2006 ANNUAL REPORT

A report on the 2006 activities of
The Australian Key Centre in
Transport and Logistics

Established and supported under the
Australian Research Council’s Key Centre Program
TABLE OF CONTENTS

DIRECTOR’S REPORT .................................................................................................................. 1
ITLS SYDNEY AND ITS MONASH .............................................................................................. 1

ABOUT THE KEY CENTRE ........................................................................................................ 5
MANAGEMENT STRUCTURE ...................................................................................................... 5
MEETING OBJECTIVES .......................................................................................................... 9

BOARDS OF ADVICE ............................................................................................................... 13

KEY CENTRE STAFF .................................................................................................................. 17
ACADEMIC AND RESEARCH STAFF ...................................................................................... 17
ADJUNCT FACULTY ............................................................................................................... 21
VISITING ACADEMICS .......................................................................................................... 25
ADMINISTRATION ASSOCIATES ............................................................................................ 30
RESEARCH ANALYSTS ........................................................................................................... 34
HIGHER DEGREES BY RESEARCH PROGRAM ..................................................................... 38
ACADEMIC AND RESEARCH STAFF ...................................................................................... 44
ADJUNCT FACULTY ............................................................................................................... 48
VISITING ACADEMICS .......................................................................................................... 49
ADMINISTRATION ASSOCIATES ............................................................................................ 50
RESEARCH ANALYSTS ........................................................................................................... 51
HIGHER DEGREES BY RESEARCH PROGRAM ..................................................................... 52

EDUCATION ............................................................................................................................. 57
ITLS SYDNEY .......................................................................................................................... 57
GRADUATE PROGRAM IN TRANSPORT AND LOGISTICS MANAGEMENT .................................. 57
COURSEWORK DEGREES ....................................................................................................... 57
COMBINED COURSEWORK DEGREES ..................................................................................... 57
COURSES .................................................................................................................................. 58
ABOUT OUR GRADUATE PROGRAM ...................................................................................... 60
HIGHER DEGREES BY RESEARCH .......................................................................................... 66
INDUSTRY PROGRAMS ........................................................................................................... 67
EXECUTIVE PROGRAMS ......................................................................................................... 69
INITIATIVES ............................................................................................................................. 71
ITS MONASH ............................................................................................................................ 78
UNDERGRADUATE TEACHING ............................................................................................... 78
POSTGRADUATE DEGREES BY COURSEWORK ................................................................... 80
POSTGRADUATE RESEARCH DEGREES ................................................................................... 83
TRANSPORT INDUSTRY EDUCATION PROGRAMS ................................................................ 84
PROFESSIONAL DEVELOPMENT ........................................................................................... 87

RESEARCH AND POLICY .................................................................................................... 89
CURRENT PROJECTS ............................................................................................................... 89
RECENT RESEARCH ACHIEVEMENTS ..................................................................................... 103

PUBLICATIONS ....................................................................................................................... 121
HANDBOOKS IN TRANSPORT ................................................................................................. 121
PUBLISHED ............................................................................................................................ 121
IN PRESS .................................................................................................................................. 126
UNDER EDITORIAL CONSIDERATION: ..................................................................................... 129
IN PROGRESS .......................................................................................................................... 132
OTHER PUBLICATIONS (INCLUDING NON-REFEREED PUBLICATIONS) ................................. 133
ITLS WORKING PAPERS ......................................................................................................... 134

PROFESSIONAL ACTIVITIES ................................................................................................. 137
ITLS SYDNEY .......................................................................................................................... 137
WORKSHOPS, SEMINARS AND INDUSTRY LINKAGES ............................................................. 137
MEDIA AND MEETINGS ........................................................................................................... 137
POSITIONS .............................................................................................................................. 140
PROFESSIONAL COMMITTEES ............................................................................................... 140
DIRECTOR’S REPORT

ITLS Sydney and ITS Monash

2006 marks the 12th year since ITS (Sydney and Monash) was established as a Key Centre. We have grown to a total complement of forty and with a sensible growth strategy we will be growing some more over the next few years.

For ITLS-Sydney a major initiative was the finalisation and advertising of the Chair in Logistics and Supply Chain Management and the appointment of a lecturer in logistics, to be based at ITLS-Sydney. We are pleased to welcome in early 2007, Professor David Walters and Dr Suk Fung Ng to contribute in the growing area of logistics and supply chain management. Dr Miguel Figliozzi was promoted to Senior Lecturer in logistics, giving us a very strong and capable group of teachers and academics in fields such as maritime logistics, freight transport and logistics, logistics systems, supply chain processes and value chain management. The full time academic staff of ten (7 in Sydney and 4 in Monash) completes the current strategic mission of staffing the program in transport, logistics and supply chain management.

Sean Puckett (USA) and Melody Hsiao (Taiwan) both graduated with their PhD and Alejandra Efron (Argentina) finalised emendations and will graduate as a PhD in early 2007. Wafa Dabbas (Jordan) has now submitted her PhD thesis for examination. As three PhD’s graduate we are pleased to have six new commencements in 2007, with two of the new PhD’s being staff, Andrew Collins and Matthew Beck. Andrew also was awarded the ATRF prize for best paper for person under 35 years old. Matthew won the ITLS-Sydney PhD scholarship to enable him to undertake research in the area of choice analysis and automobile demand.

2006 was a particularly productive research year, with great success in late 2006 in ARC discovery program and linkage grants to David Hensher, Peter Stopher and Stephen Greaves. The linkage grant (headed by Stephen Greaves) begins a period of collaborative research with AAMI in exposure charging of motorists. ITLS-Sydney has continued to publish in tier one journals, with over 30 papers, as well a numerous conference presentations and lectures as well as 22 working papers.

Research activities at ITS-Monash grew considerably in 2006. Of particular note was Professor Currie’s success in securing a $1.1M ARC Linkage Grant to investigate transport disadvantage, social exclusion and well being in Metropolitan, Regional and Rural Victoria. Over the three years of that project, Graham will have the opportunity to work closely with the local industry sponsors; the Department of Infrastructure, The Brotherhood of St Lawrence and the Bus Association of Victoria, as well as with two international collaborators (Prof Hine from the University of Ulster and Dr Karen Lucas from University of Westminster in London). Graham was also honoured with the Bus Association of Victoria’s Industry Contribution Award at the 2006 Bus Maintenance and Expo Conference held in Melbourne.

ITS-Monash continued to undertake a diversity of transport related research in 2006. We began a new project for AUSTROADS, in conjunction with ARRB Group, which is developing a National evaluation framework for travel demand management initiatives. Dr Sarvi has continued his development work on an instrumented vehicle which will play a valuable role in gathering data to improve our understanding of driver behaviour on motorways. Other new projects include the exploration of market futures for public transport, development of a framework to manage the patronage data to be collected by smart card ticketing systems and exploration of the performance of active signal priority using traffic microsimulation.
The Boards of Advice at each node (chaired by Dr Alastair Stone, ITLS-Sydney and John Stanley, ITS-Monash) met twice in 2006, and has provided important advice and direction. I especially thank Alastair and John for their commitment and the energy they give to many Key Centre activities, extending well beyond the Key Centre to the Faculties and the two Universities.

ITLS-Sydney continues the quality partnership with Delft University with Prof Mike Bliemer having a one-quarter appointment and spending January through April each year in Sydney. We have also continued to build a strong partnership with the Pontifica Universidad Catolica de Chile (and strong links with the University of Chile) with myself visiting Chile in August to give invited lectures and John Rose spending two months in Chile on a Pontifica Universidad Catolica de Chile School of Engineering Visiting Academic Scholarship. This year has seen three researchers join ITS-Monash staff (Dr Muhummad, Mr Senbergs and Mr Zavabeti) and their efforts will help to further boost research activities.

We continue to attract visiting scholars (indeed the demand is so high that we have implemented a formal application and assessment process). Professor John Pucher from Rutgers University was the 2005-06 School of Business Visiting Professor. John has an international reputation in public transport policy, in comparative transit systems and in non-motorised transport with a special focus on the health aspects of transport modes. Dr Dominique Bouf from LET in Lyon completed a full year visit in July. Dom’s interests are in public transport systems, especially rail, in Europe and China. Professor Romano Del Mistro from the University of Cape Town spent two months at ITLS-Sydney undertaking research on the application of stated preference methods to third world transport and land use problems. Dr Stephane Hess (Imperial College London) spent three months with us in an arrangement that will see Stephane visiting each year as part of a collaborative program of research in choice modelling.

During the year, ITS-Monash welcomed many national and international visitors including Professor Julian Hine from the University of Ulster, UK; Professor Avi Ceder from the Technion Israel Institute of Technology; Professor Michiel Bleimer from the Technical University of Delft, Professor Amer Shalaby from the University of Toronto; Prof. Masao Kuwahara from the University of Tokyo and Dr. Edward Chung from EPFL Switzerland. Interaction with those visitors helped to strengthen our research activities and their visits provided a valuable opportunity for our students to hear first hand of research developments overseas. During Prof. Kuwahara’s visit, a Memorandum of Understanding (MOU) was signed with the Collaborative Research Center for Advanced Mobility at the University of Tokyo. That MOU will facilitate an expansion of our international research collaboration with the Center for Advanced Mobility. 2007 visitors are now all approved and funded and we will welcome Professor Chandra Bhat, Professor Simon Washington, Professor Tom Golob, and Associate Professor David Layton.

The ITLS-Sydney graduate program continues to grow and now has over 250 students from 25 countries undertaking graduate study in transport and logistics management. We piloted an internship program in 2006, working with the senior leadership team in Veolia Environmental Services. Two research themes were identified and four high achieving students invited to participate in the pilot, with a Key Centre supervisor and a Veolia supervisor. The internship for one semester is equivalent to one unit of study in the Master’s program. The Veolia program was a great success with plans to continue the program. In addition to our contributions to structured education programs, ITS-Monash was also active in offering professional development workshops. This year two courses were offered in the public transport field, namely ‘Public Transport Planning II - Network and Strategic Perspective’ and ‘Tram Planning - Lessons from Toronto’. Each of those courses attracted over 50 professionals and the positive feedback from the participants at those workshops has provided the encouragement to progress plans to expand the workshop offerings in the public transport field in 2007.
A lot has been happening in the industry programs at ITLS-Sydney. The Ministry of Transport in NSW has introduced new minimum standards for bus and coach operator accreditation. This has resulted in an overhaul of the certificates of coach and transport management. Effective from February 2007, we will offer an online accreditation program that satisfies the minimum standard (plus a little extra), which will be part of a suite of fully articulated programs including a Certificate of Bus and Coach Operations and a revamped Certificate of Transport Management. The focus of professional development beyond the online accreditation program is a major activity of the Key Centre in partnership with the Bus and Coach Association of NSW and the Ministry of Transport. We especially thank Darryl Mellish (Executive Director, BCA) and Jim Glasson (Director-General of Transport) for their continuing support and participation in ITLS-Sydney (Darryl and Jim are members of the Board of Advice). This change resulted in staffing adjustments. Loloma Wren left at the end of 2006 after five years as administration coordinator of the Bus and Coach programs. I thank Loloma for all her efforts and I know the students greatly appreciated her support. We also said farewell to Julia Arnold who had played a valuable role in supporting the management of ITS-Monash for a number of years.

The staff responsible for the delivery of the Transport Management Course in Bus and Coach Operations at ITS-Monash deserve a special mention. Their dedication to that program is responsible for the very positive feedback it received in an external review conducted by the Department of Infrastructure. The consultants who conducted the review noted that the effective quality improvement process established by ITS-Monash, has contributed to keeping the course responsive to the needs of the industry and the key stakeholders.

Through its education programs, ITS-Monash plays a key role in developing professional capacity for the transport and traffic profession. Enrolments in the postgraduate program in Transport and Traffic, along with the Transport Management Course in Bus and Coach Operations, remained stable while strong growth was recorded in undergraduate subject enrolments. As part of the undergraduate programs in Civil and Environmental Engineering, we had responsibility for 480 subject enrolments in transport/traffic related subjects in 2006. That figure represented a 16 per cent increase over 2005. Interest in undertaking research in transport was also high amongst final year students in the undergraduate program with a record number of 33 students enrolled in 2006 in final year transport projects - a 74 per cent increase over the previous year. These increased numbers were accommodated without compromising quality and once again the students rated a number of the transport and traffic subjects as amongst the best they have taken at the University.

The Monash Transport initiative which was launched this year, aims to facilitate linkages with researchers in other faculties who have an interest in transport related research. This initiative has already produced a number of collaborative projects and following a successful event late in the year, which brought together researchers from throughout Monash, more collaborative projects are certain to follow. The Monash Transport initiative gathered a good deal of internal momentum in 2006 and preparations were made for it to increase its activities in 2007.

The ITLS-Sydney Awards Evening is an evening to recognise the success of our graduate and industry program students. In 2006, we presented a new prize for a top student in transport and logistics, named after Mrs Ching Ma from Hong Kong and Shanghai, using the interest from a donation by her family in recognition of the contribution that the Key Centre is making to partnership education with China. Mr Ma is a major developer in China, currently building the new airport in Beijing. Ms Zeyan Zhang (China) was the recipient of the prize and has since enrolled to undertake a PhD.

I agreed to continue as Associate Dean (Graduate coursework) until 2009, with many new programs introduced in 2006, and most notably I chaired the Sydney Faculty Task Force on a
new MBA, which we plan to offer from 2009 onwards. The Key Centre has reviewed its own graduate offerings in ITLS-Sydney and in 2006 introduced new graduate programs in maritime logistics, intelligent transport and logistics systems and innovations in logistics. All units were well received, and in 2007 we will be offering a new unit on aviation logistics and management. The weekly seminar series has grown hugely in stature, attracting good audiences from outside with guest speakers from around the world. I wish to thank Ruth Steel and Stephen Greaves for building this program up as a major window for the Key Centre to promote its activities.

As always, it has been a great pleasure to continue as Director of the Key Centre. The working environment brings a great deal of joy to me, overwhelmingly due to the team we have. A special thanks to all Key Centre staff. In ITLS-Sydney and ITS-Monash our success however is in no small measure due to the extraordinary support we obtain from the Dean (Professor Peter Wolnizer) and the Deputy Vice-Chancellor, Research (Professor Edwina Cornish).

On a personal note, I am honoured to be the 2006 recipient of the Engineers Australia Transport Medal in recognition of my lifelong contribution to the field of transportation. As an economist working in a field that has strong links to engineering, I am especially thrilled to have been voted unanimously by the committee to receive the medal.

David A. Hensher

23 December 2006

Systemwide Director
ABOUT THE KEY CENTRE

Management structure

The management structure of the Key Centre is shown in the diagram below. The purpose of the Board of Advice is to support the continued development and utilization of the ITLS as a centre of excellence adding value to the community. The academic and commercial membership of the Board gives a broad network for the sharing of expertise and experience. Particular contributions from the Board Members are expected to include: high-level advice on issues identified by the Board and the staff for inclusion in the teaching and research programs and assistance with integration of the faculty and student activities, within the community of stakeholders.
The two-node Centre is recognised by the Australian Federal Government as the National Centre of Excellence in teaching and research in transport and logistics management. The Australian Key Centre was established in July 1995 as a joint venture between the Institute of Transport Studies (ITS) within the Graduate School of Business at the University of Sydney and the Monash Transport Group within the Department of Civil Engineering at Monash University, Melbourne. These two groups were leading Australian centres in transport and traffic management education and research in their own right prior to the establishment of the Key Centre. In January 1998, ITS Sydney relocated to the Faculty of Economics (now the Faculty of Economics and Business) and in January 2005 it was renamed as the Institute of Transport and Logistics Studies (ITLS) to reflect its new focus.

The Key Centre continues to have integrated nodes at the University of Sydney (ITLS-Sydney) and Monash University (ITS-Monash).

The Director of the Key Centre is Professor David Hensher (Fellow of the Academy of Social Sciences in Australia and Recipient of the Engineers Australia Medal for lifelong contribution to transportation) who is regarded as one of Australia’s most eminent transport academics and someone in high demand as an adviser to industry and government. The Deputy Director in Sydney is Professor Peter Stopher internationally recognised for his research in travel survey methods and data collection, as well as his recent work on travel behaviour adaptation. The ITLS-Sydney team consists of over 30 staff. Associate Professor Geoff Rose heads ITS-Monash, which has nine staff.

ITLS-Sydney

The spirit and challenge of ITLS

If there is one thing that our past students have said about studying at ITLS it is the high quality of the academic program and the commitment of academic and support staff in ensuring that one’s time at ITLS is not only a learning experience but a period of conviviality in one’s life. Everyone wants to engage in new learning as well as make new contacts from around the world and leave with a feeling of belongingness and achievement. This is the ITLS mission.

While our program is focused on academic objectives, we recognise the need for diversity in the set of management and specialist skills that produce well-rounded managers and leaders of the future. Our students like the opportunity to gain a solid grounding in the development of theory, strategy and practice backed with appropriate technical skills in transport and logistics management. The range of core and elective units of study in transportation, logistics and general management sharpen (or whet) the appetite of all our students.

