IV. Bicycle Map
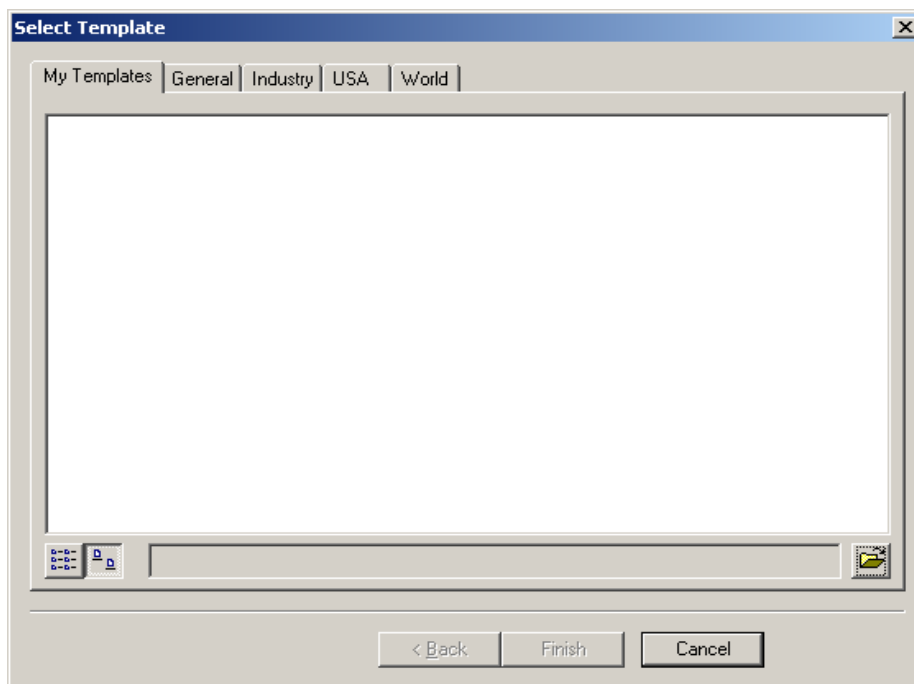
1. **Save Map**
   a. Open the Public Transportation and Rail map and using *File – Save As,* save the map as UrbanArea Name Bicycle map. The shapefiles needed for both maps are the same.
   b. Make sure you turn off the Public Transportation and Rail Map symbology of the roads. Right click on Roads and select *Properties - Symbology – Features – Single Symbol – OK.* The single symbol should be '**Reference Road**' symbol from the most current CTP Standard Style as explained in Step 3 of Highway Map procedures.
   c. In the **Table Of Contents**, uncheck the layers not needed for this map, such as the Rail Stops, Intermodal Connector and Park and Ride Lot layers, etc.

