

CAITR – 2003 25th Conference of Australian Institutes of Transport Research Transport Systems Centre



University of South Australia

Conference Room: Centenary Building, Level 3, Room 16 (C3-16)
City East Campus, corner of North Terrace and Frome Road

Day 1 – Wednesday 3 December 2003

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| 0830 – 1000 | Collection of conference papers in the foyer outside the Conference Room C3-16 |
| 0900 – 0930 | Conference Room: Centenary Building, Level 3, Room 16 (C3-16)
Welcome to CAITR 2003 – Professor Michael Taylor
Musings on CAITR – Professor Tony Richardson
Conference Matters – Dr Stuart Clement |
| 0930 – 1045 | Session 1: Transport Planning I
Chair: Professor Derek Scafton <ol style="list-style-type: none"> 1. Equity and accessibility challenges for liveable Australian cities.
<i>Dr Nariida Smith, Dr Doina Olaru, Dr Leorey Marquez and Cheryl McNamara; CSIRO.</i> 2. Investigation into bus access to tram rights-of-ways: seeking better utilisation of existing public transport infrastructure.
<i>Andrew Somers; Department of Civil Engineering, Monash University.</i> 3. Efforts to improve bus patronage: what has been attempted, what can be attempted.
<i>Geoffrey Clifton; Institute of Transport Studies, University of Sydney.</i> |
| 1045 – 1115 | Morning Tea (provided in the foyer outside the Conference Room C3-16) |
| 1115 – 1230 | Session 2: Travel Safety; ITS Markets
Chair: Dr Nariida Smith <ol style="list-style-type: none"> 4. Predisposing conditions for serious road crashes (Bayesian conditional probabilities and road crash risk).
<i>Chris Dyson; TSC, UniSA.</i> 5. The effect of the startle reflex on loss of control accidents.
<i>Patricia Wheeler; Department of Aviation, University of New South Wales.</i> 6. ITS technologies and their markets.
<i>Dr Vivian Salim and Dr Nariida Smith; CSIRO.</i> |

- 1230 – 1340 Lunch (provided in Gate One Café on campus)
- 1340 – 1520 **Session 3: Travel Behaviour, Demand and Patterns**
Chair: Dr Vivian Salim
7. **A study of route-choice behaviour in response to the content of variable message signs in Adelaide.**
Hirofumi Furusawa; TSC, UniSA.
 8. **Representing a change of destination attractiveness in a Markov model of trip sequences.**
Professor John Taplin; Transport Discipline, University of Western Australia.
 9. **Brown's Fourier method for non-stationary time series.**
Dr David Wilson; Faculty of Business, RMIT University.
 10. **Public perceptions of Victoria's roadside rest areas.**
Daniel Przychodzki and Thanuja Gunatillake; Public Policy Department, RACV.
- 1520 – 1550 Afternoon Tea (provided in the foyer outside the Conference Room C3-16)
- 1550 – 1730 **Session 4: Transport Modelling I**
Chair: Dr Upali Vandebona
11. **Modelling the efficiency of transport networks in a dynamic environment.**
Arnold Su; Department of Civil and Environmental Engineering, University of Melbourne.
 12. **Mobility considerations in restricting choice sets in modal choice models.**
Frank Primerano; TSC, UniSA.
 13. **Traffic management: a tale of two networks.**
Nikolaos Vogiatzis and Dr Stuart Clement; TSC, UniSA.
 14. **An application of the CUBE transport modelling package.**
Raju Ingole and Rishi Daryani; TSC, UniSA.

Day 2 – Thursday 4 December 2003

- 0900 – 1040 **Session 5: Transport Engineering**
Chair: Dr Lal Wadhwa
15. **Differences between lane width requirements for various MCVs on a rural road.**
Sandra Lennie and Dr Jonathan Bunker; Queensland University of Technology.
 16. **Development of an agent-based adaptive traffic signal control system.**
Suphasawas Nigarnjanagool; Department of Civil Engineering, University of Queensland.
 17. **Measuring influence in groups of more than two agents over multiple rounds of negotiation: an application to transport research.**
Sean Puckett; Institute of Transport Studies, University of Sydney.
 18. **Untitled wonderings in transport.**
Professor Tony Richardson; The Urban Transport Institute and Monash University.
- 1040 – 1110 Morning Tea (provided in the foyer outside the Conference Room C3-16)
- 1110 – 1250 **Session 6: Transport Modelling II**
Chair: Professor John Taplin
19. **On improving traffic microsimulation techniques: a research proposal.**
Nikolaos Vogiatzis; TSC, UniSA.
 20. **Evaluation of microscopic car-following behaviour.**
Sakda Panwai; Department of Civil Engineering, University of Queensland.
 21. **Comparative performance of speed-based travel time estimation models.**
Ruimin Li; Department of Civil Engineering, Monash University.
 22. **Speed-flow relationships for freeways, multilane highways and urban streets.**
Dr Rahmi Akçelik; Akçelik and Associates.