These ensure that the diversity of study is shaped by a need to acquire certain basic skills in management and planning. Most importantly we set ourselves the challenge to produce reflective students who can ask penetrating and lucid questions on current issues. ITLS recognises that communication skills are as important as technical skills. How often is someone impressed with the way in which a position is articulated? ITLS graduates are given the opportunity to acquire these skills through the diversity of learning media such as face to face lectures, debates, group projects, video-recorded presentations and feedback as well as on-line study. With over 23 countries represented in our student body we are truly international. The networking has proven to be a most valuable part of the ITLS experience. We hope you will be motivated to want to participate in our program.

ITLS Cares, Inspires, Educates and Creates employment opportunities for its students
Articulated training

Within a University environment, ITLS has been singularly successful in introducing a fully articulated series of management-oriented learning programs to cater for a very diverse background of participants. The diversity accommodates individuals with no formal tertiary education through to those with undergraduate qualifications. The opportunity for individuals to enter our non-award courses certificate grams and to articulate through to the Graduate Certificates of Transport and Logistics Management, the Graduate Diplomas in Transport and Logistics Management, and the Masters of Transport and Logistics Management is impressive. In addition, we offer the opportunity to combine the specialist Masters programs with a number of selected Masters programs offered by the University of Sydney and the possibility to undertake postgraduate research through our PhD or MPhil program. For further details of our graduate program see: www.itls.usyd.edu.au/graduateprogram

Industry links

A major strength of ITLS is its success and reputation in the custom design and delivery of training programs to suit the needs of particular organisations. ITLS has appropriate infrastructure to delivery award and non-award programs anywhere in Australia, programs that may be delivered in face-to-face, distance and / or on-line mode. We hope that future partnerships with industry will assist us in the upgrading of some infrastructure in a way that recognises the industry partner’s support and secures world class facilities for delivering a training and education program. There are significant tax incentives for such activity. We always encourage a strong quality partnership between ITLS and a specific organisation or industry association in the development and execution of such programs. Such a partnership would involve some component of teaching by industry personnel. To illustrate this capability we refer to the very strong association and quality partnership forged between ITLS and the Bus and Coach Association of NSW and with the Roads and Traffic Authority of NSW.

In partnership with the Bus and Coach Association of NSW ITLS has developed a program designed to meet the requirements for accreditation for bus and coach companies in NSW under the Passenger Transport Act, as well as executive programs in this area. ITLS offers an online accreditation program (minimum standards) for new entrants to the industry and for incumbents wishing to stay up to date on accreditation requirements as part of the annual self audit. In addition, we offer a Certificate of Bus and Coach Operations for supervisors and a Certificate of Transport Management for managers and advisers to the industry. For full details of these programs see: www.itls.usyd.edu.au/busandcoach

The Advanced Certificate in Transport and Traffic Management (ACTTM) was originally developed in partnership with the Roads and Traffic Authority of NSW and is now available to all transport professionals who wish to advance their ability to analyse the social, environmental and business aspects of transport planning and management and develop creative new solutions by broadening their intellectual base and deepening their understanding of transport. Individual modules of the program may be taken as short courses, the successful completion of which may be used as credit towards the ACTTM or the graduate program. For full details of the program see: www.itls.usyd.edu.au/executive programs

Keeping aware of activities at ITLS

As well its academic and training program the Key Centre has an extensive program of related activities including contract research to industry and government, publications, participation at conferences, software development, and links to other leading transport and logistics institutes
around the world, especially in the USA, UK, Canada, The Netherlands, Chile, Brazil and Sweden.

Current updates on the diversity of activity at ITLS are readily available by visiting our home page: www.itls.usyd.edu.au

If you wish to keep up to date with ITLS events and activities please join our mailing list by emailing itlinfo@itls.usyd.edu.au
Meeting objectives

ITLS-Sydney

The primary objective of ITLS is to undertake graduate teaching, executive programs, grant and contract research and development in the fields of transport and logistics management. The table below show the objectives of ITLS in detail and provides performance measures to demonstrate how well ITLS is meeting each objective.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Performance measure</th>
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<tbody>
<tr>
<td>1. Offer specialised training courses, workshops, short courses on topics of interest in the area of transport and logistics management.</td>
<td>Development and delivery across all modes (face-to-face, distance, on-line) of high quality graduate transport and logistics programs, certificates, advanced certificates, executive programs, short courses and workshops to meet specific training needs.</td>
</tr>
</tbody>
</table>
| 2. Widen the range of courses available for middle level professional managers in critical areas of transport and logistics not currently served. | www.itls.usyd.edu.au/graduateprogram  
www.itls.usyd.edu.au/executiveprograms  
www.itls.usyd.edu.au/busandcoach |
| 3. Build on the recognised need for stronger links between education of technical specialists and managers in transport and logistics. | Development and delivery across all modes (face-to-face, distance, on-line) of high quality graduate transport and logistics programs, certificates, advanced certificates, executive programs, short courses and workshops to meet specific training needs. |
| 4. Equip managers in all disciplines, the small business sector and local government to succeed in the face of technological, economic and institutional change. | Development and delivery across all modes (face-to-face, distance, on-line) of high quality graduate transport and logistics programs, certificates, advanced certificates, executive programs, short courses and workshops to meet specific training needs. |
| 5. Bring high quality transport and logistics management programs to people outside Sydney and widen the offerings of courses in Sydney through access to courses provided by ITLS. | Development and delivery across all modes (face-to-face, distance, on-line) of high quality graduate transport and logistics programs, certificates, advanced certificates, executive programs, short courses and workshops to meet specific training needs. |
| 6. Undertake research to develop state-of-the-art management practices and technical processes. | Development and delivery across all modes (face-to-face, distance, on-line) of high quality graduate transport and logistics programs, certificates, advanced certificates, executive programs, short courses and workshops to meet specific training needs. |
| 7. Seed the development of innovative ideas in transport and logistics management policy and professional practice in Australia, in which ITLS plays a role. | Development and delivery across all modes (face-to-face, distance, on-line) of high quality graduate transport and logistics programs, certificates, advanced certificates, executive programs, short courses and workshops to meet specific training needs. |
| 8. Contribute to Australia’s growing participation in the Australasian and Asia Pacific region in a leadership role in transport and logistics management. | Development and delivery across all modes (face-to-face, distance, on-line) of high quality graduate transport and logistics programs, certificates, advanced certificates, executive programs, short courses and workshops to meet specific training needs. |
| 9. Collaborate with key players having an interest in transport and logistics management and its applications. | Development and delivery across all modes (face-to-face, distance, on-line) of high quality graduate transport and logistics programs, certificates, advanced certificates, executive programs, short courses and workshops to meet specific training needs. |
| 10. Provide a focus for University activity in areas of transport and logistics management and establish an environment attractive to those committed to excellence in graduate transport and logistics management programs and research. | Development and delivery across all modes (face-to-face, distance, on-line) of high quality graduate transport and logistics programs, certificates, advanced certificates, executive programs, short courses and workshops to meet specific training needs. |
ITS Monash

While transport education and research programs have been offered at the Monash University Clayton campus for over 37 years, the formation of the Institute of Transport Studies heralded an expansion of those activities and in particular the development of a number of off-campus learning (distance education) programs. The Institute of Transport Studies (Monash) now operates as a self-funded entity but continues to collaborate with the Institute of Transport and Logistics Studies, at the University of Sydney, the other node of the Key Centre. ITS-Monash is located within the Department of Civil Engineering, the original home of the transport education and research programs at Monash University.

**Our Mission**

To progress transport knowledge and practice

**Our Vision**

To be regarded as a provider of international standard transport education and research which contributes to the prosperity and sustainability of industry and the wider community

**Our Values**

In following our mission, we:

Lead through innovation
Provide quality education and research services
Build a supportive team
Develop effective partnerships
Practise self-sustaining financial management

**Our core activity areas**

The activities of ITS (Monash) are concentrated in the following areas:

**Education**

Education activities contribute to building professional capacity in the transport and traffic industry and focus on transport and traffic engineering, transport policy, planning and operations management. Education programs are offered at the following levels:

Undergraduate
Postgraduate
Continuing education: seminars, short courses and workshops
Industry programs
Research

ITS (Monash) conducts research which contributes to the prosperity and sustainability of industry and the wider community through understanding, predicting and evaluating travel demand, transport operations, transport and traffic management and public transport planning and management. ITS (Monash) research is focused in four program areas:

Travel demand
Transport operations
Transport and traffic planning and management
Public transport planning and management

Professional and community service

ITS (Monash) staff engage in a range of professional and community service activities including:
Arranging public lectures on contemporary transport issues
Serving as committee members of national and international bodies
Contributing to the organization of state, national and international conferences
Providing editorial services to professional journals and publications
Reviewing papers submitted for publication at conferences and in journals
BOARDS OF ADVICE

ITLS-Sydney


Board of Advice Meetings

March 2006

From left to right: Darryl Mellish, Professor Geoff Rose, Professor Peter Stopher, Stephen Rowe, John Stott, Llew Russell, John King, Gillian Akers, Dr Alastair Stone, Professor Sid Gray, and Professor David Hensher

November 2006

From left to right: Llew Russell, Gillian Akers, Stephen Rowe, John Stott, Darryl Mellish, John Stanley, Phil Potterton, Professor Peter Stopher, Professor David Hensher, John King, and Professor Geoff Rose
Statement of Purpose

The purpose of the Board of Advice is to support the continued development and utilization of the ITLS as a centre of excellence adding value to the community. The academic and commercial membership of the Board gives a broad network for the sharing of expertise and experience. Particular contributions from the Board Members are expected to include: high-level advice on issues identified by the Board and the Staff for inclusion in the teaching and research programs and assistance with integration of the faculty and student activities, within the community of stakeholders.

Dr Alastair Stone (Chair), Managing Director, Pacific Infrastructure Corporation  
Professor David Hensher, Director, Institute of Transport and Logistics Studies  
Gillian Akers, Senior Associate, Strategic Design and Development Pty Ltd  
Professor Chandra Bhat, Department of Civil Engineering, University of Texas at Austin, USA  
Professor Edward Blakely, Director, Planning Research Centre, University of Sydney  
Professor Axel Börsch-Supan, Director, Mannheim Research Institute for the Economics of Aging, University of Mannheim, Germany  
Professor Ken Button, Director, Transportation Policy, Operations and Logistics Centre, George Mason University, USA  
Professor Paul Cousins, Professor of Operations Management and CIPS Professor of Supply Chain Management, Manchester Business School, The University of Manchester, UK  
Doug Dean, Managing Director, Veolia Environmental Services, Australia  
Hans Fischer, Project Director, Transfield Holdings  
Paul Forward, Principal, Evans and Peck  
Jim Glasson, Director General, NSW Ministry of Transport  
Professor Phil Goodwin, Professor of Transport Policy, Centre for Transport and Society, Faculty of the Built Environment, University of the West of England, UK  
Professor Sid Gray, Associate Dean International, Faculty of Economics and Business, University of Sydney  
Mr Nicholas Hann, Managing Director, Infrastructure, Macquarie Bank, Australia / Canada  
Professor Trevor Heaver, Centre for Transportation Studies, Operations and Logistics Division, Sauder School of Business, University of British Columbia, Canada  
Stuart Hicks, Chair, National Transport Commission, Chair, Planning and Transport Research Centre and Chair, John Curtin Institute of Public Policy  
John King, Managing Director, Aviation and Tourism Management Pty Ltd  
Louise Knowles, Doctoral Program, Institute of Transport and Logistics Studies  
John Lee, Chief Executive Officer, State Transit Authority  
Stephen Lucas, Chair, Bus Industry Confederation, President, Bus Association Victoria  
Professor Alan McKinnon, Director of the Logistics Research Centre, Heriot-Watt University, Edinburgh, UK  
Darryl Mellish, Executive Director, Bus and Coach Association NSW  
Max Moore-Wilton, Executive Chairman and Chief Executive, Sydney Airport Corporation  
Professor Juan de Dios Ortúzar, Department of Transport Engineering and Logistics, Pontificia Universidad Catolica de Chile, Chile
Professor Tae Oum, UPS Foundation Chair in Transport and Logistics, Sauder School of Business, University of British Columbia, Canada

Phil Potterton, Executive Director, Bureau of Transport and Regional Economics, Department of Transport and Regional Services

Professor John Pucher, Bloustein School of Planning and Public Policy, Rutgers University, USA

Professor Geoff Rose, Director, Institute of Transport Studies, Monash University

Stephen Rowe, Director, Busways Group

Llew Russell, Chief Executive, Shipping Australia Ltd

John Stanley, Executive Director, Bus Association Victoria

Professor Peter Stopher, Deputy Director, Institute of Transport and Logistics Studies

Mr John Stott, Executive Chairman, Transport Administration Corporation

Professor Wayne Talley, Executive Director, International Maritime, Ports and Logistics Management Institute, Old Dominion University, Norfolk, Virginia, USA

Professor Kenneth Train, Department of Economics, University of California, Berkeley, Vice President, National Economic Research Associates, USA

Professor Peter Wolnizer, Dean, Faculty of Economics and Business, University of Sydney

Secretariat: Ms Ruth Steel Projects Manager, Institute of Transport and Logistics Studies
ITS-Monash

The ITS (Monash) Advisory Committee met in September. The committee decided to appoint the Chair of the Advisory Committee for a two year period and that role in 2006-2007 will be filled by Mr John Stanley from the Bus Association of Victoria. The retirements of Dr Anthony Ockwell from the Federal Department of Transport & Regional Services (DoTARs) and Mr Stuart Hicks from the National Transport Commission left two vacancies on the advisory committee. Mr Michael Taylor, Secretary of the Federal Department of Transport & Regional Services (DoTARs) accepted an invitation to join the committee from 2007. The advisory committee members undertook reviews of the units in the postgraduate program and provided valuable feedback which assisted with the annual updating of the notes. The advisory committee is working with ITS (Monash) staff to initiate a number of strategic initiatives which will be announced in 2007.

Mr Bernie Carolan, Chief Executive Officer, Metlink
Ms Charmaine Dunstan, Director, Traffix Group Pty Ltd
Professor David Hensher, Director, Institute of Transport & Logistics Studies (University of Sydney)
Mr Peter Hunkin, Business Centre Manager, Traffic Division, Hyder Consulting (Aust) Pty Ltd
Dr Michael Kennedy, Chief Executive Officer, Mornington Peninsula Shire
Dr Mary Lydon, General Manager, R & I, ARRB Transport Research
Mr William McDougall, Melbourne Traffic & Transport Team Leader, Sinclair Knight Merz
Dr Ken Ogden, General Manager, Public Policy, RACV
Ms Kate Partenio, Director, GTA Consultants
Dr Tim Patton, Manager, Planning & Policy Division, Department of Infrastructure
Mr Ian Pitcher, Director, Victoria Division, Maunsell Consulting
Mr John Stanley, Executive Director, Bus Association Victoria
Mr Jim Stevenson, Special advisor, Department of Infrastructure and National Transport Commission
Mr Ted Vincent, General Manager, Traffic & Transport Integration, VicRoads
KEY CENTRE STAFF

ITLS-Sydney

http://www.itls.usyd.edu.au/about_itls/staff.asp

Academic and research staff

Professor David Hensher

BCom Hons I PhD UNSW FASSA FCIT FAITPM MAPA

Director, Professor of Management

Associate Dean (Postgraduate Coursework)

Faculty of Economics and Business

David Hensher is Professor of Management, and Director of the Institute of Transport and Logistics Studies: The Australian Key Centre of Teaching and Research in Transport Management in The Faculty of Economics and Business at The University of Sydney. David is a Fellow of the Academy of Social Sciences in Australia, Recipient of the 2006 Engineers Australia Transport Medal for lifelong contribution to transportation, Past President of the International Association of Travel Behaviour Research and a Vice-Chair of the International Scientific Committee of the World Conference of Transport Research. David is the Executive Chair and Co-Founder of The International Conference in Competition and Ownership of Land Passenger Transport (the Thredbo Series), now in its 18th year.

David is on the editorial boards of 10 of the leading transport journals and Area Editor of Transport Reviews. David was appointed in 1999 by one of the worlds most prestigious academic publishing houses - Elsevier Science press as series and volume editor of a new handbook series "Handbooks in Transport". He has published extensively (over 350 papers) in the leading international transport journals and key journals in economics as well as ten books and is Australia's most cited transport academic and number three academic economist. His books include the Demand for Automobiles, published by North-Holland the Bus and Coach Business (with Ann Brewer published - Allen and Unwin), Transport: An Economics and Management Perspective (With Ann Brewer - Oxford University Press), Stated Choice Methods (with Jordan Louviere and Joffre Swait - Cambridge University Press) and Applied Choice Analysis - a Primer (with John Rose and Bill Greene - Cambridge University Press). His particular interests are transport economics, transport strategy, sustainable transport, productivity measurement, traveller behaviour analysis, stated choice experiments, dynamic discrete-continuous choice modelling, privatisation and deregulation.

