

## Supplemental Update – Transitioning to American Community Survey Data and 2010 Census

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The U.S. Census Bureau has been reorganizing the collection and structure of its data over the course of the last decade. Along with the standard Decennial Census, there is now an American Community Survey administered each year. This supplemental guide to the “Collecting Census Data” tab of the *Transportation and Housing Alliance Toolkit* is intended to assist toolkit users through this transition, providing step-by-step instructions for accessing and working with both of these census products.

### Which Census Product Should You Use?

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U.S. Census data is integral assessing your communities’ needs, giving the most thorough and precise demographic portrait available of whatever geographical unit is being analyzed. Now that there are two data products to choose between, you must have a grasp of the benefits and constraints of each to understand which meets your specific needs.

Your options:

#### 1. 2010 Decennial Census

A census of all households is still being taken every ten years, as it has been in the United States since 1790, a year after President Washington’s inauguration. However, the 2010 Decennial Census is much more constrained in scope than those taken in recent history. Between 1940 and 2000, all households were given a “short-form” with very basic questions such as sex and race, but a smaller number received a “long-form” asking about their commute, their disability status, and several other individual and household characteristics. Statistical models were used to make estimates about the entire population based on this sample. The “short-form” was still collected in 2010, but the “long form” has now been replaced by the American Community Survey (ACS).

The 2010 Decennial Census is useful if you are looking for population counts, race, age, basic information on housing types, and sexes in your community. There are several benefits to using the 2010 Decennial Census. Because the information has been collected every decade in the same way, you can easily follow the long-term trends in your community. All data is available for all geographical levels down to individual census blocks, and the sheer number of participants makes it the most reliable data around. The federal government determines its funding allocations and voting districts based on this data, so it has to be good!

However, if you are looking to analyze and map any other features of your community, you will have to turn to the ACS.

#### 2. American Community Survey (ACS)

There are actually three separate products released each year under the ACS. There’s 1-Year Estimates, 3-Year Estimates, and in late 2010 the Census Bureau released its first 5-Year Estimates for the years 2005-2009. There’s a reason for these different choices. Because the ACS only collects information from

about 1 out of 50 households every year, the U.S. Census Bureau needs to add multiple years together to have a reliable statistical sample for less populous geographical areas.

If you're looking for data for a larger area, with over 65,000 in population, go ahead and use the 1-Year Estimate for the most up-to-date numbers. Every Metropolitan Statistical Area (MSA) and 28 counties in the Virginia are available as 1-Year Estimates, as well as the State of Virginia as a whole. This can be useful if you are comparing your whole region to others around the country or looking for annual regional trends.

But the 5-Year Estimates are the place to go for a closer look at spatial patterns *within* your community. This level of detail is necessary if, for example, you need to know where low-income households are concentrated in your community or compare the housing values of the low-income areas with those of higher-income areas.

The ACS is where you'll find this and a wide variety of other information, organized into the following "data profiles":

- Social - Education, Marital Status, Relationships, Fertility
- Economic - Income, Employment, Occupation, Commuting to Work
- Housing - Occupancy and Structure, Housing Value and Costs, Utilities
- Demographic - Sex, Age, Race, Hispanic Origin

The best way to see what is available is just to explore the list of tables on the American Factfinder website (See "How to Collect" section below for instructions on using the census website). Here's a sample of data tables and their availability by geography that may be of interest to *Toolkit* users:

<b>Selected Tables from the 2005 – 2009 American Community Survey 5-Year Estimates</b>		
<b>Table #</b>	<b>Table Title</b>	<b>Available for Block Groups</b>
<b>B01001</b>	Sex By Age	yes
<b>B02001</b>	Race	yes
<b>B03003</b>	Hispanic Or Latino Origin	yes
<b>B07003</b>	Geographical Mobility In The Past Year By Sex For Current Residence In The United States	No*
<b>B08006</b>	Sex Of Workers By Means Of Transportation To Work	no
<b>B08012</b>	Sex Of Workers By Travel Time To Work	no
<b>C08134</b>	Means Of Transportation To Work By Travel Time To Work	yes
<b>B09002</b>	Own Children Under 18 Years By Family Type And Age	yes
<b>B09017</b>	Relationship By Household Type (Including Living Alone) For The Population 65 Years And Over	yes
<b>B11012</b>	Household Type By Tenure	yes

