Introduction - This document explains how to use the State/Regional county overlays and associated Google maps available on the Tools page of the CQ/X website to develop county line crossing files for use in CQ/X. The county line crossing file is a simple space-delimited text file listing, in the order of travel, each of the county line crossings in the following format:

FromCounty-ToCounty HwyLabel Latitude Longitude

Since the file is space-delimited there should be no spaces within any of the items. So, for example, the county Red River should be entered as RedRiver and a highway such as US 183 should be entered as US183. Highway labels are more for the human user and have no role in CQ/X calculations. Their only role is in displaying information to the user in order to distinguish two crossings involving the same two counties. In the crossing file north latitude is entered as a positive value and west longitude is entered as a negative value.

The crossing file can be built using a mapping program such as Streets and Trips and that is the method I have used for several years. The tedious part of this approach is locating the crossing point and then typing in the latitude and longitude of the point. In the Google maps approach described here it is possible to simply click on the crossing point to obtain the latitude and longitude values.

The Process – You should first develop a route plan before you begin the process of developing the crossing file for the route. Once you have done that here are the steps for building the crossing file.

1. Create a text file listing each of the county line crossings in the order of travel including only the county names and the Highway label. When you finish this step you will have a file like the following example which is part of the crossing file for our recent trip in the Oklahoma QSO Party

   Carter-Jefferson US70
   Jefferson-Stephens US81
   Stephens-Grady US81
   Grady-Caddo US277
   Caddo-Comanche US277
   Comanche-Cotton US44
   Cotton-Tillman SR5
   Tillman-Jackson SR5
   Jackson-Greer US283
   Greer-Kiowa SR44
   Kiowa-Greer SR44
   Greer-Harmon SR9
   Harmon-Beckham SR30
   Beckham-RogerMills US283

RogerMills-Beckham US283
Beckham-Washita I40E
Washita-Custer I40E
Custer-Dewey SR47
Dewey-Major US183
Major-Woodward US270
Woodward-Major US270
Major-Woods US281
Woods-Alfalfa SR45
Alfalfa-Grant US64
Grant-Garfield US64

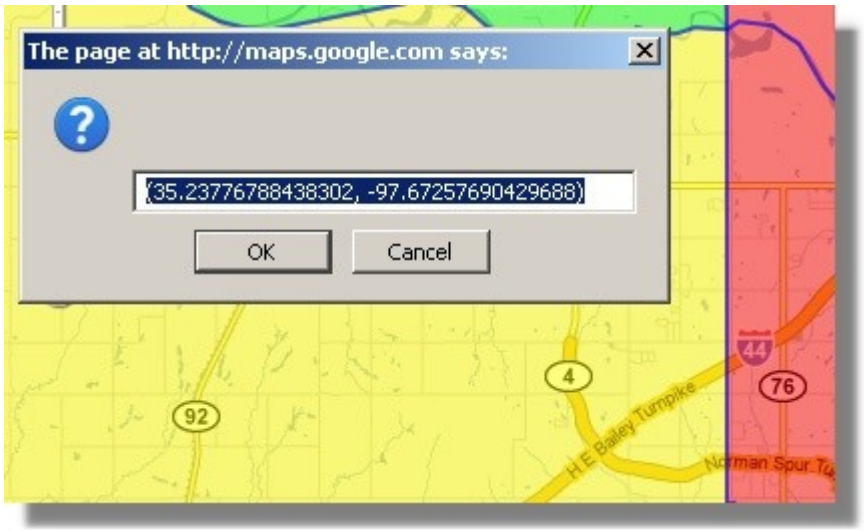
Note that if you have a situation where you enter a county and then leave it through the same crossing be sure to include both directions in the file. For example see the Greer-Kiowa and Kiowa-Greer entries in the above listing. In this case we came out of Greer on a little jog in the route to pick up Kiowa, worked the pileup sitting just across the line in Kiowa, and then returned to Greer along the same route.

2. Now you're ready to add the latitude and longitude information. To do this click on the desired state/region link on the County Line Crossing Tool page of the CQ/X website. This will bring up a container page containing a small Google map of the state/region overlaid with the county boundaries. Clicking on the link labeled **View a List of Counties and an Interactive Map** will give you access to the map you'll use in the next step.

3. Google maps does not have the capability of finding the lat/lon of a general point but only the lat/lon of the center of the displayed map. So what you'll be doing is choosing a crossing point and then asking Google maps to center the selected point. Once this is done a small dialog box will appear containing the lat/lon. To make this happen you will need to paste a one line java script into the location bar (URL window) at the top of your browser. Here is the javascript

```
javascript:void(prompt('',gApplication.getMap().getCenter()))
```

4. Once you have the java script in your location bar right click on a location on the map and a pop up menu will appear with one of the menu items being Center Map Here. Clicking on that menu item will move the map to place the selected point at the center. Now click on the arrow at the end of the location bar and a dialog box will appear with the latitude and longitude of the center of the map. The lat/lon will be highlighted so a simple Ctrl+C will copy the data to the clipboard.



In the example shown the lat/lon are for the crossing on the HE Bailey Turnpike between McClain and Grady counties.

5. Once the lat/lon is on the clipboard Alt+Tab to your crossings text file, position the cursor to the end of the corresponding line and do a Ctrl+V to copy the lat/lon into the crossing file. So, after removing the comma and the parentheses, the final line in the crossing file for this point would look like

   MCCLAIN-GRADY HEB 35.23776788438302 -97.67257690429688

6. You're now ready to do the next point. Repeat this process until all of the crossing points have been specified. Then save the file with a meaningful name and location that you can remember.

7. As a final step you should validate the file by importing it into CQ/X using the Build Route from Crossings option under the QP Tools menu. This will flag any errors such as misspelled county names, improper sequence of counties, bad lat/lon.