Maptitude: How To Guide

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Step 1: Setting Up Your Files

-Save all of the files you will use on your C drive, not your desktop. You can put them in a folder to make them easier to find.

-Open Maptitude. Click on "Open" which looks like a folder on the top toolbar. Open file(s) (file type should be Geographic File). Add any additional files and layers needed.

Step 2: Import Additional Data as New Layers If Necessary

Many of the geographic files you have already have data joined to them (In your dataview, you can see how many Blacks live in a particular Census tract. If there is data you need (incumbent addresses or election results) to import, you have to create a new layer that attaches this data to your geographic file.

Point Files: Any list of locations that you want to put on your map as "points", can be imported from an excel file. To do this, you must have the "Streets" geographic file for your area. In a new plan, open this "Streets" file. Click on the "Layers" icon that looks like a price tag. Click "add layer," and add your data file with your list of addresses with zip codes (excel or dbf format). Then go to the "Tools" menu, and click on "Locate" and choose "by address." Then match the two fields that are similar (probably your geography field, like tracts of precincts. Make sure this field has the same information in it to match and merge). Click "create new layer" and name it. You now have a new geographic file with these points that can be added as a layer to any new plan.

Data (data to same geography): You can merge data from a data file (excel or dbf format) with your geographic file. In a new plan, open your geographic file. Click on the "Layers" icon that looks like a price tag. Click "add layer," and add your data file. Go to the "Dataview" menu, click on "Join." In the window, you want to identify the columns to merge (probably your geography field, like tracts of precincts. Make sure this field has the same information in it to match and merge). Identify the fields to merge from the pull down menu (the geographic file is on top and the data file is on the bottom). Your data is now joined to the geographic file. To create a new geographic file with the data attached, you have to export this new layer. Go to "Tools" menu, and click on "export". Choose "compact geographic file" and data in this window, and name it. You now have a new geographic file with this data in it that can be added as a layer to any new plan.

Overlay (data to different geography): First, set working layer in top left hand window (Whatever geography level you're using adding data to—not the one that already has the data). Go to "Tools" menu, click on "Geographic Analysis", and choose "Overlay". In the window, choose "0" and "Feet" as band size. Click on "Attributes" button on right side of window. For each field listed, take out "avg" by highlighting it and unclicking the "Average" checkbox below. These fields should now only say "Add". Now, click on the "Dataview" button in your top toolbar and scroll to the far right columns to make sure your new data is there. To create a new geographic file with the data attached, you have to export this new layer. Go to "Tools" menu, and click on "export". Choose "compact geographic file" and data in this window, and name it. You now have a new geographic file with this data in it that can be added as a layer to any new plan.

Step 2: Setting Up Your Background Map and Data

Set working layer in top left hand window (Whatever geography level you're using).

Labels: Click labels button (looks like a price tag) from top toolbar. Define what field you want to label (can be existing field or formula you create with existing fields)

Color Theme: Click on color theme button (looks like color pie chart) from top toolbar. Define what field you want to disaggregated by color (can be existing field or a formula you create with existing fields) and how you want the data disaggregated. Under style tab in this box, you can pick which colors you want to use.

Hover Field: If you need to see an additional field at the same time (like total population and black percentage) you can use hover for your secondary field which will show up when you put your cursor over a specific geography. Go to "Redistricting" Menu, choose "Set Hover Field" and define field you want to disaggregated by color (can be existing field or a formula you create with existing fields)

Add Data Fields: If there are fields you want to create that don't exist, you can create them in your database. Go to "Dataview" Menu, and click on "Modify table." A "Dataview" window will appear. Click on "add field." Insert name and setting (for addition formulas like Hispanic +Black choose integer 4, and for division formulas like (Hispanic+Black)/Population use real 8). Click "OK". Close this window and open the " New Dataview" window by clicking on the button that looks like a chart. This will open your data chart, scroll all of the way to the right and you'll find your new field that is empty. Right click on this column, and choose "Fill." Choose "Formula" and then insert your formula from existing fields (make sure you insert parenthesis where needed). Then Click "OK."

