

Plotting Maps of a Plan in Maptitude for Redistricting

Peter S. Wattson
Senate Counsel
Minnesota

1. Open plan
2. Change layer settings
 - a. Districts
 - i. In Senate plan - Labels - Remove
 - ii. In House plan
 - (1) Move Down Districts layer to below Counties00 (where the House layer goes in a Senate plan)
 - (2) Add Layer - Senate districts layer from companion Senate plan
 - (3) Labels - Remove from companion Senate districts layer
 - iii. In congressional plan - no changes necessary
 - iv. Set District Color Theme
 - (1) Change working layer to "Districts"
 - (2) Map - Coloring - Create New Coloring - OK (so no contiguous districts are the same color)
 - (3) Color Theme Map Wizard - Remove (so you can reset the color theme to your favorite colors, in the next step)
 - (4) Color Theme Map Wizard
 - (a) Settings
 - (i) Field: Coloring (not "Coloring:1" or any higher number)
 - (ii) Method: List of Values
 - (iii) # Classes: 5
 - (b) Styles (pick your favorite pastel colors, as in the example below)
 - (i) 0 - yellow
 - (ii) 1 - blue
 - (iii) 2 - green
 - (iv) 3 - rose
 - (v) 4 - indigo
 - (c) Apply
 - (d) Review the colors assigned to each district. The map legend that pops up will show the style assignments as in (b) above. If you don't like what you see on the map, change the style assignments until you get what you want.
 - (e) Settings - Save - Name (e.g. 5-Color Pastel) - OK
 - (5) Once you have saved your favorite color theme, as in step (4), all you need to do for step (4) in the future is to Load your favorite color theme from your Settings file. Caliper is working to

incorporate a simpler version of step (4) in the next release of Maptitude for Redistricting.

- b. Big Lakes - Autoscale - Largest - 1:2,000,000
- c. Lake/Pond/Ocean - Autoscale - Smallest - 1:1,000,000
- d. Indian Reservations - Labels - Size - 6
- e. Counties00
 - i. Style
 - (1) Border Width - 4.5
 - (2) Border Color - gray
 - ii. Labels
 - (1) Field - Name
 - (2) Size - 10
 - (3) Color - gray
- f. (In Senate plan) House Districts
 - i. Style
 - (1) Border Style - solid
 - (2) Border Width - 3
 - (3) Border Color - indigo
 - ii. Labels
 - (1) Field - District
 - (2) Size - 12
 - (3) Color - black
 - (4) Overlap - Layer Priority - 1
- g. Citytown00
 - i. Autoscale - Clear
 - ii. Style
 - (1) Border Width - hairline
 - (2) Border Color - black
 - iii. Labels
 - (1) Field - MCD_Name
 - (2) Size - 8
 - (3) Color - black
 - (4) Overlaps - Autoscale - 1:1,000,000
- h. Multicounty Cities - Hide
- i. Census Blocks - Hide
- j. Tiger/Line Segments
 - i. Autoscale - Smallest - 1:200,000 (this should be just enough to show them in the Duluth map, if zoomed correctly later)
 - ii. Labels - Size
 - (1) Epson 1520 - 6 Arial
 - (2) HP 5000 - 4.8 Century Gothic
- k. Precincts00 - Hide
- l. DOT State Hwy
 - i. Autoscale - Smallest - 1:1,000,000
 - ii. Style

- (1) Width - 1
 - (2) Color - red
 - iii. Labels - Size - 8
 - m. DOT US Hwy
 - i. Autoscale - Clear
 - ii. Style
 - (1) Width - 1
 - (2) Color - red
 - iii. Labels - Size - 8
 - n. DOT Interstate
 - i. Autoscale - Clear
 - ii. Style - Width - 1.5
 - iii. Labels - Size - 8
3. Redistricting - Backup plan (so you don't lose all the work above when the program crashes the first time you try to print the layout! Caliper is aware of this bug in the program and hopes to eliminate it in the next release of Maptitude for Redistricting.)
 4. Note: Troy Lawrence has written an automated mapping add-in to complete the following step. He can install the add-in on your LCC-supported PC by request. If you have the add-in, a few more clicks and you're done mapping. If not, read on.
 5. Create markers for metro, inner metro, and outstate cities
 - a. Resize map window to proportions of 8-1/2 x 11 (portrait)
 - b. Zoom to metro area - Edit - Add Marker - Name: Metro - OK
 - c. Resize map window to proportions of 11 x 8-1/2 (landscape)
 - d. Zoom to inner metro area - Edit - Add Marker - Name: Inner Metro - OK
 - e. Resize map window to a square
 - f. Zoom to Duluth - Edit - Add Marker - Name: Duluth - OK
 - g. Zoom to Mankato, Moorhead, Rochester, and St. Cloud and add a marker for each
 6. Show Entire Plan
 7. Resize map window to almost square (to get minimum white space on all four borders of the state)
 8. Open State-Metro layout
 - a. Save As: (plan name) State-Metro (in plan folder)
 - b. Fill in type of plan, name of plan, sponsor, date
 - c. Select state map box - Right click - Replace with plan map - Use actual point sizes - OK
 - d. Select state map box - Right click - Push to Back (so legend will reappear)
 9. Return to plan map window - Edit - Markers - Metro - Adjust map width and height - OK
 10. Return to State-Metro layout
 - a. Select metro map box - Right Click - Replace with plan map - Use actual point sizes - OK
 - b. Save layout (Maptitude often crashes the first time you try to print the layout. Saving it now, having also backed up the plan, will allow you to return to where you left off.)
 - c. Make sure your printer is on and paper is loaded

- d. Print
- e. Close State-Metro layout
11. Return to plan map window
 - a. Layers
 - i. House Districts - change width to 4
 - ii. Citytown00 - change width to 1
 - b. Edit - Markers - Inner Metro - Adjust map width and height - OK
12. Open Inner Metro layout
 - a. Save As: (plan name) Inner Metro (in plan folder)
 - b. Fill in type of plan, name of plan, sponsor, date
 - c. Select inner metro box - Right click - Replace with plan map - Use actual point sizes - OK
 - d. Save layout
 - e. Print
 - f. Close Inner Metro layout
13. Return to plan map window - Edit - Markers - Duluth - Adjust map width and height - OK
14. Open Outstate Cities layout
 - a. Save As: (plan name) Outstate Cities (in plan folder)
 - b. Fill in type of plan, name of plan, sponsor, date
 - c. Select box "Duluth" - Right click - Replace with plan map - Use actual point sizes - OK
 - d. Return to plan map window, use markers to select each other outstate city and add it to the map layout, as with Duluth
 - e. Save layout
 - f. Print
 - g. Close Outstate Cities layout
15. Close plan