David has advised numerous government and private sector organisations on matters related to transportation especially matters related to forecasting demand for existing and new
transportation services, for example the Speedrail project, the Liverpool-Parramatta Transitway, and numerous tollroad projects throughout Australia and internationally. David is regarded as Australia’s most eminent expert on matters relating to travel demand and valuation and transport reform. Appointments over last few years include: a member of the executive committee that reviewed bus transport bids for the Olympic Games, the NSW Government’s Peer Review Committee for the Sydney Strategic Transport Plan, Peer reviewer for Transfund (NZ) of the New Zealand project evaluation program, Peer reviewer of the NZ Land Passenger Transport Procurement Strategy for Land Transport NZ, member of the executive committee of ATEC, a consortium promoting a freight rail system between Melbourne and Darwin; economic adviser to Gilbert+Tobin Lawyers on valuation methods in IP context.

Professor Peter Stopher  
BSc (Hons) Eng PhD Lond FIEAust FASCE MITE  
Professor of Transport Planning  
Postgraduate Research Coordinator

Professor Stopher is Professor of Transport Planning at the Institute of Transport and Logistics Studies at the University of Sydney, a position he has held since the beginning of 2001. He was educated at the University of London, where he received both his BSc (Eng.) in Civil Engineering and Ph.D. in Traffic Studies. He has been a professor at Northwestern University, Cornell University, McMaster University, and Louisiana State University, where he held the endowed chair of the Louisiana Land and Exploration Company. He spent 11 years from 1980 through 1990 as a full-time transport planning consultant in private industry. Prof. Stopher has 40 years of professional experience in transport planning, travel forecasting, travel-behaviour modelling, and associated areas. He has an international reputation in travel-demand modelling, and the development of new procedures for travel forecasting. He was one of the pioneers of the development of disaggregate travel-demand models and was the first to use and apply the logit model in the 1960s. He has been in the forefront of work to assess the shortcomings of conventional travel-forecasting models with respect to the demands of clean air legislation and goals. He was selected by the US Federal Highway Administration to develop one of four concept papers on a new paradigm for travel forecasting. He was a founding member of the Transportation Research Board’s Committee on Traveller Behaviour and Values, serving as its first Chairman from 1971-1977, and again from 1995-1997 and was awarded Emeritus Membership of the Committee in 2002; he also founded the series of International Conferences on Traveller Behaviour that began in 1973 and which will hold its next meeting in Kyoto, Japan in 2006.

In addition to work in travel forecasting, Dr. Stopher has also developed a substantial reputation in the field of data collection, particularly for the support of travel forecasting and analysis. He pioneered the development of travel and activity diaries as a data-collection mechanism, and has also written extensively on issues of sample design, data expansion, non-response biases, and measurement issues. He recently completed a report on standardising household travel surveys, and is working on use of GPS devices in connection with personal travel surveys and for evaluation of voluntary travel behaviour change. Dr. Stopher initiated the TRB Subcommittee on Survey Methods, which is now a Committee of the TRB. He co-chaired the international conference on Transport Surveys: Raising the Standard, in Eibsee, Germany in May 1997, the following conference in Kruger Park, South Africa in 2001, and the International Conference on Travel Survey Methods in Costa Rica in 2004.
Dr Stephen Greaves

BA (Hons) Leeds MSc Wales PhD Louisiana State MITE Lecturer

Senior Lecturer in Transport Management

Postgraduate Coordinator in Transport Management

Stephen is a Senior Lecturer in Transport Management at the Institute of Transport and Logistics Studies at the University of Sydney. He joined ITLS in February, 2004 after completing three years as a lecturer in transportation at Monash University. His teaching experience includes a wide variety of transportation-related courses at both the under-graduate and postgraduate levels as well as industry-based short courses. Current research activities are focused on the environmental/health externalities of transport and travel choices, and methodological and technological improvements to the collection of travel survey data.

Dr Miguel Andres Figliozzi

MEng Cordoba Natl PhD Maryland

Senior Lecturer in Logistics Management

Logistics Postgraduate Coordinator

Dr Miguel Andres Figliozzi is a Senior Lecturer in Logistics Management at ITLS, which he joined in 2004. Miguel holds a PhD from University of Maryland College Park. His research was awarded by the prestigious INFORMS Transportation Science and Logistics dissertation committee. He has pioneered the study of sequential auctions in transportation and has published in the area of transportation auctions, real-time vehicle routing, and international freight transportation. Miguel’s research areas are transportation logistics and supply chain management. His current interests are focused on these studies from a strategic perspective, which includes interaction between technology, information, and behaviour. Additional areas include, fleet management problems, port operations and ship scheduling, vendor management/ inventory routing problems, pricing and auctions, and online problem in logistics.
Dr John Rose

BEc (Hons) PhD USYD

Lecturer in Transport and Logistics Management

Director of Industry Programs

John is a Lecturer in Transport and Logistics Management and the Director of the Industry Program at Institute of Transport and Logistics Studies (ITLS). John began his academic career in the field of marketing, commencing as an associate lecturer in the Discipline of Marketing at the University of Sydney in 1995. As an associate lecturer, John taught marketing principles, consumer behaviour, introductory and advanced marketing research techniques, and new product development, all at the undergraduate and postgraduate levels. In 1999, John was promoted to the level of Lecturer where he continued in his teaching role. At the same time, John acted as the quasi head of discipline when, on mass the entire discipline staff, left the University. In this unofficial role, John reshaped the Discipline, introducing new subjects and moving the Discipline into the first year of undergraduate studies. In 2001 John moved over to the ITLS to complete his PhD under Professor David Hensher, which he has since finished. At ITLS, John is responsible for running the industry program which includes courses taught to the Roads and Traffic Authority of NSW, to NSW bus operators, as well as other professional development courses open to academics and public companies. In terms of teaching, John is responsible for teaching introductory statistics, transport economics, and discrete choice modelling. John’s research interests are in the areas of discrete choice modelling and efficient stated choice experiments. John has several articles published in the top Transportation and Logistics journals (including Transportation, Transportation Research A, B and E) and is a co-author of (with Professors David Hensher and William Greene) Applied Choice Analysis; A Primer, (2005) by Cambridge University Press. He is currently writing a book on generating efficient stated choice experimental designs (with Mike Bliemer, Delft). Currently John is active in consulting, working in the areas of Toll Road evaluation and modelling, demand and take up for pharmaceutical and agricultural products. In between all this, John spent five years as a member of the Australian Army Reserves (1997-2002), which he left after injuring himself and discovering exactly how the Australian military treats its injured members first hand.

Ann Brewer

BA MCom Hons Macq PhD UNSW MCIT

Professor of Organisational Logistics

Long term secondment as Acting Deputy Vice Chancellor (Infrastructure)

A specialist in organisational behaviour, human resource management, Ann has experience in many industries, with major projects such as teleworking, generational issues in business, value chain management, the impact of the Sydney Olympics on transport, educational needs of adult learners, all of which are pertinent to transport and logistics management. Ann has published many papers and five books. Ann is co-author (with David Hensher) of Operating a Bus and Coach Business (Allen and Unwin, 1997) and Transport: an Economics and Management Perspective, Oxford University Press (2001).
Matthew Beck

BEc Hons MPhil Usyd

Lecturer in Analysis Tools and GIS

Matthew Beck completed his undergraduate degree at the University of Sydney were he graduated with honours in Economics (specialising in International Trade and Development Economics). After flirting with studies in the analysis of discrete data and experimental design, he recently completed postgraduate research on the connectivity of individuals to the sporting teams they support. Working within the Faculty of Business and Economics, Matthew has extensive experience teaching statistics and associated research concepts, and was recently nominated for a faculty teaching award. He also works as a private consultant for many of Australia’s leading companies and has managed research projects in banking and finance, pharmaceuticals, media, and fast moving consumer goods.

Mr Frederic Horst

BBus Dusseldorf MTM Usyd

Adjunct Lecturer in International Freight

Frederic Horst is currently employed as Global Network and JV Development Manager at DHL Aviation, based in Brussels, Belgium. There, he is part of the Network Planning Group, which is responsible for the DHL Express intercontinental air network.

Previously, he worked for Cargolux Airlines, a Luxembourg based all cargo carrier operating a fleet of Boeing 747-400 Freighters. At Cargolux, he was responsible for key account development and business planning, as well as being involved in market research, fleet planning, and some business related crew training projects. Prior to this, Frederic worked as a Consultant for MergeGlobal, a Washington, D.C. based strategy consulting company focused on freight transportation, and after that was involved in several ongoing projects at the Institute of Transport studies and Sydney Ports.

He has a Master of Transport Management from the University of Sydney and completed undergraduate studies in business at the University of Duesseldorf. Frederic teaches International Freight Transport in the Graduate Program.
Dr Andrew Kerr
MBA Macq DBA IntMC
Adjunct Lecturer in International Logistics

Andrew has an extensive management and consulting background in the areas of operations management, service operations, marketing, services marketing, supply chain management and logistics. His doctoral research involved the strategic ramifications of enterprise outsourcing decisions, both in Australia and overseas.

Since late 1987, Andrew has been the Managing Director of Griffin Corporate Services; a Sydney based strategic consulting practice with network offices in several Pacific Rim cities. Previously, he held senior management appointments with Marrickville Holdings, Myer (NSW) Limited, GEC Australia Limited, Digital Equipment Corporation, Sperry Limited and Unisys.

Andrew is a visiting fellow at a number of graduate schools and since 1989 has delivered numerous post-graduate programs in Australia and overseas. Formerly Australian and Far East Editor of the International Journal of Physical Distribution and Logistics Management, Andrew remains a member of that Journal’s Editorial Advisory Board. He is an assistant editor of the Gower Handbook of Logistics and Distribution Management.

Dr Peter Lok
BAppSc MHP UNSW MBA PhD UTS
Adjunct Lecturer in People, Work and Organisations

Peter Lok is an Adjunct Lecturer in ITLS, Faculty of Economics and Business. His main research interests are in the areas of organizational change, cross-cultural management, Asian business, HRM and performance management, organizational culture, subculture and commitment. He has worked in many countries and he has extensive consultancy and executive teaching experience particularly in the Asian region. His recent publications are in the Journal of Management Studies, Applied Psychology – an international review, International Journal of Cross-cultural management and Leadership and Organizational Development Journal. He is also the co-author of two recent books (2006): “The measurement and management of strategic change”, (Pearson Prentice Hall, Sydney) and “The management of employee performance” (Pearson Prentice Hall, Sydney). Dr. Lok teaches in the areas of: Strategic change management, HRM and organizational performance, Cross cultural management and Asian Business. He has extensive work experience with international consultancy firms and clients particularly in the areas of organizational restructuring and performance management. Previously, Dr. Lok was a full time faculty of the Australian Graduate School of Management (AGSM), University of NSW and The Graduate School of Business, University of Sydney.
Robert Ogulin

BEC MBA PhD (in progress)

Adjunct Lecturer in Supply Chain Management

Robert Ogulin is an Adjunct Lecturer in Logistics and Supply Chain Management at ITLS, teaching Innovations in Logistics and Supply Chain Management. Robert Ogulin is a director at strategy and supply chain advisory Lucis Pty Ltd. He has twelve years experience in marketing, logistics and supply chain management and has the ability to combine innovative approaches in strategy and operations with proven techniques for clients and project teams. He has planned and delivered supply chain related strategic change, process and IT programs contributing to measurable benefits for blue chip clients across different industries in Australia, Asia, Europe and the US. Through his PhD research Robert continues to focus on development and application of management decision frameworks to turn out bottom line impact for Lucis clients and their trade network partners.

Chris Skinner

BSc Eng MEngSc MIEE MIEAust MACS CPEng

Adjunct Lecturer in Intelligent Transport and Logistic Systems

Chris Skinner is an Adjunct Lecturer in Intelligent Transport and Logistic Systems [IT&LS] at the Institute of Transport and Logistics Studies, as well as Principal of DISplay Pty Ltd www.display.com.au a consulting company that works closely with Intelligent Transport Systems Australia Inc.

In 2005 and 2006 Chris developed the new Unit of Study TPTM6224 Intelligent Transport and Logistic Systems, which was successfully delivered in first semester 2006. Student feedback was positive with encouragement to include more case studies in logistics.

In January 2007 Chris delivered a two-day seminar on Intelligent Logistic Systems to a visiting group of logistics managers from the Aluminium Corporation of China (CHALCO) and arranged for site visits to the Star Track Express sortation centre and a major retail distribution centre in western Sydney. Company planning and management for system development was a feature of the visits.

Chris has been involved in the analysis, design and implementation of intelligent transport systems [ITS] since the beginning of 1992. This started with four years with Philips Electronics Australia in association with Hughes Electronics of California and was later continued for more than five years with the Roads and Traffic Authority of New South Wales. Chris has also worked as contract project manager in retail supply chain systems integration.
Chris has formed a strong working liaison with Australian national research organisations CSIRO and NICTA in the areas of software and systems engineering, with emphasis on application to transport and logistics.

Work in defence, aerospace and telecommunications industries followed a distinguished career in the Australian Navy as major project director and combat systems engineering specialist at sea and in shore appointments in Australia and USA.

For over 20 years, Chris has been active in professional organisations including Engineers Australia [EA], the Australian Computer Society and within the Institute of Electrical and Electronics Engineers [IEEE] he is a member of the technical societies for computers, communications and intelligent transport systems. Chris is the Acting Editor of Transport Engineering in Australia [TEA] published by EA.

Chris is an active member of ITS standards committees at both the Australian national and international levels covering transport information and control systems and supply chain automation.

Chris has made several submissions to government on transport and technology issues and has presented at three ITS world congresses, most recently at Nagoya in 2004. From 2003 to 2005 Chris was the chairperson of the National ITS Architecture Working Group.

Dr Alastair Stone
MSc, DEng California
Adjunct Lecturer - Institutional / Finance Specialist
Chair, ITLS Board of Advice

Alastair has over thirty years experience in banking, economics and engineering. He has successfully initiated, implemented and participated in major projects and infrastructure deals. He has also advised various international and domestic agencies and governments; including the Asian Development Bank, World Bank, Jakarta Municipal Government, Shanghai Municipal Government, and several Australian State Governments, on private sector participation policies and strategies. His career has covered all facets of urban affairs including senior positions with the World Bank, Lend Lease and Merill Lynch. Alastair teaches in the area of joint ventures in public infrastructure projects.
Visiting academics

Professor Michiel Bliemer

ITLS/ Delft Partnership Visiting Professor

December 2006 to April 2007

After finishing his Masters degree in Econometrics and Operations Research, Michiel Bliemer received his PhD in transportation planning and traffic engineering on the topic of dynamic traffic assignment with heterogeneous travellers. Currently, he works as Associate Professor at Delft University of Technology in The Netherlands and since three years as Adjunct Professor at the Institute of Transport and Logistics studies in Sydney. Main research topics include (large scale) analytical dynamic network models for forecasting future network conditions and effects of dynamic traffic management measures, particularly the impact of road pricing. Another important research topic is the design of efficient stated choice experiments for estimating discrete choice models. Other topics of interest are travel choice behaviour under uncertainty, dynamic queuing models, and optimal control problems with conflicting interests using game theory.

Jian Jin

ITLS Visiting Researcher

June 2006 to May 2007

Dr Jian Jin is currently Assistant Professor Transportation Safety at Southwest Jiaotong University, Chengdu, China. Jian lectures the Transportation Reliability, Traffic Safety Engineering and Transport Psychology course in the Transportation Department. After she received her PhD in transportation planning and management in 2002, she continued her main research on driving safety. Furthermore, she is also a principle member of Accident Prevention Joint Laboratories in Chengdu City. Other research interests are traffic behaviour, traffic psychology, mixed traffic simulation models, and accident simulation. During her visit in ITLS, she worked in traffic safety research and published several papers and one book.
John Pucher is a Professor in the Bloustein School of Planning and Public Policy at Rutgers University (New Brunswick, New Jersey). Since earning a PhD at the Massachusetts Institute of Technology in 1978, Pucher has conducted research on a wide range of topics in transport economics and finance, including numerous projects for the U.S. Department of Transportation, the Canadian government, and various European ministries of transport. For over two decades, he has examined differences in travel behaviour, transport systems, and transport policies in Europe, Canada, and the USA. Currently, John's research focuses on walking and bicycling, and in particular, how American cities could learn from European policies to improve the safety, convenience, and feasibility of these non-motorized modes in the United States. Most recently, he has focused on the need for Americans to increase their walking and cycling for daily transportation as the best way to ensure adequate levels of physical exercise and enhance overall public health. From 2005 to 2006, Pucher was a visiting professor at ITLS where he directed a research project examining differences between Canada, Australia, and the USA in their travel behaviour, transport systems and policies, and the impacts of transport on public health.