2. **Obtain the CTP Standard Template for Bicycle Map**
   a. Click and navigate to **Layout View** in your map.
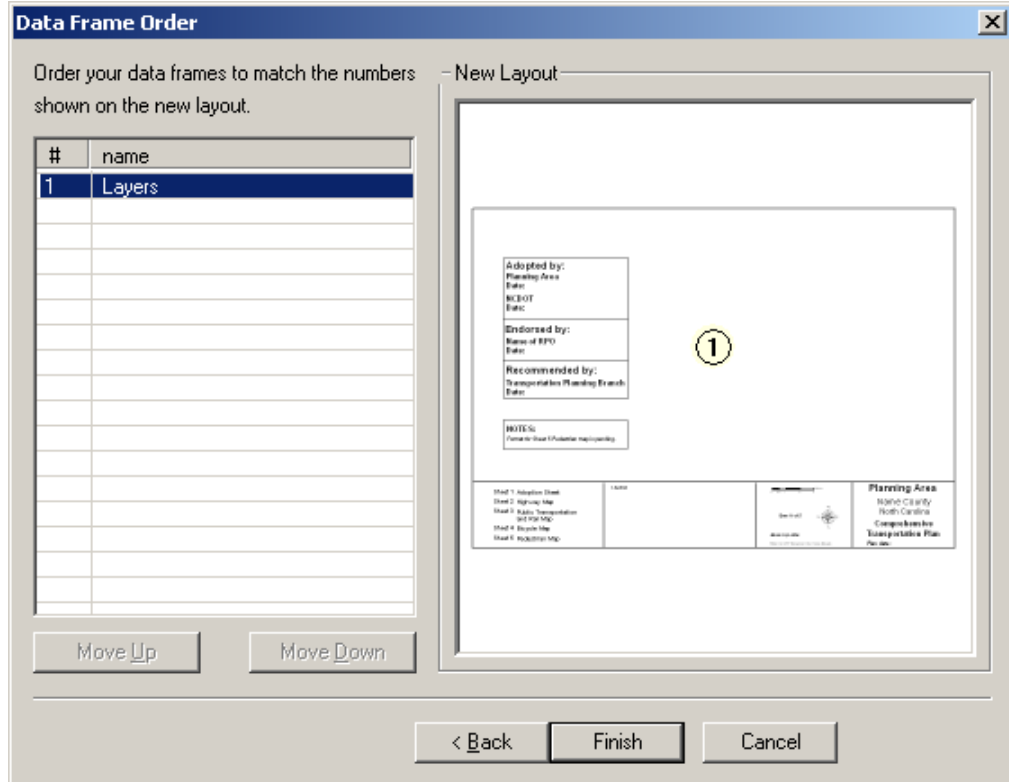   b. Click on *Change Layout* button, [icon], located in the **Layout Toolbar**.

   c. Click on the *Browse* button, [icon], located in the bottom right hand corner of the above window.
   d. Navigate to **"S:\Shared\TPB Reference\Comprehensive Transportation Plan\CTP Map Templates"** and select a 'Bicycle Map' template from the following four styles provided. It should be of the same style as for the other maps in this CTP.
      1. Landscape_Legend On Bottom
      2. Landscape_Legend On Side
      3. Portrait_Legend On Bottom

4. Portrait_Legend On Side

NOTE: Once a particular type of template is selected, the remaining maps should also be selected from the same template style.

e. Click *Open* after selecting the template for your map.

f. Click on *Finish.*
g. Save the map using *File-Save*.

3. Use Bookmark for Zoom Extent
In the **Layout View,** recall the bookmark created during the making of Adoption Sheet by selecting *View – Bookmark – Planning Area (Or whatever name you have given your bookmark).*

4. Adjust Order of Shapefiles in Table Of Contents
a. Change the order of shapefiles to display data on the map accordingly. For example, the Planning Boundary and County Line should be displayed on top of the roads, rivers, etc.
b. In the **Table Of Contents,** *Select* and then ***drag-and-drop*** shapefiles in the correct position.

NOTE: The layer at top in the **Table Of Contents,** displays on top in the map.

5. Add Bike Routes Layer

If you already have a bike routes layer, add that shapefile to the map and follow the instructions below to edit and type in the designations (existing, recommended, and needs improvement) and match bike route symbols to the symbols in the template legend.

If you **do not** have a bike routes layer, add the latest bike routes shapefile to the map and use that to edit and show the designations of existing, recommended, and needs improvement, as explained in the following step.

