## Assignment 8

**Released: 11/08/2020**                                    **Due: 11/15/2020**

*Assignments are due on the due date, unless otherwise specified. Late submission will not be accepted. This is an individual assignment. Please ensure the guidelines for submissions are followed to receive full credit.*

Please use the provided data to develop multiple linear regression models to predict AADT for different road classes. Please present and discuss at least two of your "Best" models. Please prepare a brief professional report (no more than 12 pages including figures, tables etc. but excluding the title page) that presents your "best" models and a table corresponding to the model parameter estimates. Your report should include the following at a minimum:

1. A table and/or graph listing the summary statistics of all variables (continuous and categorical) in the dataset (please note you may have to create new variables for some categorical variables)
2. A table showing the relevant statistics for the two best models (t-stats, p-values, R-square, F-test, etc.)
3. Some plots verifying reasonableness of the model assumptions (normality, homoscedasticity, linearity).
4. The outputs (tables and graphs) from utilizing the statistical software should be cleaned up for improved legibility and comprehension.
5. When submitting any work, your objective is to communicate information to the reader (in this case, your instructor) in a Clear, Concise, Complete, Careful, and Courteous manner (5 C's of good writing). If your work does not possess the "5C" qualities and/or does not adhere to the guidelines specified below, you will definitely lose A LOT OF credit even though you may have the correct answer(s).
6. Please include your Stata code in the appendix.