Jay Sankaran is Associate Professor in the Department of Information Systems and Operations Management at the University of Auckland. He holds a B.Tech in Mechanical Engineering from IIT, Madras (1984), an M.S. in Industrial Engineering from the University of Iowa (1986) and a PhD from the Graduate School of Business, University of Chicago (1989). His main teaching areas are: logistics and supply chain management; inventory management and production planning; and management science. His main research areas is both modelling and empirics in logistics and supply chain management, with a strong accent on the New Zealand context, especially with regard to the latter strand of research (he is the sole member from NZ on the Editorial Advisory Board of the International Journal of Physical Distribution and Logistics Management). He also has a secondary interest in the application of inductive, qualitative research methods in organization studies.
Professor Jou Rong-Chang

ITLS Visiting Professor

September 2005 - January 2006

Jou Rong-Chang is Professor in the Department of Civil Engineering, National ChiNan International University, Taiwan. Professor Jou received his PhD from the University of Texas, Austin, USA in 1993. He has been member of the Editorial Advisory Board of Transportation Research A (1996-present), and a reviewer for many major transportation journals and major conferences (TRB annual conference, EAST, IATBR, ISTTT, g42u etc.). Professor Jou has over 10 years experience in travel behaviour modelling (commuter behaviour, effects of real time traffic information), transportation systems and demand management (road pricing, vehicle ownership, HOV lane), and related areas. He has published more than 30 papers in refereed journals (including papers in Chinese), including the refereed publications in Transportation Research A, B, Transportation Research Record, Journal of Advance Transportation, Transportation, various conference and symposia proceedings, and bound technical research reports. Professor Jou has visited other universities as a visiting professor, such as Kyoto University, Japan (2001-2002) and NTU University, Singapore (2004-2005).

Associate Professor Romano del Mistro

ITLS Visiting Professor

October 2006 - December 2006

Romano Del Mastro is Associate Professor in the Civil Engineering Department at the University of Cape Town, South Africa. He is the convenor of the inter-disciplinary Masters programme in Urban Infrastructure Design and Management and a member of the UCT Transport Studies Group. He is a member of the organising committee and session convenor of the annual South African Transport Conference. His research interests include modelling travel behaviour related to TDM, costing public transport services, private sector response to public sector planning initiatives, modelling choices by residents in upgrading of informal settlements, and risk and consequences in municipal infrastructure management.
Professor Werner Delfmann

ITLS Visiting Professor

January 2006 - February 2006

Professor Werner Delfmann is the Director, Department for Business Policy and Logistics, Faculty of Business Administration, Economics and Social Sciences, University of Cologne, Germany. His main research activities focus on strategic and international logistics and supply chain management, aviation management, e-commerce and information management, controlling and operations research. He has published 10 books and more than 100 scientific articles. Prof. Delfmann has been a visiting professor and invited lecturer at several European universities, e.g. HEC Paris, Stockholm School of Economics and Copenhagen Business School, as well as at universities and business schools overseas like University of British Columbia (UBC), Vancouver, Canada, National University of Singapore (NUS), Asian Institute of Management (AIM), Manila. Prof. Delfmann is founder and head of national and international working-groups in Strategic Management and Logistics with academics and senior executives. He is a member of numerous scientific organisations and management associations, e.g. of the research committees of the European Logistics Association (ELA), the German Logistics Association (BVL) and the German Society for Business Administration (SG-DGfB). Prof. Delfmann has close relationships with leading companies in industry and trade by holding mandates as counsellor, consultant and member of the supervising board, as well as in a broad scope of cooperative research projects.

Dominique Bouf

PhD Lyons

August 2005 - July 2006

Dominique Bouf is Senior Researcher (CNRS) at the LET (Transportation Economics Laboratory) located in Lyons, France. Prior to joining the LET he worked for the Dutch Ministry of Transportation and for the RATP (Parisian Urban Transportation Company). He lived for two years in Africa and carried out several research projects on African transportation issues. More recently he addressed the problems of railways regulation through studies for the French Government, SNCF (the French railways operator), the European Commission (as the leader of the LET’s participation to the project Improverail), and the OECD, providing a report on yardstick competition. He is working in co-operation with the University of Tongji (Shanghai) on China’s railways reform and is responsible for a research project on the long term prospects for Chinese transportation (China in 2050). Dominque's main research interests are: Chinese transportation; performance measurement and regulation of transport companies (especially railways), particularly possible implementation of yardstick competition.
Dr Stephane Hess

PhD Imperial MPhil Cambridge

February 2006 to July 2006

Dr Stephane Hess is a senior researcher in the Institute for Traffic Planning and Transport Systems at the Swiss Federal Institute of Technology Zürich (ETH), a visiting scholar in the Institute of Transport and Logistics Studies at the University of Sydney, and an honorary research associate in the Centre for Transport Studies at Imperial College London. Hess holds a PhD in transport demand modelling from Imperial College London, and an MPhil in Statistical Science from Cambridge University. He is a fellow of the Royal Statistical Society and a member of academic committees for the European Transport Conference and the Transportation Research Board. His main research interests lie in the use of advanced discrete choice models for the analysis of travel behaviour. Here, Hess has made several recent contributions to the state of the art in the specification, estimation and interpretation of such models, while also publishing a number of papers on the benefits of advanced structures in actual large-scale transport analyses.

Tiphaine Bretin

Occupational Trainee

March 2006 to August 2006

Tiphaine Breton is an undergraduate student from ENTPE Lyon her degree is in civil engineering.
Administration associates

Bart Ahluwalia

BA Hons London

Administration Officer

Bart has recently immigrated to Australia and settled in the Western Suburbs. Since earning his BA (Hons) in Classical Studies from King’s College London, most of his employment has been for charities, national and international. Prior to settling in Australia, Bart travelled through Italy, Paris and around Britain to say one final goodbye to all his favourite places and people. He has a keen interest in politics/current affairs, music and history. He has joined Professor Stopher’s team providing administrative support for the South Australian Travel Smart project.

Jo Dumergue

Office Manager

Jo joined the ITLS team in 2001 and manages the administration of the Institute of Transport and Logistics Studies including the office of the Director/Associate Dean. Jo manages the graduate program and is responsible for creating the ITLS graduate timetable, room bookings, class notes, class listings and processing of final grades and amended results. She prepares and distributes the Annual Report for Senate and the Graduate Program Brochure for the graduate program. Jo ensures that visiting academics and occupational trainees to ITLS have their accommodation arranged prior to their arrival in Sydney and is responsible for producing the Visitors Handbook which is a compilation of information visitors new to Sydney find helpful. Jo manages the annual awards ceremony held in March and is responsible for gathering all relevant information for the final selection of award recipients and arranging plaques and prizes for the awards evening. Jo is the OH&S representative at ITLS.

From 1997-2001 Jo completed a number of assignments including providing executive support at Yooroong Garang, Indigenous Health at Cumberland Campus, and was the Executive Officer for two years at the Faculty of Dentistry Foundation, Faculty of Dentistry.

Prior to joining The University of Sydney in 1997, Jo managed her own business and information services office in Bali, Indonesia.
Anne Fernando

ACMA

Finance and Personnel Coordinator

Anne joined ITLS in 2001 and provides administrative support and financial management to the Institute of Transport and Logistics Studies. Prior to migrating to Australia Anne has worked as an Accountant in Sri Lanka.

Anne is responsible for preparation, presentation and revision of the budget of ITLS to the Faculty of Economics and Business and the University. She is responsible for timely processing of spendvision, accounts payable, accounts receivable, petty cash banking etc. Preparation and submission of financial data to external clients to secure projects and funding. She also carries out financial analysis of ITLS projects to assess viability and profitability of the projects. Prepares the financial statements for the annual reports, it involves preparation of income and expenditure statements and analysis of significant variances. She does the forecasts on a monthly basis and quarterly reconciliations. She coordinates the human resource activities for all staff at ITLS. She also provides clarification of policies and procedures relating to Finance and Personnel matters.

Gary Mariano

Computer Systems Officer

Gary is the Computer Systems Officer for the Institute of Transport and Logistics Studies. He has over six years experience in Information Technology from Desktop Support to Server and Local Area Network Administration. He is responsible for the setup, configuration and the day-to-day care and maintenance and administration of the discipline’s computer systems and its local area network. In 2006 Gary successfully completed his Cisco Network Academy Course in CCNA1, CCNA2, CCNA3 and CCNA4.

Technical Certifications
MCP - Microsoft Certified Professional
MCSA - Microsoft Certified Systems Administrator
MCSA + M - Microsoft Certified Systems Administrator + Messaging
MCSE - Microsoft Certified Systems Engineer.
Ruth Steel

BA Hons Lanc MSc MPhil Bristol DipLaw LPAB (in progress)

Projects Manager

Ruth joined the Faculty of Economics and Business in September 2003 working with Professor David Hensher (Associate Dean, Postgraduate Coursework) on a number of faculty-wide strategic initiatives including the review and development of graduate programs and the development and implementation of student related policies and procedures. She also conducts education research for the Faculty in liaison with the Office for Learning and Teaching.

At ITLS Ruth is responsible for various projects related to the development and review of learning and teaching policies and strategies and the implementation of innovations in this area. She also has an information and communications role at the Institute in developing promotional materials for the Institute, looking after branding issues, acting as website manager and coordinating the successful ITLS Research Seminar Series. In 2004 Ruth assisted Professor Hensher to edit a collection of papers from the eighth conference of the international conference series on Competition and Ownership in Land Passenger Transport (Thredbo). The book was published by Elsevier in 2005. She is the Conference Director for the tenth conference in the Thredbo series which will be held on Hamilton Island, Australia in August 2007. Ruth is also secretariat to the ITLS Board of Advice.

After moving to Sydney from the UK in September 2002 Ruth completed a number of short term assignments in executive support and education administration at the University of Sydney. Prior to this she worked in the Planning and Management Information Office of the University of Exeter, UK. After completing an undergraduate degree in Politics and Religion at the University of Lancaster she went on to gain her Masters in Ethnic Relations from the University of Bristol. Funded by a scholarship from the Economic and Social Research Council she was awarded her MPhil from the University of Bristol in 2004. The title of her thesis is: The Host Country, From Protection to Control: UK Refugee Policy and Practice. Ruth worked for two years as an Information Officer for a refugee agency providing reception support to refugees on arrival to the UK, prior to this she worked as a Front of House Manager at a community arts centre and theatre. Ruth is currently studying for a Diploma in Law with the Law Extension Committee of the Legal Practitioners Admission Board, University of Sydney. In support of her law studies, in 2005 Ruth was awarded a Career Development Support Grant from the University of Sydney’s Staff and Student Equal Opportunity Unit and in 2006 she was awarded a Staff Scholarship from the Faculty of Economics and Business.
Annette Thomas

Administration Officer

Annette has a varied professional background beginning with many years experience in early childhood development, working for the Gabba Greyhound Racing Club, Queensland Cricketer’s Club, the Y.M.C.A. and the Lions Australian Rules Football Club; all sponsors of child care centres. In more recent years she has had experience in superannuation and investment banking. Annette has travelled extensively and lived in Vancouver, Canada and London, England; she enjoys experiencing new cultures and exploring unfamiliar lands. At ITLS Annette is the first point of contact for student enquiries, her other tasks include assisting lecturers and helping to organize ITLS events. Annette enjoys working with the team at ITLS and meeting interesting people from around the world.

Mrs Loloma Wren (to December 2006)

BBus Kuring-gai CAE GradDipPR and Mktg

Industry Programs Coordinator

Loloma is responsible for the administration of ITLS’ industry programs for the bus and coach industry. Prior to joining the staff of ITLS, Loloma’s experience in education administration covered a number of professions including specialist physicians, accountants, the environmental health and building industries and dentists, in addition she has planned and organized a variety of conferences for the medical profession. Loloma has a BBus from UTS, Kuring-gai Campus and a postgraduate diploma in Public Relations and Marketing.
Research analysts

Stuart Bain

BInfTech BEng Hons Griffith MIEEE

Research Analyst

Stuart completed an undergraduate degree in engineering (microelectronic) in 2001 and was subsequently awarded the Institute of Engineers Australia’s Philip Jones Medal for his academic achievement, community involvement and advancement of the engineering profession. His doctoral studies, undertaken at Griffith University, examined how new algorithms may be automatically evolved to better solve particular classes of constrained optimisation problems. His research interests include evolutionary adaptation and algorithmic methods for complex systems. He is currently working within ITLS on algorithms for vehicle routing and combinatorial auctions.

Tony Bertoia (to August 2006)

BPsych (Hons), USYD, PhD USyd (submitted)

Research Analyst

Tony holds a Bachelor of Psychology with Honours degree from the University of Sydney and is currently completing his PhD in the School of Psychology under the supervision of Dr. Roslyn Markham. Prior to joining ITLS, Tony tutored and lectured in psychology at undergraduate level, presented papers at national and international conferences, and served as a volunteer telephone crisis counsellor with Lifeline. He joined ITLS in May 2004 and has worked with Professor Peter Stopher and Dr Stephen Greaves on a variety of projects, including evaluations of voluntary travel behaviour change programs, GPS surveys, household travel surveys, and an environmental air pollution study. Recently, Tony managed and designed a large community travel perceptions study in Adelaide, and presented the findings at ATRF in September 2005. He has also provided support to Professor Hensher and his team in investigating the transport needs of seniors in an ageing population.
Tony Biddle (to October 2006)
BCom MTM Usyd
Senior Research Analyst

After completing a Commerce degree at UNSW Tony spent some 12 years in the IT field in a range of roles. These included sales, programming and management. Later Tony worked in the capacity of business owner in vehicle warehousing and airport transfer transportation. More recently Tony spent 4 years as a full time bus driver for State Transit whilst studying a Masters of Transport Management at ITLS part time. At ITLS Tony works with Professor Peter Stopher, Dr Stephen Greaves and the team on the Travel Smart evaluation project. His main professional interest is in improving transport and planning policies in Australia. He brings to ITLS a variety of relevant industry experience and an understanding of the workings of many facets of transit organisations.

Andrew Collins
BA/ BSc Hons NSW
Research Analyst

Andrew joined ITLS in December 2002, working casually on a range of internet stated choice surveys. In 2003 he completed his honours year of a combined BSc/ BA degree. Co-supervised by Peter Stopher, he completed his thesis on ‘Web visualisation of GIS data’, achieving first class honours. Andrew joined ITLS full time in November 2003. He developed an online, animated trip visualisation tool for use with prompted recall surveys that utilise GPS data. Andrew has built a range of database systems to improve the data integrity and administrative efficiency of the many Stopher projects. He has an interest in improving the visual quality of survey materials, computer surveys, and database front-ends. In addition to the numerous online surveys that he has constructed, Andrew has programmed computer assisted personal interview survey programs for a range of research projects, including the study of urban freight movement with David Hensher and Sean Pickett, toll road and route choice studies with David Hensher and John Rose, and bushfire evacuation studies with Peter Stopher and John Rose. Andrew has worked extensively with John Rose and Michiel Bliemer on the generation of optimal experimental designs for stated choice experiments. He is currently developing a software package that will find highly efficient designs for a wide range of stated choice experiments. With Stephen Greaves, Andrew has examined the impact of aircraft noise, with a particular focus on the exposure consequences of a dynamic, moving population. Andrew has several refereed journal articles in press, and has presented papers at several conferences. In 2006 Andrew was awarded the David Willis Memorial Prize from the Australasian Transport Research Forum 2006 for the best paper by a student or new professional.
Since joining ITLS in July 2003, Camden has been involved in numerous projects with Professor Peter Stopher. A large component of this has been evaluating TravelSmart® Programs in Canberra, New South Wales, Adelaide and Victoria. One component of these evaluation projects has been the use of passive GPS devices to measure household travel. He has also used GPS devices to measure household travel for participants in the Sydney Household Travel Survey, with the aim of measuring the level of under-reporting by the household travel survey diaries. Camden has also worked with a GPS manufacturer to test the level of accuracy of their dead-reckoning devices. He has been working on an ongoing basis with a company in South Australia developing a state-of-the-art passive GPS device the size of a mobile phone. He has also been working on the development of GIS software for processing and analysing data, namely GPS data. He is also currently working on a project processing and analysing GPS data from Switzerland. Currently, Camden is working with Peter Stopher to determine the optimum duration for respondents to carry GPS devices analysing the point at which there are no longer gains in variance reduction and compliance. Camden is also working with Dr. Stephen Greaves monitoring truck freight movements in Victoria as part of the development of new forecasting procedures. The data will be among the first publicly-collected data set collected on freight movements in Australia. He developed a nation-wide database on the passenger transport industry, commissioned by the Bus Industry Confederation, it includes an extensive profile of the public and private bus industry and represents the importance of public transport to the Australian community. Working with Professor David Hensher, he has compiled a very large data base of over 1100 studies on direct and cross elasticities for prices and service levels for car and public transport. A meta-analysis will search for sources of systematic variations in the estimates. He is currently completing a Masters in Transport Management and his main interests lie in Transport Planning with a particular interest in public transport and Transport Modelling.

