



**SimplyMap: A Resource for Mapping Data  
Hands-On Session for NC LIVE  
July, 2009**

URL: <http://www.simplymap.com/index.php>

Under Step 2, Personal Login, either create a personal work space (to save your projects) OR "click here" under Personal Login.

**Practice Exercises: Maps, Reports, Exported Lists, & Queries**

*Exercises courtesy of Steven Swartz from Geographic Research, Inc.*

**(1) How do I create a map showing demographic or marketing data for a specific location?**

***In which ZIP Code(s) do the highest percentage of young adults (18 to 24 year olds) live in Wake County?***

**Step 1:** Choose your Location. *State:* North Carolina/*County:* Wake County. Click *GO*.

**Step 2:** Select a *Geographic Unit:* ZIP Codes

**Step 3:** Select your *Variable:* Open the Variables tab and search or browse "All" variables. The variable you want is *% Pop, 18 to 24 Years, 2008*. This variable is located in the folder Census 2008 Estimates > People and Households > Age > Total > *% Pop, 18 to 24 Years, 2008*.

Check the box next to the variable and click *Add selected variable*.

**Step 4:** Select the new variable from the list in the Map Tab. Click *Update* to see your map.

*Tips:*

- Open the Legend Editor and change the classification method to Natural Breaks (Local) in order to recalculate the break points for the Variable *% Pop, 18 to 24 Years, 2008* using data from your local map (in this case Wake County).
- Label your ZIP Codes by clicking yes to "Label Geographic Unit."
- Click "More Options" and click yes to "Highlight locations that I "Go" to"
- Find out the provenance of your data: double-click the variable name in the variable list for information on the data source and definition.

***Are the areas with the most young adults North, South, East or West of Raleigh?***

**Step 5:** Select *Export > image* to export your finished map!



## **(2) How do I rank the top 10 ZIP Codes in Wake County with the highest % of young adults and also limit this search to Zip Codes with a population density greater than 1,000 people per square mile?**

**Step 1:** Open the Location Side Tab and click *Rank*

**Step 1a:** Specify *ZIP Codes in a County* for the areas you would like to rank.

**Step 1b:** Select *North Carolina* and *Wake County* for the State and County.

**Step 2:** Select the variable to rank: % Pop, 18 to 24 Years, 2008.

**Step 3:** Select Population Density (per sq. mi), 2008 *Greater Than 1,000* to filter the list by the most urban ZIP Codes (must be a recent or flagged variable from the Variables tab in order to be selected under *Select Variable*). This variable is located in the folder Census 2008 Estimates > People and Households > Population > Total > *Population Density (per sq mi), 2008* or by searching “population density” in the search box at the top.

**Step 4:** Select the number of locations to rank *10*

**Step 5:** Click *View Results*.

### *Tips:*

- To add the ranked ZIP Codes to a map or report, select the checkboxes and click “*Add Selected Locations*.” The ZIP’s will appear in the locations list when you return to the Map or Report Tab.
- Click *Export* to download or email the ranked ZIP Codes in Excel format.

## **(3) How do I create a custom report comparing data across multiple locations?**

***Compare the ZIP Codes in Wake County with the most young adults between the ages of 18 to 24 (highest %) to your own Neighborhood, ZIP Code, the city of Raleigh and the state of North Carolina.***

**Step 1:** Select the ZIP Codes to be studied. We will use the *i-tool* to add multiple locations to the *Clicked Locations* list.

- Click the “*i*” tool from the toolbar, and then click a desired ZIP Code (darkest colored ZIPs = highest % of 18 to 24 Years Olds, 2008).
- Repeat as needed, clicking the *i-tool* before clicking each location.

**Step 2:** Add the selected ZIP Codes to your Locations:

- Open the Locations tab.
- Click “*Clicked*” to view the list of locations you clicked with the *i-tool*.
- Click the checkbox next to the desired locations and click *Add Selected Locations* to update the Locations list in the Map Tab.



**Step 3:** Now add your home ZIP Code, the city of Raleigh and the State of North Carolina to the Locations list:

- Enter your home ZIP Code in the ZIP field in the Map Tab and click *Go*.
- Select North Carolina in the *State* menu and click *Go*.
- Select North Carolina in the *State* menu and start typing “Raleigh” in the *City* field and click *Go*.

**Step 4:** Add your home Census Tract to the Locations list:

- Click *Census Tract* (under county) on the Map Tab.
- Select *Census Tract (by address)* in the *Search For* field.
- Enter your home address in the appropriate fields. All fields are required.
- Click *Find Location*.
- Click *Add Location* to add the Census Tract to the *Locations* list in the *Map Tab*.
- Close the pop-up window to return to the Map Tab.

*Tip:* Create a “nickname” for any census tract or block group by double-clicking on it in the list of Locations. For example, double-click your home Census Tract and enter “My neighborhood.”

**Step 5:** Create a Report with the selected locations:

- Open the Report Tab by clicking *Reports* (next to *Maps* at the top of the window).
- Select all of the Locations you just added.
- Select the Variables to include in the report (e.g., % Pop, 18 to 24 Years, 2008, # Pop, 18 to 24 Years, 2008) and any other variables you’d like to compare.
- Click *Update Report*.

A report is created comparing each selected location.