- 1250 – 1400 Lunch (provided in Gate One Café on campus)
- 1400 – 1515 **Session 7: Transport Planning II**
Chair: Dr Rahmi Akçelik
23. **The influence of operational uncertainties on airline schedule planning and punctuality control issues.**
Cheng-Lung Wu; Department of Aviation, University of New South Wales.
24. **Evolutions in urban transport planning process.**
Dr Lal Wadhwa; School of Engineering, James Cook University.
25. **Multicriteria-nested model to forecast classified traffic using low cost information.**
Amilia Aldian and Professor Michael Taylor; TSC, UniSA.
- 1515 – 1545 Afternoon Tea (provided in the foyer outside the Conference Room C3-16)
- 1545 – 1725 **Session 8: Environment and Energy**
Chair: Professor Fred Affleck
26. **Assessing impacts of urban freight measures on air toxic emissions in inner Sydney.**
Dr Leorey Marquez and Dr Vivian Salim; CSIRO.
27. **Estimating the relationship between traffic and air pollution.**
Sharif Siddique; Business School, University of Western Australia.
28. **Predicting the energy use of a solar-electric commuter car.**
Dr Peter Pudney and Dr Rocco Zito; UniSA.
29. **Freight modal transport energy efficiency: a comparison model.**
Ashis Parajuli, Professor Luis Ferreira and Dr Jonathan Bunker; School of Civil Engineering, Queensland University of Technology.
- 1900 **Conference Dinner:** Royal Garden Chinese Restaurant
351 Greenhill Rd, Toorak Gardens.
\$25 per person payable before the meal on the night; drinks not included.

Day 3 – Friday 5 December 2003

- 0900 – 1015 **Session 9: System Reliability; Freight; Data**
Chair: Dr Leorey Marquez
30. **Reliability of multi-modal transport systems.**
Dr Upali Vandebona; School of Civil and Environmental Engineering, University of New South Wales.
31. **The capacity of seaport facilities for sea-containers.**
John Leavesley and Dr David Wilson; Faculty of Business, RMIT University.
32. **An assessment of two weighting methods utilising VATS travel survey data.**
Tony Hingston; Faculty of Business, RMIT University.
- 1015 – 1045 Morning Tea (provided in the foyer outside the Conference Room C3-16)
- 1045 – 1200 **Session 10: Transport Costs**
Chair: Dr David Wilson
33. **Operating cost models in aaSIDRA and aaMOTION.**
Dr Rahmi Akçelik and Mark Besley; Akçelik and Associates.
34. **E-business and trains: tracking the benefits, derailing the costs.**
Clara Tetther; Queensland University of Technology.
35. **A simple demand model to project consumption impacts of rising petrol prices.**
Professor John Taplin; Transport Discipline, University of Western Australia.

1200 – 1310 Lunch (provided in Gate One Café on campus)

1310 – 1450 **Research Summaries**
Chair: Dr Stuart Clement

1. TSC (UniSA): Professor Michael Taylor
2. Akcelik and Associates: Dr Rahmi Akçelik
3. ITS-Monash: Dr Rahmi Akçelik
4. RMIT University: Dr David Wilson
5. University of New South Wales: Dr Upali Vandebona
6. James Cook University: Dr Lal Wadhwa
7. University of Western Australia: Professor John Taplin
8. CSIRO: Dr Nariida Smith
9. PATREC: Professor Fred Affleck
10. The Urban Transport Institute (TUTI): Professor Tony Richardson
11. University of Queensland: summary in paper form only
12. Queensland University of Technology:
13. ITS-Sydney:

1450 – 1505 **Presentation of Awards**
Chair: Professor Michael Taylor

1. *Robert L Pretty Memorial Prize* for best undergraduate student paper (sponsored by Akçelik and Associates).
2. *Rodney Vaughan Memorial Prize* for best postgraduate student paper (sponsored by The Urban Transport Institute).

1505 – 1515 **Conference Closure**
Professor Michael Taylor