Dr Tharit Issaryarangyun

BCivilEng KU  MCivilEng A IT  PhD Civil Eng UNSW

Research Analyst

Tharit Issayarangyun achieved his Bachelor of Civil Engineering in 1998 with second honour from Kasetsart University, Thailand. He received a partial scholarship from The Asian Institute of Technology, Thailand, to pursue his Master of Civil Engineering (Transportation Engineering) which he completed it in 2000. After that he worked as a research associate at the Asian Centre for Transportation Studies for one year. His particular duties were to lead a group of graduate traffic engineer, provide supervision on traffic data collection, research and analyse the relationship between traffic conditions and ambient air quality using Bangkok as a case study, and assist the project manager in final report writing.
He completed his Doctoral degree in Civil and Environmental Engineering from University of New South Wales in 2005. His PhD thesis involved studying the impacts of aircraft noise on community health and well-being, and developing a 'new' easier-to-interpret aircraft noise index. After finishing his PhD, he worked with Renzo Tonin and Associates (NSW) for one year in their Environmental Acoustic Team (2) as a graduate engineer. He was involved in a diverse range of acoustical projects. His responsibilities included site inspections, environmental noise calculations, computer noise modelling and providing advice on the control of noise.

He is currently working within the Institute of Transport and Logistics Studies on determining the variability of personal exposure to fine particulates for urban commuters inside an automobile.

Natalie Swann
BSc NSW
Research Analyst

Natalie has been working at ITLS on Professor Stopher's project team since May 2004. In that time she has contributed to TravelSmart Evaluation projects in Canberra, Sydney, and Adelaide and to the development of long range monitoring methods for a national evaluation. Her primary responsibility at present is the management, administration and analysis of a multi-wave Odometer Survey being conducted with 1200 households in Western Adelaide and being piloted with an additional 200 households in Melbourne. Natalie is a graduate of the University of NSW, where she studied Geography, focussing on urban and regional social science. She has training and experience in both quantitative and qualitative data collection and analysis, and is skilled in the production of critical, investigative text analysis.

Jun Zhang
BEng Hons Wuhan
Research Analyst

Jun Zhang holds a Bachelor of Engineering with Honours degree from the Wuhan Technical University of Surveying and Mapping and worked as a surveyor in China. Jun joined ITLS in April 2005 and is currently working with Professor Peter Stopher on the use of passive GPS devices in household travel surveys. His main interests are programming, GPS and GIS data processing and analysis.
Higher degrees by research program

Geoffrey Clifton
BEcon Hons QLD

Doctoral Student

PricewaterhouseCoopers (PwC) Australia Research Scholarship in Transport and Finance

Geoffrey holds a Bachelor of Economics with first class Honours in Economic Statistics from the University of Queensland where he graduated in 1999. Prior to joining ITLS Geoffrey worked for three years at the Reserve Bank of Australia in Sydney in the Financial System Stability Department. In July 2003 he was awarded the PricewaterhouseCoopers Australia Research Scholarship in Transport Economics to undertake research leading to a PhD. In his role as a Doctoral research student and research analyst in ITLS, Geoffrey focuses on public transport issues, in particular the challenge to grow public transport patronage and the role of frequency and connectivity on the demand for bus services along 'Strategic Bus Corridors'. Research projects in ITLS focus on the use of stated choice methods and optimal pricing theories as tools to support the development of public transport outcomes that are both socially optimal as well as financially viable to operators in the presence of optimal subsidy payments.

Supervisors: Professor David Hensher and Dr John Rose

Ms Wafa Dabbas
BSc MSc

Doctoral Student

Wafa holds a BSc in civil Engineering and MSc in Engineering / UK. She has experience in transport policy and planning. She has skills in international procurement and projects management. Her research area is in Transport and the Environment "Modelling Vehicle Emissions from Urban Air Quality Perspective: Testing Vehicle Emissions interdependencies".

Supervisors: Professor David Hensher and Professor Peter Stopher
Alejandra Efron

BEng Argentina MSc Brazil PhD Usyd (submitted)

Doctoral Student

An industrial engineer (Argentina), Master in Logistics (Brazil) and a specialist in International Transportation (UNCTAD), Alejandra has worked for Ryder Latin America leading the development and implementation of Toyota’s interplant Logistics, ISO9002 certification and other tasks. Her interest is in researching the logistics strategy choice for small and medium firms using Stated Preference techniques. Commenced Doctoral studies in 2001 and submitted thesis for examination in September.

Supervisors: Professor Ann Brewer and Professor David Hensher

Alejandra later joined the Red Cross and travelled to Aceh, Indonesia, to assist with rebuilding after the tsunami

The International Federation of the Red Cross has been granted the European Supply Chain Excellence Award (ESCA 2006) for their supply chain for disaster response. This award is conducted every year to identify the best supply chains from the leading companies around the world. The Federation’s supply chain not only won in its category (the Public and not for Profit Sector) but was also named as the overall ESCA winner.

Alejandra Efron, one of our PhDs, joined the Australian Red Cross for 12 months to assist in the Tsunami Operation in Banda Aceh, Indonesia.

‘Working for the Red Cross as a logistician proved challenging and fulfilling. I look forward to embarking in another mission!’

What is Humanitarian Logistics?

Humanitarian Logistics, or Relief Logistics, refers to the management of emergency relief supplies from source to the beneficiaries, both efficiently and effectively. The importance of a coordinated supply chain management for an efficient and effective response, as well as the optimisation of the use of scarce resources acquires a crucial significance in a humanitarian context: it means saving lives and diminishing the impact of communicable diseases due to inhuman living conditions.

Humanitarian logistics’ tasks include movement of goods and equipment, as well as the relocation of disaster-affected people, transfer of casualties, and the movement of relief workers. During emergencies, the practical difficulties in managing the supply chain are immense; damaged or completely destroyed infrastructure (roads, bridges, ports, airports, warehouses),
quality and quantity of vehicles and handling devices available and additionally, the recruiting of local staff and volunteers who are still traumatised by the disaster and its aftermath.

The Tsunami Operation
The destruction left by the 26 December 2004 tsunami in Aceh province is gruesome. In Banda Aceh alone, more than 30,000 people were killed and thousands of bodies found on the streets placed in mass graves without waiting for identification in order to keep the sanitation situation from worsening. Towns completely washed away, while in others less than half of the population survived. The town port of Meulaboh, for example, was struck by a series of seven waves, killing an estimated 40,000 of its population and destroying most parts of the city.

The tsunami operation is among the largest logistic manoeuvres in the Federation's history. To deliver relief items, the Federation employed planes, helicopters, ships, trucks and all terrain vehicles. Heavy duty cargo helicopters were used to deliver large tonnage equipment such as water cleaning plants, medical equipment and vehicles. In Indonesia, over 2000 40ft. shipping containers of relief, recovery items and transitional shelters have been delivered.

The M6 trucks are extremely effective means of transportation, especially during and after rain. These heavy-duty, all-terrain six-wheel trucks have proven to be the most successful in places with destroyed roads and infrastructure. Long travel times to reach some locations awaits the logistician though. For example, to travel the 120 km between Banda Aceh and Calang (on Sumatra's western coast) can take up to two days: firstly, because near Lam No, you must cross over a river only by pontoon, which adds 3-4 hours to the journey (there is only one for all vehicles passing along this main western coastal route); secondly, due to security rules, you have to stay overnight in a village half way and continue the journey the next day.
Dr Melody Ju-Miao Hsiao

BSc MSc PhD Usyd (completed)

Doctoral Student

Melody holds a Bachelor of Science in Business Administration from University of Massachusetts, Lowell, and a Master of Science in Management Science from California State University, Fullerton. She has been a lecturer at Ling Tung College in Taiwan for ten years. Her current research area is in supply chain management, with special interests in buyer-supplier relationship, retail business and supply chain performance. The title of her PhD study is "The Determinants of Supply Chain Performance for Retail Outlets."

Supervisor: Professor David Hensher

Graduation Ceremony for Dr Melody Ju-Miao Hsiao

L - R: Professor David Hensher, Dr Melody Hsiao and Mr Hsiao

Louise Knowles

BA Hons UNSW MBA Deakin

Doctoral Student

Prior to commencing a PhD in July 2004, Louise worked with Professor David Hensher in his role as Associate Dean (Postgraduate Coursework Programs) on a range of strategic initiatives in the Faculty of Economics and Business. Her diverse background includes market research analysis and defence logistics. Current research interests include uncertainty, contracting, bus industry reform and choice modelling. Thesis title: ‘In Search of the Perfect Contract: A global perspective on bus service provision’.

Supervisors: Professor David Hensher and Dr John Rose
Zeyan Zhang
BEcon MLM Usyd

Doctoral Student

Zeyan Zhang holds a Bachelor of Economics with accounting and auditing major and a Master of Logistics Management from ITLS. Due to high scholastic achievement, she was awarded the Ma Ching Prize for the most outstanding student in the graduate coursework or research program in transport and logistics, and has been selected for membership in Beta Gamma Sigma, the international honour society for collegiate school of business. She has six years’ experience of Business Analysis, Procurement and Cost Management in manufacturing industry in China and one year’s experience of accounts management and freight management in an international forwarding company of Sydney. Her research area is supply chain disruption costs and disruption management strategies.

Supervisors: Dr Miguel Andres Figliozzi and Professor Peter Stopher

Jaafar Zamhari

BSc/ BA MBA/ A

Doctoral Student (deferred for one year)

Jaafar holds a Bachelor of Science in Business Administration (Finance) from West Virginia University and a Master of Business Administration in Aviation from Embry-Riddle Aeronautical University, Florida. He is a licensed Air Traffic Controller by profession, but currently works as an Assistant Director at the Department of Civil Aviation Malaysia. Jaafar’s research interest is in household travel survey data. His thesis topic ‘Simulating Tour-based Synthetic Household Travel Survey Data’.

Supervisors: Professor Peter Stopher and Dr Stephen Greaves

Sean Puckett

BA Hons MA Washington PhD Usyd (2006)

Doctoral Student

Sean is a PhD student at ITLS, holding a Bachelor of Arts in Economics and German from the Honours Programme at Western Washington University, and a Master of Arts in Economics from the University of Washington. Sean has collaborated with ITLS researchers in the areas of: urban goods movement, interactive agency choice modelling, road pricing, survey instrument design, group behaviour inference methods, advanced discrete choice modelling and impacts of security measures on shipping activity.

In his third year of study at the Institute, Sean is compiling his thesis, “Multi-Agent Modelling in Urban Freight Distribution: A advanced Stated Choice Analysis of Distance-Based Road User Charges”. His
research, part of an ARC-funded ITLS team research initiative on urban freight, discrete choice methodology and the study of choices of interdependent decision-makers, centres on the economic behaviour of providers of freight services and their clients under various road-user charging configurations and corresponding levels of service. Sean’s 2005 research agenda includes: the synthesis of the theoretical frameworks developed with his supervisors, data collection, generalised mixed logit analysis, minimum-information group inference (MIGI) analysis, the submission of his thesis and the publication of several articles of empirical and theoretical interest relating to his doctoral research. Sean has a School of Business scholarship.

Supervisors: Professor David Hensher and Professor Peter Stopher

Rahaf Alsnih

BSc Hons UNSW

MPhil Student (in progress)

Rahaf is currently undertaking a thesis on the travel needs of seniors with particular focus on the role of transport alternative to the car. Prior to this, Rahaf was a Senior Research Analyst at the Institute of Transport and Logistics Studies, the University of Sydney, for three years. During this time she worked on numerous projects which investigated household evacuation behaviour during urban bushfire threats; she worked on a project which developed recommended standards and guidelines for many items of household travel surveys, a project conducted for the U.S. National Academy of Sciences; she was involved with TravelSmart™ Evaluation Projects in Canberra and New South Wales; and also the Travel Needs of Seniors study, which involves her post graduate research studies. She is currently devoting her time to her post graduate research and is currently conducting in-depth interviews and an attitude surveys with individuals aged 65 years and over.

Supervisors: Professor David Hensher and Dr Stephen Greaves
ITS-Monash

Academic and research staff

Geoff Rose
BEng QIT, MSc PhD Northwestern, MIEAust CPEng
Associate Professor
Director, ITS Monash

Geoff’s professional interests cover intelligent transport systems and sustainable transport, specifically travel demand management, travel behaviour change and non-motorised transport. His experience spans government, consulting and academia. He is Director of the postgraduate program in transport and traffic and is the author of four units currently offered in the program: Intelligent transport systems, Traffic engineering fundamentals, Transport network models and Transport Planning and Policy. Active research projects relate to travel behaviour change programs, understanding use of off-road bicycle facilities, appraisal and evaluation of travel demand management initiatives and measurement and modeling of motorway travel time variability.

William Young
BE (Hons I) UNSW, GradDipMgt Deakin, MBA Deakin, MSc, PhD, FIEAust, FCIT, FITE, MACRS
Head
Monash University

Professor William Young is Chair of Civil Engineering, Monash University. He has a distinguished professional and academic career, having worked at Monash University for 29 years and prior to joining Monash in the transport industry in England, Germany and several states of Australia for four years. He has also held visiting positions at Oxford, Nanyang, Karlsruhe, Michigan State and Hong Kong Universities, and with the Australian Bureau of Transport and Communication Economics. He received his BE (with honours) degree from the University of New South Wales (1970), his Graduate Diploma in Management and MBA from Deakin University (1997, 1999), and his Master of Science (1990) and PhD (1982) from Monash University. Professor Young has wide-ranging interests and has researched, consulted and published widely in the areas of land-use/transport/environment interaction, parking, engineering management and education. He has worked on several international research projects with teams from Sweden, Hong Kong, Japan, the UK, Germany and Indonesia, and was an Associate Editor of the international journal Transportation for 12 years. He has published over 300 papers and co-authored four books on transportation. He has been awarded a Chartered Institute of Transport Excellence Award, Bureau of Transport and Communication Fellowship, Alexander Von Humboldt Fellowship, and Monash Postgraduate Award. He has 29
years experience in teaching at an undergraduate and postgraduate level, and has also developed and run many distance education programs, short courses and workshops for industry. Professor Young has held a number of senior administrative positions at Monash, including: Head of the Department of Civil Engineering (1999-date), Head of the Caulfield Division of the Department of Civil Engineering (1995-1997), Head of the Institute of Transport Studies (Monash) (1995-1998), Head of the Monash Transport Group (1994, 1995, 1996), Director of Graduate and Further Education in the Faculty of Engineering (2001-date) and Chairperson of the Monash University Advisory Committee on People with Disabilities (1997-2002). He is a Fellow of the Institution of Engineers, Australia (IEAust), the Institute of Transportation Engineers and the Chartered Institute of Transport, and a Member of the Australian College of Road Safety. He has been Chair of the Victorian Transport Committee (IEAust), the National Committee of Transport (IEAust), and the Institution of Transportation Engineers Australia.

Graham Currie
BSc (Hons) Huddersfield, MSc Cranfield
Professor of Public Transport, Department of Civil Engineering

Professor Currie has over 25 years experience as a transit planner and researcher. He has worked for some of the world’s leading public transport operators including London Transport. He is an internationally recognised advisor on public transport planning and has undertaken research projects in Europe, Asia, North America and throughout Australasia. He is a World Bank accredited consultant and has developed and managed training programs in public transport planning for them in Asia. Professor Currie is a member of the US Transportation Research Board committee on Bus Transit Systems and also the TRB committee on Light Rail Transit. He is a member of the UITP (International Association of Public Transport) academic network and the Victorian Roads Based Public Transport Advisory Council in Australia. Prof Currie has led numerous research projects in public transport in all states and territories of Australia as well as assignments in Europe, Asia and North America. His research interests include bus rapid transit, behavioural factors in transit use, improving streetcar operations, transit signal priority, social perspectives on transit planning, market futures in transit, demand responsive transit, transit interchange design, schedule coordination optimisation and planning transit systems for major special events.
Majid Sarvi
BEng MEng Tehran, PhD Tokyo
Lecturer

Majid’s masters degree was in highway and transportation engineering. He worked at Tokyo University on the subject of traffic and transportation with emphasis on human factors and freeway operation and obtained his PhD there. He worked as a research fellow at Tokyo University and was the Chief Engineer at the i-transport laboratory in Tokyo. Majid has also worked as the chief researcher of the ITS research group of the Social System Research Institute and as a transport analyst with the Hong Kong Transport Department. Majid’s research interests include traffic operations, traffic flow theory, transport modeling, micro simulation programming, intelligent transport systems, public transit, application of GPS to transport studies, and highway operations. Majid joined ITS as a Research Fellow and was appointed to the position of Lecturer in Civil Engineering in February 2004.