<b>B14002</b>	Sex By School Enrollment By Level Of School For The Population 3 Years And Over	yes
<b>B16001</b>	Language Spoken At Home By Ability To Speak English For The Population 5 Years And Over	no
<b>B17003</b>	Poverty Status In The Past 12 Months Of Individuals By Sex By Educational Attainment	no
<b>B19001</b>	Household Income In The Past 12 Months	yes
<b>B19055</b>	Social Security Income In The Past 12 Months For Households	yes
<b>B25001</b>	Housing Units	yes
<b>B25002</b>	Occupancy Status	yes
<b>B25003</b>	Tenure	yes
<b>B25014</b>	Tenure By Occupants Per Room	yes
<b>B25024</b>	Units In Structure	yes
<b>B25047</b>	Plumbing Facilities For All Housing Units	yes
<b>B25063</b>	Gross Rent	yes
<b>B25087</b>	Mortgage Status And Selected Monthly Owner Costs	yes
<b>B25107</b>	Median Value By Year Structure Built	no
<b>B25113</b>	Median Gross Rent By Year Householder Moved Into Unit	no

\* “No” means data is available at all geographical levels larger than block groups

**Special Note about Disability Status:** The U.S. Census Bureau changed the questions they use to determine disability in 2008. The ACS now asks specific questions about hearing disabilities, visual disabilities, cognitive disabilities, ambulatory disabilities, self-care disabilities, and independent living disabilities. This will provide a richer understanding of the varieties of disability in your community, but it also means that areas of smaller populations will have to wait until 2013 for the information. Because the questions were changed, disability status is omitted from the 2005-2009 5-Year Estimates. However, It is available in the 2009 1-Year Estimates for more populous geographical areas.

Although the table numbers and titles have changed between the 2000 Census and the ACS, it is still possible to make meaningful comparisons over time for almost all of the tables. For example, if you want to compare the travel time to work in your community between 2000 and 2009, you can use “P31. Travel Time to Work for Workers 16 Years and Over” in the 2000 Census and “B08303. Travel Time to Work” in the 2009 ACS. Be careful though. There is a slight difference in these tables. The 2000 table includes all workers 16 years and over, and tells you how many of these worked at home. The 2009 table only includes those that worked outside of the home. You have to look elsewhere for information on who works at home. As long as you pay attention to the subtle variations that may arise, the numbers should be easily comparable.

The U.S. Census Bureau has created a handy tool to compare the 2000 Census with 2005-2009 ACS on their website

- [http://www.census.gov/acs/www/guidance\\_for\\_data\\_users/2009\\_table\\_comparisons/](http://www.census.gov/acs/www/guidance_for_data_users/2009_table_comparisons/)

The greatest advantage of the ACS is the timeliness of the data. You no longer have to wait ten years for the next objective snapshot of your community. Starting in 2010, every year you will be able to watch the demographic and economic profile change, equipping you with the basis you need to make better decisions.

## How Do You Collect the Data Now?

Most of the steps in the “Collecting Census Data” tab of the *Toolkit* will still apply for the new census data products. However, there are a few differences that will be highlighted in this section.

### Accessing the American Community Survey (ACS)

**Important Note:** Although the American Community Survey is currently accessed through the legacy American Factfinder website, this will be discontinued in the Fall of 2011. The following instructions will no longer be valid after that point. For using American Factfinder 2, please see the instructions below on accessing the Decennial Census. Both the ACS and the Decennial Census will be accessed from the same website with the same method.

**Step 1: The Census Website.** Go to the American Factfinder website:

- <http://factfinder.census.gov/>

This time, select *American Community Survey* from the “Data Sets” menu on the left.

