Creating a Map Series from a Grid

This exercise shows you how to make a series of maps for a grid, in this case, a street atlas showing Fire Hydrants. A sample of the final layout for this map is on the last page of the exercise.

Open ArcMap in a Citrix connection. In the ArcMap – Getting Started window, go to Existing Maps>Browse for more... and go to the H:/DataDrivenPages directory and select StreetGrid.mxd.

Using the Add Data tool, navigate to the DataDrivenPages directory and open the DDP.gdb file geodatabase. Add the JeffersonStreetGrid feature class.

Change the symbology of the JeffersonStreetGrid feature class to Fill Color of No Color and Outline Color of Black with a line weight of 2. Move the JeffersonStreetGrid to the top of the Table of Contents. Open the table of JeffersonStreetGrid and view the adjacent pages attributes that will be used to add dynamic text later in the exercise.

To set the scale, right click on the Data Frame called Layers and select Properties. Go to the Data Frame tab and set the Extent to Fixed Scale and set Scale to 21,600. This will set the map series to 1 inch = 1,800 foot scale which is the same scale as the LOJIC Street Atlas.

Creating Data Driven Pages

To open the Data Driven Pages toolbar, go to Customize > Toolbars and select Data Driven Pages. (Figure 1)

On the Data Driven Pages toolbar, use the Definition tab to open the Setup Data Driven Pages property pages. (Figure 2)

Check Enable Data Driven Pages.

Choose the Layers data frame that contains the index layer.

For Layer, choose the index layer. In this exercise, select JeffersonStreetGrid.

For the Name field, choose the field name ‘METRO_PAGE’.

For the Sort field, choose the field name ‘METRO_PAGE’.

Figure 1 - Data Driven Pages toolbar

Figure 2 - Setup Data Driven Pages, Definition tab
Switch to the **Extent** tab. (Figure 3)

Select **Center and Maintain Current Scale**. This will keep a fixed scale with the current map scale.

Click **OK**. This will zoom to the first page in your index layer.

On the **Data Driven Pages** toolbar, step through some of your pages using the arrow buttons.

![Figure 3 - Setup Data Driven Pages, Extent tab](image)

**Setting up Map Series Layout**

Click on the **Layout** button in the lower left corner to start working on the map layout.

Make sure the Map Scale is set to **1:21,600** in the **Standard** toolbar. (Figure 4)

![Figure 4 - Standard toolbar](image)

**Creating Map Series Layout**

To make the **METRO_PAGE** the map title that will change automatically, go to the **Data Driven Pages** toolbar, click on the **Page Text** button and select **Data Driven Page Name**.

The **METRO_PAGE** will appear in a text box in the middle of the page. Move it to the **left top of the page**. Right click on the **METRO_PAGE**, click on **Properties** and **Center** the text. Click on the **Change Symbol** button to make the text **bold** and **increase the text size to 18**. Click through the **map pages** to see how the title changes with the extent.
Add a Legend

Click on the Insert Menu and select Legend. Keep only the six (6) layers shown in Figure 8. “Set the number of columns in your legend” to 2.

![Legend Wizard](image)

Figure 8 – Choosing layers in Legend Wizard.

Click Next. Remove the word “Legend” from the Legend Title Box. Click Next through the rest of the windows. The Legend will appear in the middle of the page. Make it smaller and move it down in the margin between the LOJIC Logo and the scale bar. (See the Sample Map on the last page.)

Using LOJIC published grids for dynamic text for neighbor labels

Neighboring page information is an essential component in any map series. All the LOJIC published grids have attributes defining the neighboring pages in eight (8) cardinal directions. These grids cover the entire multi-county metro regional area.

This table describes the LOJIC published grids:

<table>
<thead>
<tr>
<th>Add Layers Category</th>
<th>Layerfile Name</th>
<th>Page Name Attribute</th>
<th>Grid Size</th>
<th>Designed for Hardcopy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Grids</td>
<td>Street Atlas Grid</td>
<td>METRO_PAGE</td>
<td>12,000 ft. x 16,000 ft.</td>
<td>8.5” x 11” portrait at 1 in. = 1,800 ft.</td>
</tr>
<tr>
<td>Reference Grids</td>
<td>200 Scale Map Grid</td>
<td>M200_ID</td>
<td>6,000 ft. x 4,000 ft.</td>
<td>24” x 36” landscape at 1 in. = 200 ft.</td>
</tr>
<tr>
<td>Reference Grids</td>
<td>100 Scale Map Grid</td>
<td>M100_ID</td>
<td>3,000 ft. x 2,000 ft.</td>
<td>24” x 36” landscape at 1 in. = 100 ft.</td>
</tr>
<tr>
<td>Reference Grids</td>
<td>50 Scale Map Grid</td>
<td>M50_ID</td>
<td>1,500 ft. x 1,000 ft.</td>
<td>24” x 36” landscape at 1 in. = 50 ft.</td>
</tr>
</tbody>
</table>
Figure 9 shows the relationship between and nomenclature of the LOJIC published grids.
How to add dynamic text for neighbor labels

Click Insert > Dynamic Text > Data Driven Page Name from the main menu.

Note: Not all dynamic text elements are available from the menu. This includes dynamic text for Data Driven Page numbers. To include dynamic text for neighboring page labels, you will need to manually edit existing text elements. Adding an available Data Driven Pages dynamic text element from the menu saves you the step of having to type in the type tag.

Click the Select Elements tool on the Tools toolbar, select the text element you just added, then drag it to the center top (North) of the margin.

Double-click the text element.

Change the value for the property tag to the field name for the page value you want to use. In the exercise the dynamic text element would look like this: `<dyn type="page" property="METRO_PAGE_N"/>`

(See Figure 10.)

Right Click on the center top neighboring page label and click Copy. Right Click in the map anywhere and click Paste. Move the new text element to the center bottom (South) of the margin.

Double-click the text element and change the text to: `<dyn type="page" property="METRO_PAGE_S"/>`

Right Click on the center top neighboring page label and click Copy. Right Click in the map anywhere and click Paste. Move the new text element to the center right (East) of the margin.

Double-click the text element and change the text to: `<dyn type="page" property="METRO_PAGE_E"/>`

To change the text rotation, click the Change Symbol button in the Text Properties window. Click on the Edit Symbol… button in the Symbol Selector window. In the Editor window, change the Angle to 90. Click the OK button through all the windows.

Right Click on the center right neighboring page label and click Copy. Right Click in the map anywhere and click Paste. Move the new text element to the center left (West) of the margin.

Double-click the text element and change the text to: `<dyn type="page" property="METRO_PAGE_W"/>`

Save the mxd.

Click through the map pages to see the dynamic text change.

Close the mxd.