John Clements
Bcom DipEd Mec Madm FCILT
Program Director
Transport Management Course in Bus and Coach Operations

John joined ITS (Monash) in July 2000. Prior to that he was Acting Head of the School of Marketing at RMIT University, and had previously been Head of the Department of Marketing, Logistics and Property and a Principal Lecturer responsible for the Transport and Logistics Management Group at RMIT. John is a Fellow of the Chartered Institute of Logistics and Transport and actively involved in the CILT (Victorian Section) General Committee and is Chair of the Passenger Transport Group. His major interests are in transport economics, policy and management and he is the author of the postgraduate unit Transport Economics which is offered by distance education as part of the ITS (Monash) Masters degree program in transport and traffic. He has professional and consulting experience in the public sector, including the Victorian Ministry of Transport, the public transport operating authorities and water resource boards. John is a member of the editorial advisory board of the International Journal of Logistics: Research and Applications. He has undertaken quality assurance auditing with Open Learning Australia.
Astrid De Alwis
BA Melb, GradDipTr&DistMgt RMITU, MLogMgt, MCILT
Assistant Program Director
Transport Management Course in Bus and Coach Operations

Astrid is a logistician with a transport background. Initially in freight and currently in passenger transport, she has taught, written and/or practised transport for more than fourteen years. Working as a transport consultant to several commercial transport organisations, she has produced some key industry publications. Astrid’s chief strength lies in her varied and cross-disciplinary educational and experiential background. Having worked in government, industry and academia, and on local and international projects, Astrid brings to ITS (Monash) a broad blend of skills and aptitudes.

While assisting with the ongoing development and delivery of the Transport Management Course in Bus and Coach Operations, Astrid is also pursuing a consulting interest in business systems and business development.

Imran Muhammad
BSc (CRP), MSc (CRP) UET, MSc (UP) Hong Kong, PhD Melb, MCILT, MISoCaRP
Research Fellow

Imran has received his PhD from the University of Melbourne. The focus of his research was to identify and examine the institutional barriers that are hindering the development, application and implementation of sustainable urban transport policies in the developing countries. Imran trained as an urban transport planner by completing his master degrees from the University of Hong Kong and the University of Engineering and Technology, Lahore. Prior joining to ITS in August 2006, Imran worked in Australia, Hong Kong and Pakistan as a researcher and consultant in transport planning for over 10 years. His research interests include urban transport planning and policies for sustainable cities.
Adjunct faculty

Rahmi Akçelik
CivEng ITU, PhD Leeds, Fellow IE Aust, Fellow ITE

Director, Akcelik and Associates Pty Ltd

Dr Akçelik is an Honorary Associate in the Department of Civil Engineering at Monash University, and Director of Akçelik and Associates Pty Ltd. He is a leading scientist and software developer in the area of traffic management, with over 250 technical publications in his area of expertise. His research and software development company specialises in the areas of road traffic operations, traffic engineering, management and control. Dr Akçelik is member of various US Transportation Research Board (TRB) Committees. Awards received by Dr Akçelik include the 1999 Clunies Ross National Science and Technology award for outstanding contribution to the application of science and technology in Australia, and the Institute of Transportation Engineers Australia and New Zealand Section Certificate of Commendation in recognition of an outstanding contribution to the advancement of the profession, and the Institute of Transportation Engineers (USA) 1986 Transportation Energy Conservation Award for research into energy savings from urban traffic management.

Rita Seethaler
MEc Berne

Rita graduated with a Master of Economics and Political Science from the University of Berne, Switzerland, in 1994. She has worked for the Swiss Federal Office of Statistics and for the Bureau of Transport Studies (Federal Department for Environment, Transport, Energy and Communications), Berne. She is presently a Director of the Urban Transport Institute, Victoria and an Associate of the Institute of Transport Studies (Monash University). She is the author of the postgraduate unit Infrastructure project and policy evaluation, which is offered by distance education as part of the postgraduate program in infrastructure engineering and management at ITS (Monash). Rita is currently undertaking a PhD with ITS (Monash).

Tony Richardson
BE (Hons) MEngSc UNSW PhD

Tony has wide experience in academia, having worked at Monash University, RMIT, the University of Melbourne, the University of Sydney and Cornell University in the USA. He has also worked for the Australian Road Research Board, the Victorian Ministry of Transport and in his own consulting practice. As well as being an Adjunct Professor at Monash, Tony is also a Director of the Urban Transport Institute, Victoria. He is the author of the postgraduate unit Infrastructure project management which is offered by distance education as part of the postgraduate program in infrastructure engineering and management at ITS-Monash.
Visiting academics

Associate Professor Arvid Arkre
August 2005 to June 2006

Professor Arkre currently works at the Norwegian University of Science and Technology, Department of Civil and Transport Engineering, Trondheim, Norway. Arvid's research interests include: Traffic flow theory; Traffic management; Traffic signals; Capacity and level of service for roads and different types of junctions; Driver behavior and efficient traffic flow; Traffic survey methods and equipment; Traffic simulation and modelling; Queueing theory and statistical modelling; Computer models and programming; Intelligent transport systems; Road traffic accident investigation.
Brenda O’Keefe
Administration Manager

Brenda is responsible for managing administrative support at ITS (Monash). This includes administering all aspects of ITS (Monash)’s industry distance education programs in the Transport Management Course in Bus and Coach Operations and the Education Program in Parking Management. She handles all general course enquiries, student enrolment and record keeping as well as all written communications with students throughout the semester. Brenda is also heavily involved with the role of administering all aspects of the Department of Civil Engineering’s off-campus learning postgraduate programs in Transport and Traffic and also the Infrastructure Engineering and Management program. This also includes handling all general course enquiries, processing enrolments, re-enrolments, withdrawals and completions and carrying out extensive liaison with the Off-Campus Unit at Gippsland, other areas within the university system and the Faculty of Engineering’s Postgraduate Manager. In her administrative support role, Brenda manages the production of all advertising and study guide material (which includes extensive liaison with printers and designers), and supports all other ITS (Monash) activities including seminars, workshops and public lectures. Brenda also undertakes website and MUSO development and maintenance for ITS (Monash) as well as for the Department of Civil Engineering’s postgraduate programs.

Julia Arnold
Administrative Officer (Finance)

Julia was working one day a week to provide income and expenditure reports, budgets, projections and other financial accounting services, as well as assisting with reports and other large administrative tasks. Early in 2006 resigned to pursue an opportunity to work in the education sector in regional Victoria.
Research analysts

Zed Janis Senbergs
BSc (Hon) RMITU, BA Melb
Research Assistant

Zed came to ITS with experience in cartography/GIS and spatial research. Prior to joining ITS he was employed in cartographic publishing and had earlier research experience at the School of Mathematical and Geospatial Sciences at RMIT University amongst other things. He has degrees in multimedia cartography, history and political science.

Ali Zavabeti
Research Assistant

Ali joined the Institute of Transport Studies in 2006 as a research assistant primarily working on the development of the Institute’s instrumented vehicle. Prior to this he received a Bachelor of Telecommunications Engineering with honours from Monash University in 2006. He has intention to pursue a MEngSc (Res) under the supervision of Dr Majid Sarvi and Associate Professor Geoffrey Rose focussing on driver behaviour prediction utilising hidden Markov, dynamic Bayesian models and neural networks.
Higher degrees by research program

Daniel Csikos

B.Sc (Aust Env Stud)(Hons I) Griffith

Doctoral Student

Daniel graduated with a Bachelor of Science in Australian Environmental Studies from Griffith University, Brisbane, in 1997. He began work for Melbourne’s public transport industry in 2000, for Yarra Trams. Roles included operations analysis, scheduling and market analysis. Daniel was awarded a joint Metlink-Monash PhD scholarship.

Supervisors: Professor Graham Currie and Associate Professor Geoff Rose

Mahmoud Mesbah

BSc (Civil), University of Tehran, MSc (Transportation Planning), Iran University of Science & Technology

Doctoral Student

Mahmoud completed his BSc in Civil Engineering at University of Tehran and graduated with a MSc in Transportation Planning from Iran University of Science & Technology. His previous research included approaches for reliability assessment of transport networks. Mahmoud was awarded a Monash Graduate Scholarship in 2006 when he commenced his research at ITS (Monash). Mahmoud is working on optimization of transit priority systems to be applied to the transport network.

Supervisors: Professor Graham Currie and Dr Majid Sarvi

Mark Karpovich

BE MEng Sci

Doctoral Student

Mark has more than 20 years’ experience in infrastructure and transport engineering projects in Hong Kong and Australia. His present field of study is transport and infrastructure projects with western technology financed in China. This research aims to investigate success factor influence by comparing conventional and joint venture style projects.

Supervisor: Professor William Young
Md. Aftabuzzaman

BE (Civil) (Hons), Bangladesh University of Engineering and Technology, M Eng (Transportation Planning), The University of Tokyo

Doctoral Student

Aftabuzzaman has worked as a lecturer of Bangladesh University of Engineering & Technology. His previous research interests include travel demand forecasting, mode choice modelling, traffic performance measurement and parking demand and supply analysis. He has long been involved in the activities for encouragement of walking, cycling and public transport use. Aftabuzzaman has recently started his PhD study with a Monash Graduate Scholarship. His PhD study focuses on public transport performance measures of road traffic congestion relief.

Supervisors: Professor Graham Currie and Dr Majid Sarvi

Md. Iqbal Kabir

BE (Civil), Bangladesh University of Engineering and Technology

Doctoral Student

Iqbal has completed his Bachelor of Science in Civil Engineering from Bangladesh University of Engineering and Technology, Dhaka, Bangladesh. He is working as an Executive engineer in Dhaka City Corporation, the capital city council. As part of the Master of Engineering Science Degree he commenced in June 2005, he is modelling various aspects of impacts of land use pattern changes on transport systems of Melbourne Metropolitan area with an integrated land use-transport interaction model TRANUS. With that model, he is also examining impact of transport policy changes (such as construction of new large road infrastructure, introduction of new toll road etc) on land use patterns.

Supervisors: Professor William Young and Professor Graham Currie

Mike Shackleton

Doctoral Student

Mike is a Manager in transport operation at ARRB Group in Melbourne. His research aims to build a model for management of a public-good transport related research institutions.

Supervisors: Professor William Young and Professor Graham Currie
Richard Yeo

BE (Hons) M Eng (Res) RMIT

**Doctoral Student**

Richard has worked with Maunsell Consultants and VicRoads and is currently a Principal Engineer (Pavements) at ARRB. His main research interests are in the areas of construction quality, pavement performance, accelerated pavement testing, stabilisation and pavement materials characterisation. He is a member of the Austroads Pavement Technology Review Panel and is currently the manager of the Australian Accelerated Loading Facility (ALF) program. Richard is leading the research associated with investigating the impact of heavy vehicles on the pavement infrastructure. This is one of the largest research projects currently being conducted by ARRB, in terms of both scope and funding.

Supervisor: Professor William Young

Rita Seethaler

MEc Berne

**Doctoral Student (submitted in 2006)**

Rita graduated with a Master of Economics and Political Science from the University of Berne, Switzerland, in 1994 and is presently a Director of the Urban Transport Institute, Victoria and an Associate of the Institute of Transport Studies (Monash University). She was awarded a PhD scholarship by the Victorian Minister for Transport to develop evaluation approaches for “total transport” strategies. Rita is currently looking at this concept from the perspective of developing and measuring the impact of psychological persuasion techniques on peoples’ travel choices.

Supervisor: Associate Professor Geoff Rose

Roger Toleman

**Doctoral Student**

Roger has an extensive experience in transport planning and policy. He was Deputy Secretary, Strategic Directions at the Ministry of Transport in New Zealand. Roger has been involved in a wide variety of strategic initiatives and policy development in transport planning and responsible for the Ministry’s policy input into the National Land Transport Strategy. Roger’s research is exploring the relationship between toll roads and sustainable transport.

Supervisors: Associate Professor Geoff Rose and Dr Tony Richardson
Ruimin Li
BE (Highway and Railway), Inner Mongolia Polytechnic University, M Eng (Transportation), SEU, China
Doctoral Student (submitted in 2006)
Ruimin has worked as a professional engineer in Beijing in the areas of highway and intersection design. Previous research interests included pavement management and the evaluation of paving on steel decking. Ruimin was awarded a Monash Graduate Scholarship for her PhD study, which focuses on the long-term travel time variability prediction. Based on historical travel time data and weather forecasting information, the model she is developing would be able to provide estimated of travel time variability, such as the 90th percentile travel times, up to a few days before a journey commences.

Supervisors: Associate Professor Geoff Rose and Dr Majid Sarvi

Sara Moridpour
BE (Civil), Master (Transport Planning and Engineering), Sharif University of Technology, Tehran, Iran
Doctoral Student
Sara has worked on sensitivity of traffic equilibrium respect to some changes in the accuracy of network parameters. Her previous research interests include trip production and attraction models, travel time and volume delay functions, traffic assignment models and efficient methods for traffic surveys like cordon line origin-destination surveys. She also has been involved in the establishment of drivers' working hour standards in Iran. Sara has recently started her PhD study on a Civil Engineering Departmental Scholarship. Her PhD study focuses on lane changing behavior of heavy vehicles.

Supervisors: Dr Majid Sarvi and Associate Professor Geoff Rose

Tan Yan Weng
BE MEngSc MCILT MIE Singapore MREAAA
Yan Weng is an Associate Professor in the School of Civil and Environmentl Engineering at Nanyang Technological University, Singapore. His current PhD research is in the area of parking systems design, with particular emphasis on developing an interactive stated preference approach to collect information on parking behaviour in multi-use facilities.

Supervisor: Professor William Young
Tim Martin

Doctoral Student

Tim is a principal research engineer with ARRB Transport Research Ltd, and commenced his PhD in April 2001. He is working on the components of uncertainty in predicting pavement performance at a road network and road program level.

Supervisors: Professor William Young and Associate Professor Geoff Rose
EDUCATION

ITLS-Sydney

Graduate Program in Transport and Logistics Management

The Faculty of Economics and Business and the Institute of Transport and Logistics Studies at the University of Sydney offer a range of fully integrated and articulated graduate programs. Six degree programs are available to graduates or non-graduates with industry experience. These are the Graduate Certificate in Transport Management or Logistics Management, the Graduate Diploma in Transport Management or Logistics Management and the Master of Transport Management or Logistics Management. Students who have completed the MLM, MTM or one of the combined degrees on offer may be eligible to enrol in a research program leading to an MPhil or PhD in Transport Management or Logistics Management.

The demand for the units of study remains very high. Many of the students are enrolled in a major or minor in logistics and/ or transport management via the MBus, MCom and MIB as well as the transport and logistics degrees.

Coursework Degrees

GradCertTM and GradCertLM
Graduate Certificates of Transport Management and Logistics Management (4 units)

GradDipTM and GradDipLM
Graduate Diplomas in Transport Management and Logistics Management (6 units)

MTM and MLM
Masters of Transport Management and Logistics Management (8 units)

Combined Coursework Degrees

MTM / MLM
Master of Transport Management / Master of Logistics Management

MTM / MCom and MLM / MCom
Master of Transport Management / Master of Commerce
Master of Logistics Management / Master of Commerce

MLM / MIB and MTM / MIB and MTM / MURP
Master of Logistics Management / Master of International Business
Master of Transport Management / Master of International Business
Master of Transport Management / Master of Urban and Regional Planning
Graduate Program in Transport and Logistics Management - Enrolments

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Courses

The following transport and logistics management courses were taught during 2006:

(Students in each unit of study are given in parenthesis, excluding non-award and ITLS research staff who undertook a number of graduate units).

Summer Session (5 January - 27 February 2006)

Logistics Management (43)
Strategy and Supply Chain Management (38)

Semester 1 (6 March - 28 June 2006)

People, Work and Organisation (136)
Transport and Logistics Economics (56)
Logistics Management (104)
Strategy and Supply Chain Management (101)
Logistics Systems (50)
Intelligent Transport and Logistics Systems (22)
International Logistics (40)
Survey, Design and Management (9)
Transport Policy, Decision Making and Environment (25)
Logistics and the Environment (53)
Analysis Tools for Transport and Logistics (123)

Winter Session (3 July - 21 July 2006)

Maritime Logistics (52)
Special Topic in Supply Chain Management (6)
International Freight Transport (80)

Semester 2 (29 July - 17 November 2006)

People, Work and Organisation (149)
Logistics Management (97)
Strategy and Supply Chain Management (72)
Geographical Information Systems for Planning and Marketing (61)
Logistics Systems (64)
International Logistics (99)
Project Management in Supply Chain (52)
Land Use and Transport Planning (46)
Traffic Engineering and Safety Management (24)
Analysis Tools for Transport and Logistics (87)

Ms Andrea Luque Torres graduated with a Masters of Logistics Management degree on 12 May 2006, with Professor Peter Stopher
About our Graduate Program

To Dr Stephen Greaves
I am lucky that I have got opportunity to come here and to learn from people like you.
Nitin

To Professor David Hensher
Dear David, I am writing to appreciate for your excellent lectures and kind guidance. Through one-year study, I found the courses provided by ITLS are closely linked to contemporary supply chain management issues and the lecturers are very helpful and give us wonderful guidance as well. I’ve learnt not only the comprehensive theoretical knowledge, but also critical thinking and research methods that are helpful in my future career and life. Thank you and all ITLS staff very much again. I will never forget your guidance and be proud of having been a student of ITLS forever.
Yingying Li

Analysis Tools, Dr John Rose
The teaching was of a high standard.
Exciting teaching.
Both the lecturer and tutor were very knowledgeable.
Thanks a lot!! This is one of the best courses I took in University of Sydney.
Very vivid lecturer, impressed!
I am a student of the University of Sydney. I am undertaking my master’s degree in transport management at the ITLS. I wanted to nominate Dr John Rose (Lecturer in the ITLS) for the Outstanding Teaching Award and for the Excellence in Tutoring Award. He has taught the units of Analysis Tools for Transport and Logistics and Land Use and Transport Planning (mode choice models) during my study.
In my opinion if anyone deserves this award it is John. He not only has unparalleled knowledge of his subject, his method of teaching is simply adorable. He translates the theoretical knowledge with exceptional practical examples and makes the understanding of difficult concepts so easy to understand. John is an asset not only to the university but in my opinion to this society.
Each and every aspect of the criteria for selection for this award is so true in John’s case i.e.
He has helped me to think critically on my own
He has been interested in helping us to learn
He presents material imaginatively and enthusiastically
He shows how recent, relevant events relate
He provides helpful advice and useful feedback
He has been innovative
He supports our learning
Lecturers of his calibre are rare and it would be a great injustice if such a genius person is not rewarded publicly.
Yogendra Bhatnagar BE, ME, MIE (Aus)
Analysis Tools, Matthew Beck  
Good tutor and lecturer. Those involved in teaching this subject, stopped at any point to help you better understand. The course helps me learn a lot and the tutors are fantastic. I learnt a lot more here than most of other class and want to thank all the lecturer’s efforts. Thank you. It’s a great unit and I enjoyed doing it. Thanks.