The screenshot shows the American FactFinder website interface. The top navigation bar includes links for Main, Search, Feedback, FAQs, Glossary, Site Map, and Help. The left sidebar contains a vertical menu with categories such as POPULATION FINDER, FACT SHEET, PEOPLE, HOUSING, BUSINESS AND GOVERNMENT, ABOUT THE DATA, DATA SETS, DOWNLOAD CENTER, MAPS, and TOOLS AND REFERENCES. The 'DATA SETS' menu is currently open, displaying a list of survey types: Decennial Census, American Community Survey (highlighted), Puerto Rico Community Survey, Annual Population Estimates, Economic Census, and Annual Economic Surveys. The main content area features a search box for 'Get a Fact Sheet for your community...' with a dropdown for state selection and a 'GO' button. Below this, there is a 'U.S. Population Clock' showing a population of 310,676,703 as of November 10, 2010. A 'What's New' section at the bottom right highlights the '2009 American Community Survey 1-Year Estimates'.

You will be given some options for ACS products:

- Click on “2005-2009 American Community Survey 5-Year Estimates” (or whichever are the most current years for you. This will be at or near the top of the list).

- Click on “Detailed Tables”

**Step 2: Selecting Geography.** This has not changed. Select the scale of geography you desire, and then “drill down” to the specific area as instructed. Refer to page 3 of “Collecting Census Data” in the *Toolkit* for more detailed instructions.

**Step 3: Selecting Tables.** The tables are organized as they were before, but there are entirely different options with different table numbers this time.

The screenshot shows the 'U.S. Census Bureau American FactFinder' interface. The 'Select Tables' section is active, with a breadcrumb trail: 'Main > Data Sets > Data Sets with Detailed Tables > Geography > Tables > Results'. The page title is '2009 American Community Survey 1-Year Estimates, Detailed Tables'. There are three tabs for table selection: 'by subject', 'by keyword', and 'show all tables'. The 'show all tables' tab is selected. A list of tables is displayed, with 'B25063. Gross Rent' highlighted. Below the list is an 'Add' button. To the right of the list is a legend for abbreviations: Black - Black or African American, AIAN - American Indian and Alaska Native, NHP - Native Hawaiian and Other Pacific Islander, and SOR - Some Other Race. Below the legend is a 'What's this?' button. Below the 'Add' button is a 'Current table selections' box containing 'B25063. Gross Rent' and buttons for 'Remove' and 'Show Result'.

- Scroll down the list of the tables and click on “B25063 Gross Rent”
- Click on “Add” to put this table into the “Current Table Selections” box below
- Click on “Show Results”

If you’re not quite sure of the name of the table, you can sift through different subject categories or type in a keyword to see if your table shows up. Click on one the tabs under “Choose a table selection method” for these other options.

From this point on, you can jump back into the original instructions starting on page 5. Of course, the labels and numbers in your table will differ from the example pictured, but the process for downloading the data and opening it in Microsoft Excel will still be applicable.

That’s it! Now you can create the same maps, charts, and tables as before except with much more current data.

## Accessing the Decennial Census

There are two important things to note before beginning:

- Data for 2010 Census is being released incrementally during 2011 and 2012. As of the summer of 2011, population counts, race groups, housing units, and certain other demographic characteristics have been released for most levels of geography. More tables and “imputations” of the data will continue to be released, showing how the different questions interact with each other.
- Remember that your options for tables are very limited. The example used in the Toolkit, “Disabilities by Block Group,” will unfortunately not be available.

The website interface for the 2010 Decennial Census has changed substantially from that described in previous editions of the *Toolkit*, under “Collecting the Census Data.” The following instructions will guide you through the new process.

In this example, we are seeking to find what percentage of the total population of Nelson County, Virginia is Hispanic or Latino by ethnicity.

