Creating a Vector Index for Raster Image Sets: NOAA Chart Example

1. In ArcView, turn on the XTools extension. This will give you a new menu named XTools.
2. Add your first image to the view, and turn that theme on.
3. Draw a rectangle or polygon around the outer edges of the image.
4. Under the XTools menu, select "Convert Graphics to Shape". In the dialog box that appears—"Multiple Graphics Convert to Shape"—select "1 graphic polygons" and click OK.
5. To name the new polygon theme, navigate to a temporary directory on your local hard drive, and enter a unique file name. Click OK.
6. Back in your view, go to the Edit menu and select "Delete Graphics". Now turn the image off.
7. Make your new shape file active and turn in on. Under the Theme menu, select "Start Editing". Click on the "Open Theme Table" button to open the theme's attribute table.
8. In the Attributes window, go to the Edit menu and select "Add Field". In the Field Definition box that opens, type in the following information and then click ok:

   Name: **FileName**
   Type: **String**
   Width: **16**
9. Repeat Step 8, except make the name **FilePath** and the width **150**.
10. Repeat Step 8, except make the name **Scale**.
11. In the attribute table window, turn on the Edit button. In the table enter the file name, file path, and the scale. You should be able to navigate to the file in Windows Explorer and copy and past them into your attribute table. After entering the scale, click on one of the other fields before closing the Attributes window. Go to the Theme menu and select "Stop Editing". Click "yes" to save edits. Turn the current theme off.
12. Repeat Steps 2-11 for all of your images.
13. Once you have all of your images converted to shape files, go to the XTools menu and select "Merge Themes." In the Select Input Theme box that opens, click ok. In the next box—Themes to Merge With—select all the themes listed. This should be all of your converted images. Click ok.
14. Navigate to the directory where you want to store your merged file and give it a unique name. Click ok. Your merged theme will now be created and added to the view. Turn the theme on. You should see all of your polygons (though they may be overlapping).
15. Make your merged theme active, and click on the "Open Theme Table" button. Check the Attribute table to make sure all of your data was merged properly and that all of the appropriate fields are full.
16. Under the Table menu, select "Start Editing". Click on the table heading called "Sourcethm". Under the Edit menu, select "Delete Field." Click

"yes" to delete the source theme field. Go to the Table menu and select "Stop Editing" and click "yes" to save the edits. Close the attribute table.

17. You now have your navigation chart index file (a shape file). You may now delete the individual converted shape files from your local directory.