Innovations in Logistics and Supply Chain, Robert Ogulin  
Very enjoyable subject, applying real-life issues and understanding. This subject provided an opportunity to apply all the knowledge and info gained in the basic or core logistic subjects. I think this subject should continue and be encouraged.
Notes, structure and readings were very relevant. Participation and discussion encouraged.
Applying the knowledge into our own research and case study was very satisfying.
Some frameworks are illustrated and related readings are pointed out to help the learning.

International Freight Transport, Frederic Horst  
Great examples, the lecturer’s experience in the air cargo industry provides powerful insights.
The lecturer is fantastic.
Very hands-on and practical materials for the airfreight industry. Very good coverage.
One of the best courses in the program.

International Logistics, Dr Andrew Kerr  
The lecturer is excellent and extremely responsive and supportive to students.
Andrew Kerr outlined the class clearly and concisely without any grey areas.
Great unit and highly enjoyable learning experience.
Appreciated Andrew’s flexibility with my full time work situation.
The best at the Sydney Uni! Andrew speaks in clearly and in an interesting way and connects theories to the real life - extremely useful for us.
One of the best units with a good level of teaching I have undertaken at Uni of Sydney.
Very informative lecture, fantastic!

Intelligent Transport and Logistic Systems, Chris Skinner  
Teacher is nice and willing to answer every question patiently.
The lecturer is very professional.
Lecturer is friendly and responsive to student’s questions.

Logistics and the Environment  
Interesting topic.
Challenging group and individual projects.
He encourages students to take part and ask questions during class.
Logistics Management, Dr Andrew Kerr

Dr Andrew gave a wonderful lecture each time. The lecturer encouraged the students to be involved in the study. Moreover, the explanations in class were clear and the lecture notes very useful. The lecturer is very good. I learned a lot in this unit. I am glad to enrol your course this semester and learn a lot from your lectures. As I finish all the required courses, I will be back to China next month and continue working in logistics industry. It is highly appreciated that you share your knowledge and experience with us. Though I worked in Flextronics for 2 years in logistics before, I knew little about the comprehensive logistics management approach and high-tech application in inventory management, procurement, distribution and other logistics related activities. I encountered problems in my job and they puzzled me for quite a long time. After learning your course, I gained a clear due about the operation of the whole system, which helped me understand and solve the problems. I put forward my suggestions on inventory management to Flextronics and met its real effect on improving efficiency and saved employee effort. The senior manager wishes me to go back to the company. Although my enrolled programme (Master of Logistics Management) lasts only nine months, it enriches my experience of studying in a foreign country. The experience is much more impressive rather than what I learned from books. Before I came to Australia, I thought it is easy and glorious to study overseas. But after that, I encounter difficulties in adapting myself to another totally different culture, society and education mode, which change my thinking and make me stronger. I realise that that piece of paper (graduate certification) accompany with considerable effort, that is no pain, no gain. I believe it will be my great treasure in my whole life. Finally, I would like to say THANK YOU from my bottom of heart.

Xi Feng

The professor is very good in this field. He gives very useful information to the class and also answers the questions clearly. Very interactive and case study based learning helped immensely. Great experience with Dr Kerr. Looking forward to sit in his class in future. Good teacher and learning environment. Gained a lot. The learning material has been provided in a very interesting way. Both text book theories and real life examples create a great experience for me.

Logistics Systems, Dr Miguel Figliozzi

Miguel is open-minded guy. Like to ask challenging questions in class, which helped me to think quickly. The assignments he given is well designed to help us learn things. By ask him question after class a lot of related issues are discussed. I like this study, useful challenging and bull-shit free. Throughout the course I’ve learnt to solve logistic problems in both quantitative and qualitative way which could be useful and applicable in the real life. The lecturer can deliver the concepts very clearly. He is able to give feedback to assessments timely. He also explains all assessments very clearly and it is good for students to choose to work in group.

Miguel is very nice and he knows what is useful and what is useless. I have learned very useful method and knowledge. Good. Generally speaking, logistics system gave me the chance to learn some useful and practical methods to resolve the problems of logistics/ sc system. Lecturer is very kind, nice and patient. I hope there should be more lecturers like Miguel.

Miguel, you are an excellent professor, I recognise you do a lot of effort to explain in simple words difficult topics. Congratulations. It’s worth to come to Australia to learn this topic with you.

I liked that the course is offered as an intensive course. I like the mixture of theoretical and practical issues. Lecturing style was very good.

This is an excellent course, well done Miguel! I like the teaching techniques and research put in.
It is the most practical course I ever had studied in ITLS. Research skills were new to me as I have not had a lot of experience in this task. I like the journal articles and believe the logistics systems book is one of the best books used at ITLS courses.

The class was enriching and interesting.

Lecturer is very kind, nice and patient.

Miguel, you are an excellent professor, congratulations.

This is an excellent course, well done Miguel!

The lecturer delivered the unit very well. I can say this is the best unit I ever attended.

The lecturer effectively made students participate in the class. And he also related the theory to practice well to give us a good profile of the maritime industry.

I... must say [he is] by far the best class and teacher at ITLS. Very informative and great experience.

Best course at ITLS! Really enjoyed and learned a lot.

The teacher made the difference he is very well prepared and knows how to explain things clearly.

Help to improve analysis skills and develop creative thinking.

The lecturer gives us a lot of opportunities to express ideas in the class with encouraging attitude.

Quick and friendly response by Miguel. Much appreciated.

Participation in class was encouraged and the friendly atmosphere allowed me to participate actively.

**Maritime Logistics, Dr Miguel Figliozzi**

The lecturer delivered the unit very well. I can say this is the best unit I ever attended.

The lecturer effectively made students participate in the class. And he also related the theory to practice well to give us a good profile of the maritime industry.

As someone who entered the course without any prior knowledge and experience in the maritime logistics industry, I have certainly learnt a lot about the industry.

Rare do I write here but must say by far the best class and teacher at ITLS. Very informative and great experience.

The teacher made the difference he is very well prepared and knows how to explain things clearly.

Best course at ITLS! Really enjoyed and learned a lot. Maybe good option to offer this course throughout semester. Time was a bit short but intensive was good. Different assignment and presentation topics very good concept!

This is Norway calling! When I graduated from ITLS this fall you told me to send you an email about my work. Well, here we go. I just got my ‘dream job’ at a company called Marintek Solutions. I will be working in various projects in the maritime industry, being a 4PL operator. Think this will prove to be a very good start for me, and a great opportunity to build experience on top of the basis of theory I got at ITLS. I start working the 1st of Oct.

Even Holte

**People, Work and Organisations, Dr Peter Lok**

The teacher is great. He makes the class interesting with all the theories and examples and stories about companies. I really liked the subject.

This is one of my favourite units so far. Lecturer has been supportive and responsive. The unit structure and target is clear. Lectures have been structured well.

Peter Lok is a great lecturer who is able to engage his audience and I was able to learn from this experience.

The teacher who gives this class is very good and I enjoyed coming to his class.
Good lectures. Thank you!
Good course, I have taken a lot out of it. Thank you!
Excellent lecturer!
I enjoyed the teaching style and method of passing information.
I would recommend my peers to take this course in the future.

Dear Peter

I am writing to sincerely thank you for the knowledge I received while attending your lectures, and want to express my admiration, adoration and respect to your charming characteristics. Your expertise is unparalleled and your patience was infinite.

At the beginning of this semester, many of the classmates around me said that your course is boring, which even made me have an impulse to drop it and choose a research course, finally, I still need to enroll it as it is a core unit. After that, I surprisingly found I learned a lot of management skills from your lectures. In the past I could not understand why some people could be the top managers while others have to be the followers. You helped me to solve my puzzle on many questions like this. Each time you put forward a case, it helped me to relate with the real experience in my past working experience.

I worked in bonded warehouse as an officer of logistics department in Flextronics for two years. I never thought about the whole corporation structure and function of each department, but obey the working instruction and repeat the same procedure day after day. After listening to your lecture, I realize how the organization operates well. I am certain that your skill as a professor was a significant enabling factor. Please allow me to say THANK YOU to you. Moreover, I greatly enjoyed the ease with which you interacted with students and appreciated the experience that you brought to me.

From my personal view, the experience of studying abroad is much more important than what I learned from books. I believe it will be my great treasure in my whole life. During the short 9 months’ study, I paid great effort to adapt myself to the society, the culture, the education mode here. Before this moment, I always said I hate the painful studying and will never be back to Australia. I know that I was making progress in the process of learning and living, and I appreciate the university brings me up. I wish I could come back to Australia and visit you one day.

Again, thank you for both your enthusiasm and sharing your knowledge with us. Finally, I would like to say I am really honored to be one of your students, though I am not an excellent one. I will keep working hard in future career after I go back to China.

Wish the wind-bell accompany you to spend every happy day.

Sincerely yours,

Feng Xi
**Project Management in Supply Chain, Elizabeth Barber**
Interesting subject. Fun materials, enjoyable computer lab.
Well done!
Very practical unit.

**Strategy and Supply Chain Management, Elizabeth Barber**
Elizabeth taught us by using many real business examples.
The research topics for the paper were interesting and helpful about supply chain.
The first time I like doing my assignments, thanks to her.
Very responsive, appreciate it a lot. Thank you!
Thanks for the lecturer’s hard work.
I believe it is a very good class in logistics management. I have learned a lot from Ms Barber.
I found the classes to be quite informative and I benefited from your teaching methods, especially the interactive case study based learning. I think the class was extremely useful especially given the fact that it is a core subject. I can take away from this a solid foundation to build on with other subjects that probe deeper into specific elements. Thanks again for a good experience and look forward to being in your class for something else if you teach other subjects in the future.
Karthik Venkataraman
I like the class discussion, learnt a lot from them.
The unit is very interesting.

**Survey Design and Management, Professor Peter Stopher**
Very good professor. Took his time to ensure we all understood the concepts, was very patient.
Stopher’s experience was terrific!!
Thanks Mr Stopher, I think I learned a lot from you.
Professor was very knowledgeable, flexible and I’m glad he was teaching the course.
Peter is an excellent professor. I like this course very much.

**Traffic Engineering and Safety Management, Dr Stephen Greaves**
Developed analytical skills.
Good interaction with teacher.
Crucial to understanding design process.

**Transport and Logistics Economics, Professor David Hensher and Dr John Rose**
Excellent teaching by Prof Hensher.
Very good lectures.
Strong communication attributes built into the course.
Very up-to-date, good lectures.
The unit was successful in broadening my intent in logistic economics, very well taught.
Transport Policy, Decision Making and the Environment, Professor John Pucher

The course was extremely useful in understanding transport issues around the world, to see similarities and differences between transport issues around the world.

I loved the topic and found it extremely interesting and informative.

One of the best courses I have done in the 6 years of my uni life.

Very, very satisfied the way he teaches is excellent. It was marvellous.

John is a great teacher who can motivate all his students in the class. His teaching style is pretty fresh!!

John is a passionate lecturer whose enthusiasm is infectious. The international experience he brings to the table is considerable.

Higher degrees by research

http://www.itls.usyd.edu.au/higherdegrees.asp

MPhil
Master of Philosophy (Transport Management or Logistics Management)

PhD
Doctor of Philosophy

With so many exciting and important themes available to research and the general shortage of well-trained researchers in transport and logistics, ITLS always encourages inquiries. The Institute invites individuals with strong interests in higher level research to contact us. We offer a Master of Philosophy (MPhil) and a Doctor of Philosophy (PhD) by research in any area of transportation and logistics. ITLS has a large number of research themes which we believe would make an excellent research program. These can range from highly quantitative to highly qualitative research topics with a focus on basic and applied research. ITLS has the largest group of postgraduate students in transport management in Australia. Our full time research students become close members of ITLS and have open access to research facilities and internationally renowned academic staff in transport and logistics.

Presentations

Each Higher Degree by Research student must present a seminar each year as part of the progress review of their research program. Seminars are chaired by each student’s supervisor.

The role of frequency and connectivity in delivering enhanced bus systems in urban areas: Developing a network of corridor services

Geoffrey Clifton

Supervisors: Dr John Rose and Professor David Hensher
Industry programs

In preparation for a move to online accreditation of bus and coach operators in NSW, ITLS undertook a major review and development of the entire offerings of non-award programs for the bus and coach sector. The Certificate of Coach Management (CCM) as a face to face program ended in 2006; however the Certificate of Transport Management (CTM) continues as a professional development program in partnership with the BCA (NSW) and Ministry of Transport. The new online program to be activated in February 2007 is a five-module program covering the minimum standards for new entrants to the industry as well as offering a refresher program for all existing operators who are required to maintain currency of knowledge of the standards. Further details are set out on the ITLS web at http://www.itls.usyd.edu.au/busandcoach.asp

Certificate of Transport Management – Bus and Coach (CTM)
http://www.itls.usyd.edu.au/busandcoach.asp#CTM

Established in conjunction with the Bus and Coach Association (NSW) and the NSW Government, this program has been designed to meet the requirements of accreditation for NSW bus and coach companies operating under the NSW Passenger Transport Act and enables operators to be accredited for all route bus, coach and tourist vehicle operations.

The program has recently undergone a review and rewrite which has resulted in a more streamlined program and one which, in 2004, reflected the NSW government’s bus reform agenda. As they are implemented, the CTM program material will be updated to take into account these reforms.

Topics covered in the 2006 CTM course include:

- NSW government structures
- Marketing
- Industry environment
- Employment relations
- Institutional settings and contracts
- Driver authority and coach operations
- MOT accreditation
- Vehicle maintenance and safety
- Reporting obligations
- Fleet age and DDA
- Knowing your costs
- Occupational health and safety
- SSTS sections, fares and T-card
- Financial management and financial viability

The 2006 program has attracted more students as the course covered new legislative requirements for bus and coach operations as introduced by the NSW government.

Some comments from past CTM participants:

"Sessions were extremely informative and I will be able to implement much of the information to my workplace"

"The quality of presentations and level of knowledge of the lecturers is very impressive"

"All sessions were valuable and the topic content on the whole has been informative and relative"

"Having the manual will greatly assist in reinforcing the lecturers' presentations"
Certificate of Coach Management (CCM)

The Institute’s Certificate of Coach Management was developed in association with the Bus and Coach Association (NSW) and the NSW Ministry of Transport to meet accreditation requirements for the NSW bus and coach companies operating under the NSW Passenger Transport Act and developed specifically for operators accredited for long distance and tourist vehicle services.

Topics covered in the 2006 CCM course include:

- MOT accreditation
- Costing your service
- Driver authority: process and responsibilities
- Coach operations: driving hours, VMD
- Employment relations
- Knowing your costs
- Marketing
- Occupational health and safety
- Workers compensation
- Vehicle maintenance and safety
- DDA
- Financial management and financial decision making
- Safety and maintenance systems

This year a total 116 students enrolled in the February and June courses.

