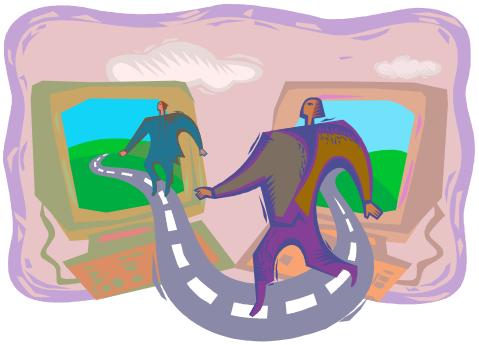
Cedar Rapids Model Analysis Assignment

1. Start QRS
    a. Go to Start-> Programs->EngineeringApplications->CivilEngineering->QRSII->QRSII. Note that you are executing a batch file, which first copies a set of files to the temporary directory C:\Documents and Settings\TEMP, and then executes the program QRSII itself)
    b. Tell QRS to use the Cedar Rapids network file. Pull down 'File' menu in QRSII, select 'Highway...', then navigate to: **R:/STAFF/BEIMBORN/CE590/CRA5N45P.DTA**.
    c. Pull down 'File' menu in QRSII, select 'Run Controls', then click sequentially on 'Reports', 'Temporary', and 'Parameters' buttons, and select a folder under C:\Documents and Settings\TEMP/

2. Under File/Run Controls make sure Transit Split is off. Under Parameters, Assignment, Options, set the equilibrium iterations to 3. Then push the run button of QRSII.



3. Open GNE and open the file **NICEOUT.DTA** from the same directory. Then, from the File menu, append **OUTPUT.DTA** from **C:\QRSII.** (use appended network attributes)

4. Under GNE/Tools/Calculate open the file **CEDRPV-C.PGM** from R directory. Then run the program (push start button on the calculate menu). Refresh the graphics (showerhead button under the view menu).

5. Plot the results.

6. Identify the links which have v/c ratios greater than 0.7. Use View/Search/Link Search/One-way Streets/Attributes and set the v/c ratio range from 0.7 to 10.0. Do the same for two-way streets.

7. Clean up the drawing by changing the color of irrelevant nodes and links to white, under the View/Entity styles menu.

8. Plot your results.

   (Look at Tools/Calculate/Relations. This shows the program file used to calculate v/c ratios. It doubles the volume for two-way links less than 36 mph. This is done for streets to provide a signal green time ratio of 50%).

Due <u>November 2, 2004.</u>