Economics 741, Urban Economics   Fall 2018
Professor Yinger

Final Exam

This is a closed-book exam. You have two hours to complete it. Please turn the exam in to the professor or to the CPR receptionist when you are finished.

<u>You must answer any two of the following five questions.</u>

1. Homeownership by Cohort

    Several recent newspaper stories argue that the Millennials (people born after about 1985) have a lower preference for homeownership in early adulthood than do the Gen-Xers (people born between about 1965 and 1985). Write a proposal for a study to test this hypothesis. Explain the data you would need, the theory you would draw on, and the methods you would use.

2. Air Quality and Housing Prices

    You have just obtained excellent data on the number of particulates in the air throughout a single urban area over a number of years. Although the number of particulates is literally observed only at measuring stations (of which there are many), these data have been smoothed so that they provide a highly accurate estimate of air quality at any given latitude and longitude.

    You have decided to use these data to estimate the impact of air quality on housing prices in this urban area. Explain the data you would need, the theory you would draw on, and the methods you would use.

3. Two-job families

    Urban theory predicts that households with two jobs in different sites will tend to select a housing location between those two job sites, whereas households with two jobs in the same site will locate very close to that site. Draw graphs to explain these predictions and write a brief proposal to explain how you would test them. You have decided to make use of a household survey for this project. Explain what you would ask households and how you would use their answers (and other data) to test these hypotheses.

4. Audit Names

    Correspondence audits to measure racial and ethnic discrimination depend on the assumption that a name given on an e-mail inquiry conveys race or ethnicity to a housing agent. You have decided to look into this using an existing survey that asks people about their perceptions concerning names. To be specific, this survey asks people to indicate whether each name on a list is a name for a black person or a white person. This survey was given to a random sample of adults in the urban area you are studying. Thus, for each name, you have the probability that an average adult will perceive it as a name for a black person instead of a white person.

    Explain how you would conduct this study using Craigslist advertisements. Explain how you would incorporate the above name variable into your study design and explain your hypothesis tests linked to this name variable.

5. "The Environment"

    The famous *NTJ* article by Bradford, Malt, and Oates explains that public production and cost functions must account for the "environment" in which the public services are delivered. Give an example of a variable that helps to measure this environment for some public service. Explain how you would estimate a cost function for this service and explain the role that this variable would play. Indicate the data you would need and the methods you would use.