Professor Sergio Jara-Díaz, Universidad de Chile

Abstract: Starting with the seminal papers by Mohring (1972) and Jansson (1980) most of the microeconomic analysis of public transport design has been focused on the optimal levels of frequency and vehicle size on an isolated line. Various authors have departed from this to introduce the spatial dimension by adding the spacing between lines, by studying different technologies to serve a network (radial or squared), by comparing fixed feeder systems and demand responsive ones, or by comparing services with and without transfers.

The discussion on the appropriate lines structure has also expanded to real systems. In the last two decades several Latin American cities have evolved towards integrated transit systems, including bus lines structure as a key element in the strategic design. Some of these cities have kept a system mostly based on direct services while others have adopted feeder-trunk like structures. The feeder-trunk system introduced in Santiago, Chile, in 2007, generated discussion that has induced the evolution of the system towards a mixture that includes direct services as well.

In this research we highlight two aspects of the problem. One is an urban network where local streets and main ones or avenues coexist. A second aspect is the presence of a demand pattern that is quite common in Latin American capital cities in the morning peak, namely the presence of large amounts of people traveling from the peripheral residential zones not only towards the CBD (where services, business, government and retail locate) but also crossing the CBD towards other peripheral zones to work mostly at local retail, private houses and labor intensive construction sites; these latter are long trips that cross the city to many dispersed destinations.

Date: Thursday 4 December 2014
Time: 3:30-4:30pm (Afternoon Tea at 3.15pm)
Venue: BUSN 142 Sir Rod Eddington Case Study Room
RSVP: Kirsty.Seitz@uwa.edu.au by 2/12/2014
For more information: Doina.Olaru@uwa.edu.au on 6488 3908