Autoscale: For a map with many layers, it is often very hard to see everything at one time. For each layer and label in your plan, you can set the autoscale to decide at what distance you want to see and not see a particular layer. To do this, you should zoom to the scale that you want to start seeing a particular layer and click on the "Layers" button on the top toolbar (looks like a three sheets of stacked paper). Choose the layer, and click "Autoscale" button below. Then set largest as "1:1" and the smallest, for the geography listed in the gray "Map Scale" window above. Now, you will only see this layer from this scale, and closer. This is the same for the opposite—if you only want to see certain layers or labels when you're a certain distance or further away. Just set your largest for the geography listed in the gray "Map Scale" window above, and set the smallest as something really small like "1:3,000,000".

Step 3: Creating New Plan

Go to "Redistricting" Menu, choose "Plan Manager."

Library: Go to "Library" tab. Click "Add." Name your library (which serves similar to a folder to help categorize your plans like from a specific project like "Florida").

Create Plan: Go to "Plans" tab. Click "New Plan." Name your plan, make sure you use clear names and even version numbers or dates to help you identify them later (like Miami07.29.10v1). Settings will likely be map and using current map window.

Plan Settings: Go to "General" tab. Choose your control field (probably population), number of districts (insert) and click "Compute Ideal".

Go to "Summary Fields" tab. Click "Change." And add all of your fields (These are all of the data fields you will need to use to develop your plans. Remember to get Hispanic and Non-Hispanic as well as 18+ data). And make sure you insert the proper denominator (population or 18+ population) for each field.

Go to "Properties" tab. Insert project and administrator names. These appear on reports you produce.

Go to "Political" tab. If you have incumbent point file (must import and convert to Caliber program ahead of time), you can add this.

Go to "Advanced" tab. Establish hierarchy among your fields. And set your Deviation level (probably 0).

Step 4: Drawing Districts

Redistricting Toolbar: Set your target (new district, existing district or unassigned), your source (in this example the district you want to remove the area from), and selection layer (whatever geography you're using). You can track your deviation and variables in Dataview 3 window that appears on the right hand side of your screen. You can track all of your districts in Dataview 1 window at the top of your screen. You can click on areas with the arrow button (from your redistricting toolbar, not your tools toolbar) to select areas for your target geography. You can hold down "control" button and click on areas to un-select areas for your target geography.

Step 5: Checking Your Plan

Unassigned Areas: To make sure all of your areas are assigned to a district, go to the "Redistricting" Menu and click on "Plan Integrity" and click on "Find Unassigned Areas." This will help you locate any unassigned areas— that you must assign. You can do this until the program tells you that you have not unassigned areas.

Contiguity: Go to "Redistricting" Menu and click on "Plan Integrity" and click on "Find Non-Contiguous Areas." This will help you locate any non-contiguous districts you created—that you must fix. You can do this until the program tells you that you have not unassigned areas.

Step 6: Produce Reports and Products

Reports: You can run a variety of reports from "Measures of Compactness" or "Population Summary." Go to "Redistricting Menu" and click on "Reports". You can choose which report you want to run, and press "OK". A report will appear in a new window.

Products: You can export your plan by going to "Redistricting" Menu and clicking on "Plan Utilities." You can do a variety of things including "Export Plan" and "Publish Plan to html."

Step 6: Close Your Plan

Saving Your Plan: When you close your plan properly (through the "Redistricting" Menu, your plan will save. You can also save a copy of your plan by going to the "Redistricting" Menu, clicking on "Plan Manager" and saving a copy of your plan.

Closing Your Plan: Remember to close your plan by going to "Redistricting" Menu and choosing "Close Plan." Do not go to "File" and choose close, or just close by clicking on red "X" box in upper right hand corner.