

## Minnesota Legislative GIS Office Posting Plans on the Web

### 1. Export File Provided to Director of GIS

- a. **Members Only.** A member of the Senate or House of Representatives may request that a redistricting plan for seats in the Legislature, Congress, or the Metropolitan Council be posted on the redistricting Web site of the Geographic Information Systems Office.
- b. **Block Equivalency File.** For a plan to be posted, the member must provide to the Director of Geographic Information Systems (GIS) an electronic block equivalency file showing the district to which each census block has been assigned. The file must be either in dBASE format, such as an export file produced by Maptitude for Redistricting or Autobound, or in ASCII text format.
- c. **Whole State.** The block equivalency file must include a district assignment for every census block in the state.
- d. **Legislative Plan.** A block equivalency file for a legislative plan must assign district numbers using the convention "01A, 01B, 02A, 02B" etc., so that it provides a House district number for every census block in the state. The House district numbers will be used to create Senate district numbers by deleting the As and Bs.
- e. **House Plan.** A block equivalency file for a House plan must assign district numbers using the convention "01A, 01B, 02A, 02B" etc.
- f. **Senate Plan.** A block equivalency file for a Senate plan must assign district numbers using the convention "01, 02, 03" etc.
- g. **Not Public Until Released.** The block equivalency file will be treated as nonpublic data until the member who provided it releases the plan for publication.

### 2. Equivalency File Used to Create Plan

- a. **Import.** The Director of GIS will import the block equivalency file (or files, in the case of a legislative plan) into a standard map file maintained by the Geographic Information Systems Office and transform it into a redistricting plan.
- b. **Plan Name.** The Director will name the plan as follows:
  - i. **Congress:** C0001-0 for the plan as introduced; C0001-1, C0001-2, etc., for each engrossment of the same plan as it moves through committee, to the floor, etc..
  - ii. **Senate:** S0001, etc, as in the case of congressional plans.
  - iii. **House:** H0001, etc., as above.
  - iv. **Metropolitan Council:** MC0001, etc., as above.
- c. **Plan Administrator.** The name of the member who requested that the plan be posted will be shown as the "Plan Administrator."

### 3. Plan Used to Generate Maps and Reports

- a. **Maps.** The Director will produce maps describing the plan.
  - i. **Layers and Labels.** A statewide map of the plan will include the following layers and labels:
    - (1) **Current Districts.** Current legislative or congressional district boundaries, as appropriate to the plan, will be shown as the top layer.
    - (2) **Counties.** County boundaries and names will be shown.
    - (3) **Cities, Towns, Unorganized Territories.** Boundaries and names of Minor Civil Divisions (MCDs) will be shown.
    - (4) **Precincts.** Precinct boundaries and names will be shown.
    - (5) **Blocks.** Census block boundaries will be shown.
    - (6) **Other Physical Features.** Selected other physical features represented as TIGER/Line segments and their names (where available) will be shown.
    - (7) **Proposed Districts.** Districts as proposed by the plan will be shown as a color theme on the bottom layer, except that when the color theme of racial and ethnic populations is displayed the proposed district boundaries will be shown as a boundary line on the top layer.
    - (8) **Racial and Ethnic Populations.** When selected by the viewer, concentrations of racial and language minority populations will be shown as a color theme on the bottom layer.
  - ii. **Points and Labels.** The map will include points showing the residence of each incumbent with a label showing the name of the incumbent.
- b. **Reports.** The Director will create reports describing the plan. The reports will be converted to Adobe Portable Document Format (pdf) for viewing, printing, and downloading from the Web.
  - i. **Population Summary.** A report listing every district in the plan, its population, and various summary statistics.
  - ii. **Minority Total Population.** A report listing the total population of each racial or language minority and the total minority population in each district, according to categories recommended by the U.S. Department of Justice.
  - iii. **Minority Voting Age Population.** A report listing the voting age population of each racial or language minority and the total minority voting age population in each district, according to categories recommended by the U.S. Department of Justice.
  - iv. **Contiguity.** A report showing whether any district contains territory that is not contiguous. (The current report shows any district that contains more than one polygon, even if the polygons touch each other. This flaw in the report may, or may not, be fixed.)
  - v. **Compactness.** A report showing how each district and the plan as a whole score on the Roeck, Polsby-Popper, and perimeter measures of compactness.

- vi. **Political Subdivision Splits.** A report showing the number of counties, cities, towns, and precincts split into more than one district, the number of times each kind of subdivision has been split, and the districts to which they have been assigned.
- vii. **Incumbents.** A report showing the proposed district to which each incumbent has been assigned, the number of incumbents in the same district with another incumbent, and the number of open seats.
- viii. **Components.** A report listing the census units that compose each district and their population.

#### 4. **Plan Archive**

- a. **Maps.** The Director will produce a set of paper maps, including a large-format color map of the state, a large-format color map with insets for the six metropolitan areas, and letter-size black-and-white maps of the state, the six metropolitan areas, and each city, town, and unorganized territory split by the plan, and file them in the plan archive.
- b. **Reports.** The Director will file a set of the standard reports on paper in the plan archive.

#### 5. **Paper Copies to Member.** The Director will deliver to the member who requested the plan be posted two copies of the large-format color map and five copies of the black-and-white maps and reports. The member will file one color map and four copies of the black-and-white maps and reports with the Secretary of the Senate or Chief Clerk of the House, as appropriate.

#### 6. **Files Posted on Redistricting Web Site**

- a. **Not Public Until Released.** The maps and reports generated by the Director will remain nonpublic until the member who provided the block equivalency file releases the plan for publication.
- b. **Release.** When the member who provided the block equivalency file notifies the Director that the plan may be published, the Director will post the plan on the World Wide Web.
- c. **Redistricting Home Page.** The Geographic Information Systems Office will include on its Redistricting home page a link to a directory of proposed redistricting plans.
- d. **Plan Directory.** The plan directory will index a plan according to the name of the member who provided it, the plan name, the date the plan was posted, and the number of any bill introduced in either the House or the Senate that refers to the plan. When later development of the Web posting system makes it possible, the directory will include a link to the Legislature's bill status system so that the viewer may check the status and text of the bill.

- e. **Viewing a Plan.** Once the viewer selects a plan, the viewer will be able to examine the maps and reports that describe the plan using either Netscape Navigator 4.0 or above or Internet Explorer 5.0 or above.
  - i. **Zoom and Pan.** A person viewing the map using a Web browser will be able to zoom in and out to get more or less detail in the map, with the appropriate layers of geography appearing as the viewer zooms down through the various layers to the block level, and then pan around the state at any given level to see what's there.
  - ii. **Information About Census Units.** The viewer will be able to click on a proposed district and get detailed information about the district.
  - iii. **Scrolling Through Reports.** The viewer will be able to scroll through the various reports using the Adobe Acrobat Reader.
- f. **Printing.** The viewer will be able to print the maps and reports using the Print command in either of the named Web browsers.
- g. **Downloading.**
  - i. **Maps and Reports.** The viewer will be able to download map and report files visible with the browser by using the browser's "Save As" command.
  - ii. **Plan File.** The viewer will not be able to draw a plan or modify the plan on the Web site. A viewer will be able to download the "districts" layer from the Maptitude plan file and use the viewer's own GIS software to produce maps and reports describing the plan. A viewer will be able to download the block equivalency file in either dBASE format or ASCII text format using the browser and then import the plan as a block equivalency file into any standard redistricting software.