**Step 1: The Census Website.** Go to the American Factfinder 2 website.

- <http://factfinder2.census.gov/>

The screenshot shows the American FactFinder website interface. At the top, the U.S. Census Bureau logo is visible. Below it, the 'AMERICAN FactFinder' logo is displayed. A navigation bar includes 'MAIN', 'SEARCH', 'WHAT WE PROVIDE', and 'USING FACTFINDER'. On the right, there are links for 'Feedback', 'FAQs', 'Glossary', and 'Help', along with language options for 'English' and 'Español'. The main content area is titled 'Your source for population, housing, economic, and geographic data'. It features a search box with a 'GO' button and a 'Quick Start' section. On the left, there are several menu items: 'Your Selections', 'Topics', 'Geographies (states, counties, places,...)', 'Population Groups (race, ancestry,...)', 'Industry Codes (NAICS,...)', 'Legacy American FactFinder', and 'Load Query'. A red arrow points to the 'Geographies' menu item. The 'News and Notes' section on the right contains several news items, including one dated July 14, 2011, about the 2010 Census Summary File 1. The 'U.S. Population Clock' shows a population of 311,770,010 as of July 15, 2011. Other sections include 'Reference Maps', 'Address Search', and 'Did you know?'.

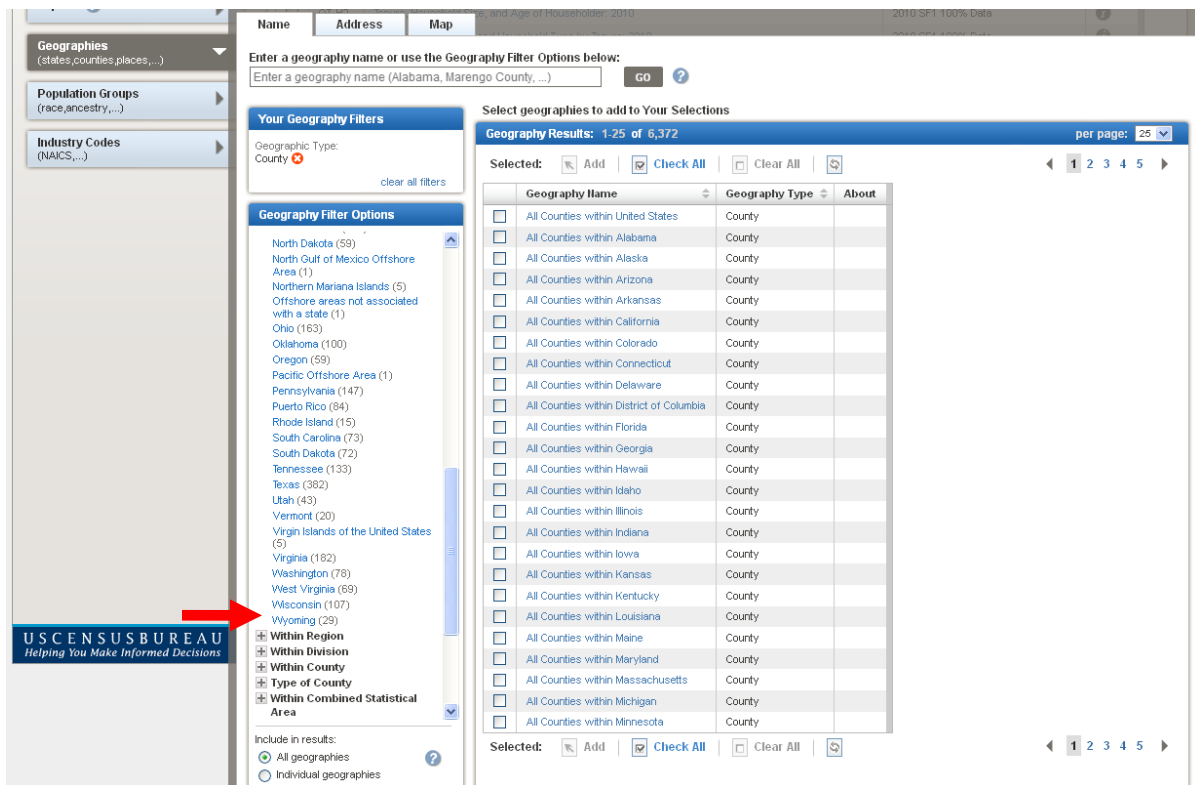
**Step2: Choosing Geography.** Click on the “Geographies” tab on the left side of the screen

A new window will overlap the previous screen, allowing you to select the area you are interested in. There are several ways to find your area. The easiest may be to type the name of the place in the search box, and see if it finds the correct location.

