Risk and uncertainty in the choice between park-and-ride and other modes of travel to work

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Abstract: Park-and-ride is emerging as a competitive option for commuting. However, existing park-and-ride facilities in Perth are already at breaking point and commuters need to arrive at the railway station early in the morning to secure a parking bay. At a cost of $20,000 per bay to add a multistorey car park at selected stations, there is a practical need to know the current level of unmet demand for park-and-ride as well as the commuter’s willingness to pay for the facility.

This study mainly investigates the significance of commuters’ attitudes to risk on their choice of commuting mode and time of day departure. The sources of uncertainty for public transport commuters include the chance of finding a parking bay as well as the level of crowding on board. The private vehicle alternative includes the uncertainties of freeway travel. The line of research is based on recent findings that commuters are willing to pay a premium to reduce the day to day variations of their commute.

An experimental economic model of commuters’ mode and departure-time choice incorporates the generalised cost of travel (out of pocket expenses and travel time) along with an expected utility specification for the uncertainties experienced in the morning commute. The objective is to incorporate the distribution of risk attitudes into calculations of consumer welfare, demand elasticities and willingness to pay for the park-and-ride facilities.

The seminar will present the conceptual model of research and the design of the experiment.

Presenter: Ying Huang is the second year PhD student in transport economics

Date: Friday 25 October 2013
Time: 3:00 (Afternoon Tea) followed by 3:30-4:30 (presentation)
Venue: BUSN 142 Case Study Room
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