6. Edit Bike Routes Layer

    a. Open the attribute table of the shapefile added in Step 5 and using *Options –Add Field* add two new attributes, **CTPType_B** and **Status_B**, both of type Text and Length=50. Make sure the field names are documented in the metadata.

    b. Using *Selection – Select by Attributes*, or using *Select Features* tool, , and selecting by clicking, select the links that are On-road (or the road links that fall under Off-road or Multi-Use Paths)

    c. Open the attribute table and click on *Selected* button at the bottom next to *Show All.* This should only display the records selected in step b.

    d. Highlight and right click on **CTPType_B** column. Select *Field Calculator*. In the box that comes up, type **"On-road"** (or **"Off-road"** or **"Multi-Use Paths"** depending on the category you are working with)**.** If you want to edit each record separately while in the *Selected* tab, use *Editor - Start Editing* and once editing is completed, select *Editor- Save Edits - Stop Editing.*
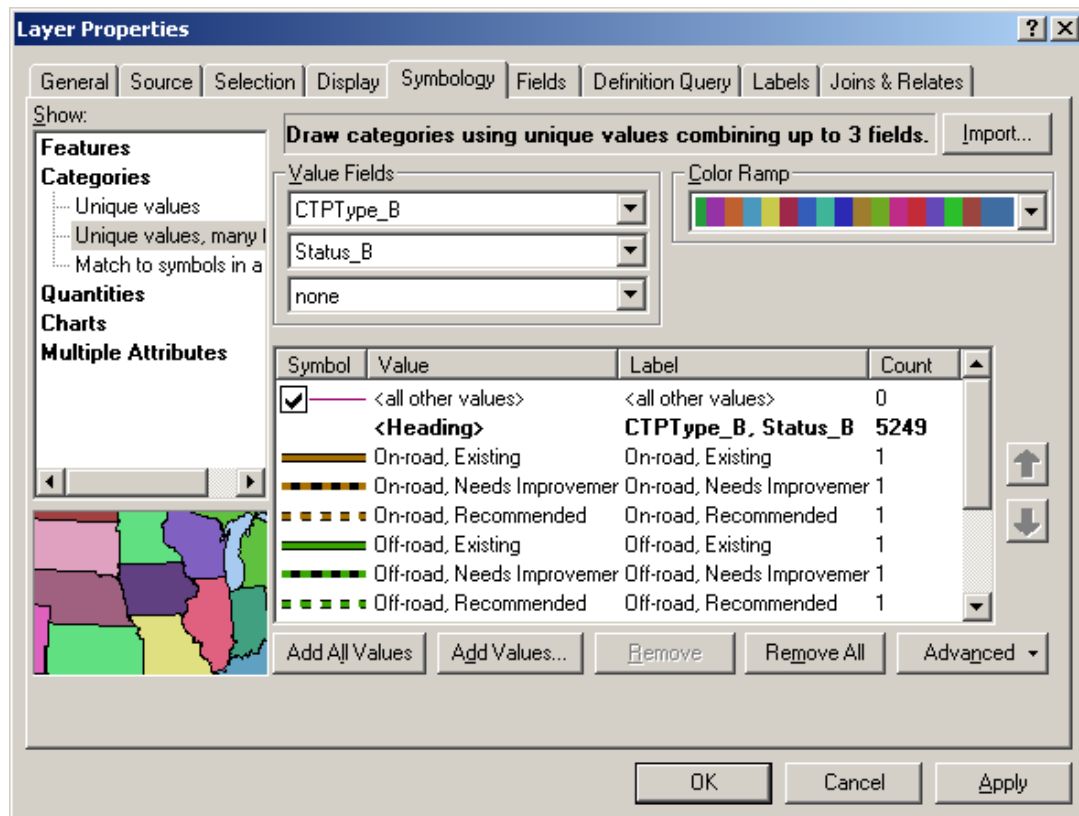
NOTE: Since it is a Text field, this will not work unless you type in the data with quotations in the field calculator box.

    e. In the attribute table, go to *All* tab and select *Options - Clear Selection.*

    f. Using *Selection – Select by Attributes*, or using *Select Features* tool, , and selecting by clicking, select the On-road links that are 'Existing' (or Needs Improvement or Recommended)

    g. Open the attribute table and click on *Selected* button at the bottom next to *Show All.* This should only display the records selected in step f.