Another option is to find your area by narrowing down from larger geographical units. In this example we will look for Nelson County.

- Open option “Geography Type” (this may already be open)
- Select County

You should see “County” displayed in the “Your Geography Filters” box above



- Open option “Within State”
- Scroll down and Select Virginia from list
- Click on page 3 on the bottom right to get to the Ns on the alphabetical list
- Click on Nelson County, Virginia to select this geography

You should see Nelson added to “Your Selections” at the very top of the page. You can make multiple selections at the same time. Just go back to the geography window and find the other areas you are looking for. For several geographies it may be useful to use the checkboxes and select “Add” once all of your selections are checked.

- Close the “Select Geographies” window by clicking on the X in the upper right corner

### Step 3: Selecting Tables

Just like selecting geographies, we will use filters, called “topics,” at the left of the page to narrow down to the information we are looking for.

- Open option “People”
- Open the further option “Race and Ethnicity”
- Select “Hispanic or Latino”

On the main list, you will now only see tables that pertain in some way to Hispanics or Latinos in Nelson County.

- Open option “Year”
- Select 2010

The screenshot shows the American FactFinder interface. On the left, the 'Your Selections' panel shows: People/Race & Ethnicity: Hispanic or Latino; Year: 2010; County: Nelson County, Virginia. Below this is a 'Search within Results for...' field. The 'Topics' panel on the left has 'People' expanded, and 'Hispanic or Latino' is selected. The 'Year' panel has '2010' selected. The 'Geographies' panel has 'Nelson County, Virginia' selected. The 'Population Groups' panel is highlighted with a red arrow pointing to 'Race, Hispanic or Latino, Age, and Housing Occupancy: 2010'. The main search results table shows 49 results, with the selected item being 'QT-PL Race, Hispanic or Latino, Age, and Housing Occupancy: 2010'.

ID	Title	Dataset	About
DP-1	Profile of General Population and Housing Characteristics: 2010	2010 Demographic Profile SF	<a href="#">?</a>
QT-H1	General Housing Characteristics: 2010	2010 SF1 100% Data	<a href="#">?</a>
QT-P10	Hispanic or Latino by Type: 2010	2010 SF1 100% Data	<a href="#">?</a>
QT-P3	Race and Hispanic or Latino Origin: 2010	2010 SF1 100% Data	<a href="#">?</a>
QT-P4	Race, Combinations of Two Races, and Not Hispanic or Latino: 2010	2010 SF1 100% Data	<a href="#">?</a>
QT-P6	Race Alone or in Combination and Hispanic or Latino: 2010	2010 SF1 100% Data	<a href="#">?</a>
QT-PL	Race, Hispanic or Latino, Age, and Housing Occupancy: 2010	2010 Redistricting Data SF (PL 94-171)	<a href="#">?</a>
H11H	TOTAL POPULATION IN OCCUPIED HOUSING UNITS BY TENURE (HISPANIC OR LATINO HOUSEHOLDER)	2010 SF1 100% Data	<a href="#">?</a>
H12H	AVERAGE HOUSEHOLD SIZE OF OCCUPIED HOUSING UNITS BY TENURE (HISPANIC OR LATINO HOUSEHOLDER)	2010 SF1 100% Data	<a href="#">?</a>
H15	TENURE BY HISPANIC OR LATINO ORIGIN OF HOUSEHOLDER	2010 SF1 100% Data	<a href="#">?</a>
H16H	TENURE BY HOUSEHOLD SIZE (HISPANIC OR LATINO HOUSEHOLDER)	2010 SF1 100% Data	<a href="#">?</a>
H17H	TENURE BY AGE OF HOUSEHOLDER (HISPANIC OR LATINO HOUSEHOLDER)	2010 SF1 100% Data	<a href="#">?</a>
H7	HISPANIC OR LATINO ORIGIN OF HOUSEHOLDER BY RACE OF HOUSEHOLDER	2010 SF1 100% Data	<a href="#">?</a>
H9	HISPANIC OR LATINO ORIGIN OF HOUSEHOLDERS BY TOTAL RACES TALLIED	2010 SF1 100% Data	<a href="#">?</a>
HCT1	TENURE BY HISPANIC OR LATINO ORIGIN OF HOUSEHOLDER BY RACE OF HOUSEHOLDER	2010 SF1 100% Data	<a href="#">?</a>

