

Dear CE 614 Students,

There are a number of things that need to be addressed in future submissions. You are responsible for the items listed below even if they were not marked on your homework 1. The submissions are not only a record of what you worked on but they are practice for your future technical/academic writings. Please take your time to read through this carefully.

- 1) Format tables in accordance with Dr. Mannering's samples.
 - a. Number and Label your tables
 - b. Left justify text
 - c. Do not include variable number (i.e. x10) in your summary tables
 - d. You do not need t-stats and standard errors in your tables. I suggest only including t-stats.
 - e. You do not need the variable name in the table (i.e. x10 or FRWY)
 - f. Limit your estimates to two or three decimal places (see Number 11) below for more details)
 - g. Don't wrap tables across pages.
- 2) Make sure you rewrite the problem statement and background in your own words.
- 3) Try not to talk in the first person. They are "the t-stats" not "my t-stats".
- 4) Limdep output goes in the appendix
- 5) Be careful drawing conclusions from variables with a limited number of observations. There were 151 observations in the dataset. If the "mean of X" for an indicator variables is 0.026 (or conversely 0.974) that means one outcomes only has 4 observations ($0.026 * 151 = 4$).
- 6) Don't forget units, both in your tables and in your text.
- 7) In your discussion of the T-stats, R^2 value, Durbin-Watson statistic, and other measures of model fit/appropriateness please explain briefly what these values mean.
 - a. It is not enough to say the R^2 value of 0.38 therefore the model is a good.
 - b. It is also not enough to say the t-stat is 1.45 therefore the variable is significant.
 - i. Please link your t-stats to your level of confidence. If all of the variables have corresponding t-stats greater than 1.645 you can easily say that all of the variables are significant at a 90% level of confidence.
- 8) Discussion of your results should provide an explanation of the rational for including each variable and the intuitiveness of the results (direction of influence). Please don't simply say it is logical that old cars are slower, instead suggest plausible reasons such as older cars tend to have lower engine power and therefore lower speeds.
- 9) Try not to use rational that you could have tested in your model but didn't. For example, don't say that the arterial has lower expected speeds because it has more traffic signals, because traffic signals were observed and could have been tested.
- 10) Do not include the variables number (i.e. x10) in the body of the paper. Refer to the variable by name, such as the marital status indicator variable.
 - a. Same can be said for variables IDs such as FRWY. Say the freeway indicator variable.
- 11) Suggestion: Consider transforming significant variables that have small estimated parameters. For example, many found the traffic flow rate (TFR) to be significant with an estimated parameter of approximately 0.008. If you were to create a new variable by multiplying TFR by 1000 and then use that in the regression you would get an estimated parameter of 8.xxx for the variable traffic flow rate (in 1000's of vehicles per hour).
- 12) Be careful drawing conclusions regarding how much a variable impacts the model based on the estimated parameter. As we saw in Number 11) the parameter estimate (coefficient) can change dramatically by scaling the variable. To draw conclusions regarding the relative impact of each variable one would need to do a sensitivity analysis which will be covered later in this course.