NOTE: In these selected records, the CTPType_B field should already show up as updated/filled with appropriate data.

    h. Highlight and right click on **Status_B** column. Select Field Calculator. In the box that comes up, type **"Existing"** (or "Needs Improvement" or "Recommended")

    i. Repeat steps *f to j* for On-road - 'Needs Improvement' and 'Recommended'.

    j. Similarly, repeat steps *b through i* to fill in
- Off-road – Existing, Needs Improvement and Recommended
- Multi-Use Paths - Existing, Needs Improvement and Recommended

    k. To match the symbols of the bike routes to the Legend, right click on Roads and select *Properties - Symbology - Categories - Unique values, many fields*.

    l. Select **CTPType_B** and **Status_B** under the Value Fields and click on *Add All Values.*

m. To change the symbol of each value, double click on the symbol for each and select the appropriate symbol from the **CTP Standard Style** file for symbols as explained in Step 3 of Highway Map procedures.

n. The symbols for the on-road and off-road bicycle routes should match the legend for the Bicycle Map. The state bicycle route should have a green color with the appropriate route number as the label as designated by styles file.

o. Remember an on-road bicycle facility that needs improvement is only shown on the bicycle map, except when that road needs improvement as well. If the road as well as on-road bicycle facility need improvement, it should be displayed on the Highway as well as Bicycle map.

7. Grade Separations
Make sure the Grade Separations are displayed on the map, by checking the layer on in the **Table of Contents**.

8. Update Map Data
a. For each of the following items, go to the **Layout View** and using the **Layout Toolbar** zoom button, , locate and then zoom on the text on the map. Select the text box, right click and go to *Properties - Text* tab and type in the correct information for each of the following data, located on the map near the North Arrow:
  - Planning Area – Change to your area name (Ex: Norwood)
  - Plan Date – Provide appropriate date (Ex: June 20, 2008)

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- Base Map Date - Provide appropriate date (Ex: August 4, 2006)

   b. For county plans that have donut areas (urban areas that have individual CTPs or thoroughfare plans) there should not be a date for the plans referenced. It should be shown as " See UrbanName CTP" or " See UrbanName Thoroughfare Plan".

   c. Make sure the north arrow is pointing in the correct direction with respect to your area/map.

   d. *Insert - Text* and type "DRAFT" and move the text around the legend area of the map. After a plan has been adopted locally, it will be changed from "DRAFT" to "RECOMMENDED" prior to being sent to the Board of Transportation.

   e. In addition, the map should be labeled as "Working Copy" instead of "Comprehensive Transportation Plan" until the CTP roadway classifications are applied. This should reduce the likelihood that a working map would be confused with a draft plan.

9. Insert Photo or Logo (optional)

Using the **Standard Toolbar** on top, select *Insert - Picture* and you can then insert a GIF photo or logo that is suitable for your area. The picture is not required, but if used, it must be a GIF. If it is not a GIF, the map will become too large of a file to be placed on the internet once it is completed. The logo should be of the area and not the TPB logo.

10. Labels And Symbols

Since this map is made from the Public Transportation and Rail map, the labels should already exist in the right place. Make sure you match all the symbols in the map to the symbols in the template Legend. Turn off any unnecessary layer/shapefile by unchecking it in the **Table Of Contents**. Remove/delete labels or symbols carried from the previous map and add new according to the needs of the current map.

Following is a list of required layers to be labeled with the color and labeling convention.

Layer	Color(Highway Map)	Color(Other Maps)	Style
Rivers and Streams	Sodalite blue	Sodalite blue	Name in italics
Water Bodies	Sodalite blue	Sodalite blue	Name, but space the letters to take up the space
Interstates	Blue/Red	40% Gray	
US	Black	40% Gray	
NC	Black	40% Gray	
SR	Black	50% Gray	Name (SR #) i.e. Elm St. (SR 1111)
Roads	Black	50% Gray	Name
Municipality	Black	50% Gray	Name, but space the letters to take up the space
County	Black	50% Gray	Name, but space the letters to take up the space