*Tips:*

- To add a whole group of related data, open the Variables Tab, click *Groups* and select the variable groups to add. Then *update* your report.
- Sort report data by clicking the arrows in each column header.
- Chart variables by clicking the Chart icon on the right side of each row.
- Transpose the columns and rows by clicking *Transpose* at the bottom of the report.

**Step 6:** Create a Ring Study analyzing data 1, 3, and 5 miles from any Location:

- Select *Ring Study* from the *Report Type* menu (underneath Locations in the Report Tab)
- Select one location from the Locations list.
- Click *Update Report*.

**Step 7:** Select *Export* to download the Report data in Excel, Word, or .csv format.



#### **(4) How can I create a query combining more than one variable?**

*Locate Census Tracts in Wake County that have greater than 40% of the population with a college education and a median income over \$65,000 (let's call 'em Brains & Money). In this example, we will provide fewer details so you can use the skills you learned in the previous steps.*

**Step 1:** Find the variables you need in the *Variables* Tab:

- Which is easier, searching or browsing? See variable names below if you need help.\*
- Click the flag icon next to the variables you want to include in the query.

**Step 2:** Open the *Query* Tab to create the query:

- Click the *Flagged* button to quickly find the variables you selected in Step 1.
- Select your college education variable and set to greater than 40% in Steps 2a and 2b.
- Click *Add to List*.

**Step 3:** Add additional conditions to the query:

- Select your income variable and set to greater than \$65,000 (no \$ sign required in box).
- Set the operator to *AND*
- Click *Add to List*.

*Tip:* We recommend mapping each variable separately before using them in a Query to learn where the break point values are located.

**Step 4:** Give this search a descriptive name – “Brains & Money” -- and click *Done*. Your custom variable is now in the Variables List in the Map Tab!

**Step 5:** Map the custom variable:

- Select Wake County in the active location list and click *Go*
- Select Brains & Money in the active variable list and click *Update*.
- Select *Census Tracts* from the *Geographic Unit* menu.
- Locations that meet your criteria are mapped in red.

*Tip:* You may also change geographic units to Block Group as we are searching by % and not a specific number.

\* % Education College, 2008 and HH Inc., Median (\$), 2008

#### **(5) How can I create and export a list of relevant ZIP Code, Census Tract or Block Group data for an entire city or county?**



***Which Zip Code has the highest % College Education in the entire state of North Carolina? Highest Median Income?***

**Step 1:** Create a Map of North Carolina by ZIP Codes. You may need to zoom in once or twice to map by ZIP Code.

**Step 2:** Make sure the relevant variables have been selected and added to the list on the Variables Tab. If they are not there, go to flagged and add these two variables to the active variable list (They should still be there from the last question.)

**Step 3:** Select *Export > Data*

**Step 4:** Select the variables you wish to export and click *Preview*.

**Step 5:** Click *Export* to download or email the data in Excel format.

**Step 6:** Use the *Custom Sort* feature in Excel to sort by any variable.

*Tip:* Make sure the geographic units are ZIP Codes and the active location is North Carolina before exporting. Data will export for the active location and geographic unit.

## **(6) How do I overlay Points-of-Interest data with demographic or marketing data?**

***How many Child Day Care Services are there in areas with the most children age 0-5 in Wake County?***

**Step 1:** Create a map of Wake County by ZIP Code & Select Variable # Pop, 0 to 5 Years, 2008.

**Step 2:** Open the *Points* Tab and select *D&B Points of Interest* data.

**Step 3:** Next to the *NAICS Code* field, click on the question mark to select a NAICS code.

**Step 4:** Enter “Child Day Care” in the search field and select *Child Day Care Services* by clicking the “+” symbol. The code will populate the NAICS field.

**Step 5:** To select a point marker, click *Edit Marker*. Click the shape and color of choice.

**Step 6:** Type in a Descriptive Name “Child Day Care Services” and click done.

**Step 7:** Back in the Map Tab, Select “Child Day Care Services” from the Point drop down menu (beneath the Variables list). Check the box next to this menu to turn on the Point Layer. The map will update to show Day Care Services.

*Tips:*

- Remember to open the Legend Editor and change the classification method to Quantiles (Local) or Natural Breaks (Local) to recalculate the break points for the Variable # Pop, 0 to 5 Years, 2008 using data from your local map (in this case Wake County).
- You may locate specific day care centers such as Bright Horizons Children’s Centers by typing the name “Bright Horizons” in the Business Name box.
- Click any point on the map for details about that location.
- If there are many points, it may take a few moments for the map to update.



- Click *Export > Points* to download the point data in Excel format.

## Scenarios for Further Exploration

### Coollest Bookstore Ever

You plan to open a bookstore somewhere in North Carolina that is targeted to sophisticated young singles (ages 18 to 24) and features a full-service coffee bar. Explore the variables that could help you pin down a great location (using the different geographic units available: County, City/Place, ZIP Code, Census Tract, Block Group). Make sure to take a look at Market Segments/Lifestyle Clusters/Sales Potential. Read the Data Source notes to guide you.

Note some variables of interest:

### Trends in Your Neighborhood

In the Locations tab, click the *New* button to locate your census block group by address. Create a nickname for the location (same as question #3, step 4). Now browse to select and add demographics of interest from the Census 2008 estimates. Find and add the same variables for the Census 2013 Projections. Create a Report to find out how your neighborhood is predicted to change. Remember to also compare the growth rate in population & households in your community compared to the county or state average.

Note some variables of interest: