UNIVERSITY OF SOUTH FLORIDA

Statistical and Econometric Methods

MID-TERM EXAM
(Take-home)

You are given data from a survey of 182 people conducted during the Fall of 2009. The survey instrument, and data are available on the course website under "Exams". For the mid-term exam, you are to develop a model based on Question 8 (variable x8 when read in through software commands) "How many traffic tickets (moving violations only, no parking tickets) have your received in your lifetime?"

This is not an assignment so you are not to communicate with fellow students on this exam.

Your task is the following:

1. Discuss, in general terms, the factors that might determine how many traffic tickets a person may get in their lifetime (perhaps from a review of past work on the subject via an internet search).

2. Discuss feasible modeling alternatives. That is, what statistical approaches could possibly be used to model these data and discuss the advantages and disadvantages of each?

3. Estimate a model with the provided data. Discuss the significance and implications of each variable included in your specification.

4. Discuss the overall statistical fit of your model.

5. Discuss any possible specification errors in your model.

6. Discuss missing data that you think might improve model specification.

7. Present a summary, conclusions, and directions for future research in this area.

8. **NO NLOGIT OUTPUT in the text**. This means that you will have to create tables with all of the relevant information. Please put NLOGIT output **of your final model only** in an appendix so that variable definitions and other model information can be reviewed (make sure to include the create commands of all variables included in the final model).

Additional Mid-Term Information

1. Please look at ALL of the comments on your homework assignments. Do not make the same mistakes again.

2. **Read the book.** Depending on the model you chose, almost every question you could ask is discussed in the book. And, the book will talk about problems you have not thought of.

3. Be careful constructing your tables and interpreting your results. Again, see comments on your assignments.

4. Use everything you have learned in the course so far.