U.S. Census Bureau's Decennial Census and its Population Estimates. The Census Bureau conducts the Decennial Census every 10 years. For the years in between, the Census Bureau produces population estimates. Both sources include data organized by race/ethnicity and by age; these data can be useful for programming in all Extension areas.

Although the ACS contains population estimates for the total population and estimates by race/ethnicity and age, these are not official population counts. As noted, the official population counts come from either the Decennial Census or the Population Estimates.

Families

To find the number and types of families in a county, consult the ACS. The ACS includes estimates related to numbers of families, family types, and family characteristics (Table S1101). These data can be useful for family and consumer sciences or 4-H programming or for programming representing an intersection of areas, such as youths in agriculture. When using estimates from the ACS, always include the margin of error figures provided therein.

Agriculture

Farmers and farm families are important clientele for Extension. Data about those engaged in agriculture can be obtained from the Census of Agriculture conducted by the U.S. Department of Agriculture. Data on operator characteristics include age, race/ethnicity, and gender data. The Census of Agriculture also contains data on hired and migrant farm labor.

Poverty and Income

Knowing about local poverty and income levels can provide perspectives on the financial statuses of people and households locally. The Small Area Income and Poverty Estimates (SAIPE) compiled annually by the Census Bureau include the official numbers of people and children in poverty as well median household income for an area. As with ACS margin of error figures, when using data from SAIPE, it is important to include the confidence interval values provided in the data source.

Although the ACS includes estimates on the characteristics of individuals and families in poverty (Tables S1701 and S1702), the ACS does not provide the overall official poverty rate.

Unemployment Rates

Unemployment rates can be useful for understanding the overall status of a local economy. The U.S. Bureau of Labor Statistics (BLS) provides the official unemployment rates, numbers employed and unemployed, and total labor force figures for entities such as states, counties, and metropolitan/micropolitan areas.

Although the ACS includes unemployment rate estimates, they are not the official unemployment rates. The official unemployment rates are produced by the BLS. Still, the ACS does contain estimates on the characteristics of those who are employed/unemployed (Tables S2301 and S2302).
Educational Attainment

Identifying educational attainment figures can help you understand overall educational levels in your county. Additionally, knowing the educational levels of your county can help you in developing program resources. Estimates on the educational attainment of residents in your county are available from the ACS, including estimates by age, gender, and race/ethnicity (Table S1501).

Website Tips

Part of the challenge of using publically available data is that every website is different. On the American FactFinder website (see appendix), to access a specific table from the ACS, you can use the "Advanced Search" option and enter the name of your county and the table number you are looking for at the top of the input screen. In some cases, such as with the Census of Agriculture, multiple websites provide access to the same data. There are also websites that compile data from different sources, such as the Kids Count Data Center (http://datacenter.kidscount.org/).

When accessing any data website, applying a few simple strategies can be useful.

- If a website includes a "back" button, use it to navigate to previously accessed pages. Sometimes using your browser's "back" button will back you out of a website entirely and you must start over.

- Be careful where you click on the screen. Blank spaces are not always what they appear to be. Sometimes websites have hidden links, and you can end up on a page that you did not intend to go to.

- No matter which website you use, always be critical of what you find. Because margins of error in the ACS can be large, it is important that a website containing data from the ACS provide these figures. If a website does not provide the margins of error for data from the ACS, use the American FactFinder website instead.

Conclusion

By locating data from just a few data sources, it is possible to compile a portrait of your community. As a collection, these data can be useful not only for informing Extension program areas but also for providing you with a better understanding of your local community and putting individual Extension program impacts into a broader perspective.

References


**Appendix**

### Community Portrait Quick Guide

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<td>Total Population</td>
<td>Decennial Census</td>
<td>Use <em>Community Facts</em>, or in <em>Advanced Search</em> select <em>Topics</em> → <em>Program</em> → <em>Decennial Census.</em></td>
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<td>Race/Ethnicity</td>
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<td><a href="https://factfinder.census.gov/">https://factfinder.census.gov/</a></td>
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<tr>
<td>Age and Age Groups</td>
<td>Annual Population Estimates</td>
<td>Use <em>Community Facts</em>, or in <em>Advanced Search</em> select <em>Topics</em> → <em>Program</em> → <em>Population Estimates.</em></td>
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<td>Families</td>
<td>American Community Survey</td>
<td>Advanced Search select &quot;Topics&quot; → &quot;People&quot; → &quot;Relationship.&quot;</td>
<td><a href="https://factfinder.census.gov/">https://factfinder.census.gov/</a></td>
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<td>Farming and Agriculture</td>
<td>U.S. Department of Agriculture (USDA) Census of Agriculture</td>
<td>For county data, under &quot;Find Data By,&quot; select &quot;County Profiles&quot; or &quot;State and County.&quot; Or under &quot;Data Search Tools,&quot; select &quot;Ag Census Web Maps&quot; or &quot;Quick Stats.&quot;</td>
<td><a href="https://www.agcensus.usda.gov/">https://www.agcensus.usda.gov/</a></td>
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<td>Poverty and Income</td>
<td>Small Area Income and Poverty Estimates (SAIPE)</td>
<td>Select &quot;SAIPE Interactive Data Tool.&quot; To zoom in on your state, under &quot;Filter By&quot; select &quot;States&quot; and then select your state.</td>
<td><a href="https://www.census.gov/programs-surveys/saipe.html">https://www.census.gov/programs-surveys/saipe.html</a></td>
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<td>Unemployment Rates</td>
<td>Bureau of Labor Statistics (BLS)</td>
<td>Scroll down the page until you see a row of boxes with data access options.</td>
<td><a href="https://stats.bls.gov/lau/">https://stats.bls.gov/lau/</a></td>
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<td>Educational Attainment</td>
<td>American Community Survey</td>
<td>&quot;Multi-screen&quot; is easiest to use.</td>
<td>Use Community Facts, or in Advanced Search select &quot;Topics&quot; → &quot;People&quot; → &quot;Education.&quot;</td>
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