By adding the year the data was collected, we’ve narrowed things down far enough to find what we are looking for on the list. You should see several results that are under the dataset “2010 SF1 100% data.” These titles will have detailed data on Hispanics or Latinos, but at the time of this writing they have not been released for Nelson County. For our purposes, the “2010 Redistricting Data SF” dataset will be suitable.

- Find “Race, Hispanic or Latino, Age, and Housing Occupancy: 2010” on the list and click on it.

Table View Map View

Actions: [Modify Table](#) | [Bookmark](#) | [Download](#) | [Create a Map](#)

[View Table Notes](#)

NOTE: For information on confidentiality protection, nonsampling error, and definitions, see <http://www.census.gov/prod/cen2010/b94-171.pdf>

NOTE: Change to the [California, Connecticut, Mississippi, New Hampshire, Virginia, and Washington P. L. 94-171 Summary Files](#) as delivered.

GEO: [Nelson County, Virginia](#)

Subject	Total		18 years and over	
	Number	Percent	Number	Percent
<b>POPULATION</b>				
Total population	15,020	100.0	12,128	100.0
<b>RACE</b>				
One race	14,768	98.3	12,014	99.1
White	12,509	83.3	10,219	84.3
Black or African American	1,967	13.1	1,503	13.1
American Indian and Alaska Native	46	0.3	35	0.3
Asian	68	0.5	49	0.4
Native Hawaiian and Other Pacific Islander	4	0.0	3	0.0
Some Other Race	172	1.1	125	1.0
Two or More Races	252	1.7	114	0.9
<b>HISPANIC OR LATINO AND RACE</b>				
Hispanic or Latino (of any race)	459	3.1	288	2.4
Not Hispanic or Latino	14,561	96.9	11,840	97.6
One race	14,360	95.6	11,746	96.9
White	12,283	81.8	10,075	83.1
Black or African American	1,941	12.9	1,573	13.0
American Indian and Alaska Native	43	0.3	32	0.3
Asian	66	0.4	47	0.4
Native Hawaiian and Other Pacific Islander	4	0.0	3	0.0
Some Other Race	23	0.2	16	0.1
Two or More Races	201	1.3	94	0.8
<b>HOUSING UNITS</b>				
Total Housing Units	9,931	100.0		
<b>OCCUPANCY STATUS</b>				
Occupied housing units	6,396	64.4		
Vacant housing units	3,535	35.6		

X Not applicable

Source: U.S. Census Bureau, 2010 Census.  
2010 Census Redistricting Data (Public Law 94-171) Summary File, Tables P1, P2, P3, P4, H1.

These are the numbers we are looking for. The line item for Hispanics or Latinos (of any race) is highlighted above. We see that 3.1% of the total population in Nelson County is Hispanic or Latino. If you were just looking for this number, your task is complete. However, you may want to download this table to perform some calculations on it in excel.

- Click “Download”
- Select Microsoft Excel under “Presentation Ready Formats”

An easy-to-read spreadsheet will be downloaded, and you can open it up in Microsoft Excel. If you are working with multiple tables, or you want to perform more complex tasks such as mapping in GIS, you will need to select “Comma delimited” under “Database-compatible formats” in the download window. This file will also be readable in Microsoft Excel.

The new American Factfinder may take some time to get used to, but the ability to apply many filters and select multiple options simultaneously can greatly speed up the process of finding the right data. Take some time to explore the other tabs and features that are available.