Some comments from past CCM participants:

“The speakers were well informed and helpful. The opportunity to meet others in the industry was great as you get to discuss relevant issues and meet people who have been in the industry for a long time”

“Even as a coach operator for three years, I found the sessions to be very enlightening”

“I am glad I attended the Certificate of Coach Management course, it has helped me to understand the coach industry and helped my decisions”

“Information covered was all very informative and relevant to the industry”

“Attending the course has been invaluable and I have certainly learnt a lot about the industry I intend to get into”

The Institute acknowledges the support it has received from both the Bus and Coach Association, the NSW Ministry of Transport and the team of industry professionals who are not only involved as lecturers in both the Certificate of Coach Management and Certificate of Transport Management programs, but who also update course material on an ongoing basis.
Executive programs

Advanced Certificate in Transport and Traffic Management (ACTTM)
http://www.itls.usyd.edu.au/executiveprograms.asp#ACTTM

While the ACTTM did not run this year, the Roads and Traffic Authority committed instead to sponsoring 8 of their top graduates of the program to undertake the MTM degree. Under this arrangement, the ACTTM constituted 3 units towards the MTM with the remaining 5 units to be taken by part-time study over the next 2 years. These 8 students have already completed Analysis Tools and Land Use and Transport Planning, leaving them with 3 units to go to complete the MTM. The ACTTM will run next year in a slightly different form with students taking transport policy to be taught by Dr Stephen Greaves in Semester 1. In semester 2 they will take traffic systems control and management and land use and transport planning in the postgraduate program with Professor Peter Stopher. ACTTM students will still take the introductory courses in mathematics and statistics, and Excel to be taught by Dr John Rose.

The following RTA (NSW) students who had completed the ACTTM were accepted for sponsorship to the Masters of Transport Management program (2007) at The University of Sydney.

Greg Allsopp       Kenneth Seeto
Yogendra Bhatnagar Linh Truong
Christian Chong-White Matthew Wong
Katherine Lunney   Paul Wade

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<td>181</td>
<td>****</td>
<td>15</td>
</tr>
<tr>
<td>2005</td>
<td>42</td>
<td>177</td>
<td>****</td>
<td>14</td>
</tr>
<tr>
<td>2006</td>
<td>50</td>
<td>134</td>
<td>****</td>
<td>8</td>
</tr>
</tbody>
</table>

** Two executive programs were run.
*** No programs except via Deakin in Australia.
**** From 2004 onwards, non-award students in logistics enrol directly into graduate units.
Almost without exception, everything human beings undertake involves a choice. In recent years there has been a growing interest in the development and application of quantitative statistical methods to study choices made by individuals with the purpose of gaining a better understanding both of how choices are made and of forecasting future choice responses.

The Discrete Choice Analysis and Choice Experiment Design courses are intended for researchers in fields in which consumer demand and choice is of interest. These include marketing, economics, health services, environmental science, engineering, planning, transportation, logistics and finance. The courses are intended for practitioners, academics, and managers in government and industry. Participants should have an appreciation of basic statistical concepts and spreadsheets and some familiarity with econometrics, but advanced training is not necessary. The introductory course will provide an unintimidating introduction to the main techniques of choice analysis and the design of choice experiments. The advanced course will build on this base knowledge introducing state of the art tools.

Discrete choice modelling and stated choice methods are widely used in many fields to study the preferences and behavioural responses of individuals, households as well as other organizations. The two courses on offer are designed to provide both theory and practical experience in the building and estimating of simple (e.g., Multinomial Logit (MNL)) and more advanced choice models (e.g., mixed logit), as well as in generating stated choice experimental designs. Whilst theory will be covered, the majority of time will be spent in a computer lab, working on building models using real data, and generating workable designs. Those completing the courses will be capable of transferring the techniques taught to their own research and practice areas.

Some comments from past participants:

Discrete Choice Analysis
Overall an excellent course. Great lecturers who are obviously world leaders in the field and are very motivating.
Excellent course, applied content is outstanding!
Undoubted expertise of teaching staff, probably very few places worldwide where you could get this knowledge.
The lab work/computer work, very practical hands-on experience was very worthwhile. It has helped me gain a greater understanding of the subject matter.
The running of the models in the lab was very useful.
Practical tips and ideas of what to do in practice were most important.

Choice Experiment Design
Good structure, clear explanations, very consistent approach and treatment of material between lecturers.
This is the best short course I have attended. The teachers have really structured the learning content to meet the course objectives.
Great stuff! You’ve nailed it, overall, a credit to both John and Mike.
This has actually given me the skills to go away and do it for real.
Cutting-edge methods in the field. Comprehensive and inclusive.
Found the course very enjoyable and really really useful. Mike and John were helpful and extremely knowledgeable plus really approachable and willing to help. Great.
Methodology for developing efficient designs, 5 star rating with 2 thumbs up.
Initiatives

The Institute of Transport and Logistics Studies home page

http://www.itls.usyd.edu.au/

Veolia Environmental Services internship program

Semester 2, 2006 ITLS ran a pilot industry internship program with Veolia Environmental Services. Four students worked in pairs on two projects. In the first project the students undertook an occupational health and safety analysis to identify the causes of risky behaviour that leads to accidents within the Industrial Services Group of Veolia. In the second project a feasibility study was conducted of the transport options for the Veolia's Woodlawn Bioreactor Operation. At the end of the program the students presented the results of their research at ITLS to their Veolia and ITLS supervisors and the Director of ITLS. On completion of the program ITLS obtained feedback from all parties involved; this feedback will be used to inform future industry participation initiatives at ITLS. There are some challenges to overcome and lessons to be learnt from the pilot program but overall it was a very positive experience for all.

Some feedback from our internship students:

“I think it was a good experience for us to have… it was very different to the academic environment which we’re used to. It gave us some broader perspective of what the industry expects from specialists, from consultants, which is I guess the better word, because our job was more like a consultant’s job... [it] opened some new horizons in front of us and saw how it could be done.”

“...it was the first time to really taste the flavour of working in a real industry environment. I am happy to finish my degree with this special research topic because it was not only a subject for me but it was a start of my career.”

“I think it was a great experience, in the sense that it was something very new. It puts to the test different things you’ve learnt, different things you’ve done in your life and different abilities that you may have gained through either previous experience in similar situations or through study itself. But to see it in practice and to see it all come together, I think, is the greatest gain we can actually get from this.”

“ITLS believed in us and by sending us out and allowed us to work on real projects, ITLS has proved that they want their students to outshine in real industry. I really appreciate that and thank ITLS for their help and support.”

Feedback from one of the Veolia supervisors:

“I think that I probably underestimated the feedback that I got on the opportunity for my managers to work with the students... they’re young guys, they’re bright guys, they’re probably a little bit un-acustomed to industry and I think that there was a bit of feel-good factor about assisting those guys achieve some of their goals. I think that whilst their course is prepares them for work in industry, in a lot of areas, the transition between learning and industry is quite a difficult one. With this particular project there was a considerable dollar value, that was tangible, and could be achieved as direct result of the findings and the recommendations that were made. If you want to understand why you work in industry and have context for why you do something. This project is a very good example, measured in... dollars and cents, a direct link between what the two students did and how those actions translate into significant dollars.”
ITLS Orientation


Every semester ITLS invites its new students to attend a half day orientation. The orientation provides valuable guidance on what new students can expect at ITLS and helps to ensure that their studies here are both enjoyable and successful. It is also a great opportunity for new students to meet ITLS staff and their fellow students. The orientation program includes tips on preparing assignments and using the web as a research tool, as well as introductions to some of the units of study on offer at ITLS. Morning tea and lunch are provided.

Feedback from our students on what they found most useful about Orientation:

Good overview.
Gives a lot of information about the library, black board and study related issues in concise manner.
I appreciated the mix of speakers and Faculty. It helped to give me a full bodied concept of the Institute and the resources available to students. I also though the step-by-step approach to the website was incredibly helpful, as most students wouldn’t think to mine the Institute website for a quarter of the information it has.
Free food!!
Lots of important information.
Dr Figliozzi’s talk successfully conveyed the urgency of having to work well with others.
Knowing how to use the web effectively.
Professor Peter Stopher’s explanation about course units was very helpful.
How to learn and manage myself through the course.
Preparing and formatting assignments.
Dr John Rose and Dr Miguel Figliozzi were extremely helpful with all the information provided which is very worthwhile to understand the University and the Institute’s functioning and features.
Met with people I am going to get along with...
Photos from ITLS Orientation, Semester 2, 2006
ITLS Sydney 2006 Awards Evening

The 2006 Institute of Transport and Logistics Studies annual presentation of awards and prizes was held on Saturday 25 March at the Forum Restaurant, The University of Sydney. This function, attended by 125 guests, provided an opportunity for the industry, guests and the Institute to acknowledge the achievements of students in the Institute’s graduate and industry programs.

This year the Institute’s Director, Professor David Hensher, gave the welcome speech. The presentation of awards and certificates for 2005 followed his address.

Collection of the perpetual wall plaques which are retained by ITLS

Collection of the glass trophies presented to each recipient at the annual ITLS Awards Ceremony
Awards and certificates for 2005 presented during the evening included:

*The Chartered Institute of Logistics and Transport (CILT) Ken Hillyar Award* for meritorious performance in the masters program with a major in transport or logistics management, presented by Ms Dorothy Koukari, Chairman (NSW Section) was awarded to **Mr Taurus Vysnauskas**. Taurus was presented with an annual membership to CILTA, a cheque ($200) and an inscribed glass trophy.

*The Chartered Institute of Logistics and Transport (CILT) Sir Hudson Fysh Award* for meritorious performance in the Masters program with a major in transport or logistics management, presented by Ms Dorothy Koukari, Chairman (NSW Section) was awarded to **Mr Tao Chen**. Tao was presented with an annual membership to CILTA, a cheque ($200) and an inscribed glass trophy.

*From left to right: Mr Tauras Vysnauskas (CILT Ken Hillyar award), Dr Miguel Figliozzi ITLS, Mr Tao Chen (CILT Sir Hudson Fysh award) and Ms Zeyan Zhang (Mrs MA Ching award).*

*The Logistics Association of Australia (LAA) Logistics Prize*, presented by Mr Allan Murray, Director and Vice President was awarded to **Mr Barney Blesing**. Barney was presented with an inscribed glass trophy.

*The Institute of Transport and Logistics Studies (ITLS) Prize* for excellence in graduate coursework or for research in transport or logistics management, presented by Mr Alastair Stone, Chair, ITLS Board of Advice was awarded to **Mr Christopher Bell**. Christopher was presented with a cheque ($250) and an inscribed glass trophy.

*The Bus and Coach Association Prize* for a student with the highest grade in the Certificate of Transport Management program, presented by Mr Darryl Mellish, Executive Director, Bus and Coach Association was awarded to **Mr Darren Carey**. Darren was presented with a cheque ($500) and an inscribed glass trophy.
The inaugural Mrs MA Ching Prize for the most outstanding student in the graduate coursework or the research program in transport or logistics, presented by Professor David Hensher was awarded to Ms Zeyan Zhang. Zeyan was presented with a cheque ($1000) and an inscribed glass trophy.

Mr Darryl Mellish, Executive Director, Bus and Coach Association presented certificates to the following students who successfully completed the 2005 Certificate of Transport Management course:

Darren Carey, STA  William Massey-Reed, STA
David Fisher, STA  Leslie Mlungisi Mpofu, MWT, Botswana
Steven Hawkins, Shoreline  Rick Sciarrone, Sydney Buses
Fiona Hemmings, Fiona’s Minibus  Anthony Shaw, Worrick John Shaw Pty Ltd
Roger Ibbotson, ATA Drivetech  Worrick Shaw, Worrick John Shaw Pty Ltd
Carl Searle, Hannaford’s Coaches  Nick Kole Lazarou, STA
Ms Dawn Peacock, Manager (Learning and Development, RTA) presented certificates to the following RTA students who successfully completed the 2005 Advanced Certificate of Transport and Traffic Management program:

Greg Allsopp          Kenneth Seetto
Murray Cleaver        Ray Tester
Andrew Dorrian        Matthew Wong

(Awarded in absentia):

Nicholas Boyd          Simon Stratton
Yogendra Bhatnagar     Linh Truong
Peter Keys

Award Recipients

Students who had completed four or more TPTM UoS, had majored in either Transport or Logistics and who had achieved 75% or higher in their overall grade (i.e., a Distinction average or higher) received a Certificate of Outstanding Achievement and a congratulatory letter from the Director, ITLS.

The following students were awarded a certificate in 2006 for results achieved in 2005:

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Jun Li</td>
<td>China</td>
<td>Transport and Logistics</td>
</tr>
<tr>
<td>Ms Hua Bai</td>
<td>Australia</td>
<td>Logistics</td>
</tr>
<tr>
<td>Mr Yang Zhou</td>
<td>China</td>
<td>Logistics</td>
</tr>
<tr>
<td>Ms Ka Wah Wong</td>
<td>Hong Kong</td>
<td>Logistics</td>
</tr>
<tr>
<td>Ms Yee Ling Pauline Wee</td>
<td>Singapore</td>
<td>Transport and Logistics</td>
</tr>
<tr>
<td>Mr Tao Chen</td>
<td>Australia</td>
<td>Logistics</td>
</tr>
<tr>
<td>Ms Jianying Li</td>
<td>New Zealand</td>
<td>Logistics</td>
</tr>
<tr>
<td>Mr Benjamin Tsai</td>
<td>Taiwan</td>
<td>Logistics</td>
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<tr>
<td>Mr Tauras Paul Vysniauskas</td>
<td>Australia</td>
<td>Logistics</td>
</tr>
<tr>
<td>Ms Jintana Thanavibulchai</td>
<td>Thailand</td>
<td>Logistics</td>
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<tr>
<td>Ms Zeyan Zhang</td>
<td>Australia</td>
<td>Logistics</td>
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<tr>
<td>Mr Christopher James Bell</td>
<td>Australia</td>
<td>Logistics</td>
</tr>
<tr>
<td>Mr Andrey Myasnikov</td>
<td>Russia</td>
<td>Logistics</td>
</tr>
<tr>
<td>Mr Barney Blesing</td>
<td>Australia</td>
<td>Logistics</td>
</tr>
<tr>
<td>Ms Kwankamon Asawarachan</td>
<td>Thailand</td>
<td>Logistics</td>
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ITS-Monash

Undergraduate teaching

Staff associated with ITS Monash continue to play a key role in the delivery of the undergraduate transport units in the civil and environmental engineering programs. The graph below illustrates the trends in undergraduate student numbers. Level 2 enrolments increased substantially this year. In addition to passing the 200 mark in terms of enrolments, the Level 2 core unit in Transport and Traffic Engineering increased from 4 to 6 credit points. This increase in the size of the unit reflected the implementation of a recent course review and involved incorporating an explicit oral and written communications component in the unit. In one of the assignments, students prepared a technical paper which they then presented at an end of semester ‘Transport Conference’. Enrolments have stabilised in the level 3 core unit which this year incorporated material on pavement design. That material fits naturally with the geometric design content of that unit.

![Undergraduate Student Enrolments Graph]

**KEY TO UNIT CODES:** CIV2281 - Transport and traffic; CIV3283 - Road engineering; CIV4283 - Transport planning; CIV4284 - Transport systems

*Trends in undergraduate transport unit enrolments*

Enrolments also rose in the final year electives, with the biggest increase being for the Transport Planning unit. Students in that unit completed a major project which involved designing and undertaking a survey of cyclists using Melbourne’s off-road bicycle paths. Vic Roads collaborated closely on the project which aimed to add value to the data currently collected from inductive loop detectors installed on Melbourne’s bike paths. Vic Roads also sponsored a prize for the winning team and the Manager of Vic Roads Bicycle and Pedestrian Programs (My Tony Barton) acted as second marker on the student reports and came along to class to provide verbal
feedback on all the student’s reports and to present the prize to the winning team. Geoff Rose presented a paper at the 2006 ATRF conference based on the CIV4283 class project¹.

Staff also supervise final year research project students who are enrolled in CIV4210 Project A and CIV4211 Project B (Professors Bill Young and Graham Currie, Associate Professor Geoff Rose and Dr Majid Sarvi). A total of 33 undergraduate students were supervised when undertaking final year research projects in transport in 2006. This was a dramatic increase on the 19 students who undertook transport projects in 2005. Details of those projects are provided in the section of this report which deals with research activities.

Apart from the dedicated transport units described above, the staff also contribute to other units in the civil engineering program. Dr Majid Sarvi is responsible for the transport component of the major group design subject (CIV4212 Civil engineering practice 4), which is a core unit in the final year of the civil engineering degree. Staff are also responsible for two other units in the civil and environmental engineering programs: CIV3204 Engineering investigations which is taught by Dr Majid Sarvi and CIV3205 Project management for civil engineers which is taught by Professor Bill Young.

**Undergraduate student prizes awarded in 2006**

**The GHD Highway Design Prize** – awarded to the group of Bachelor of Engineering students who submitted the best highway design – Michael Matthews, Deniz Ibrahim, Thomas Achilles

**The Richardson Prize in Transport** – awarded to the BE student showing the greatest proficiency in one transport elective and project – Jordan Allan

**The Traffix Group Prize** – awarded to the BE student showing the greatest proficiency in level 4 transport engineering elective subjects – Jordan Allan

¹ Rose, G. 2006, ‘Learning in more ways than one about the users of Melbourne’s bike paths’, Proc ATRF 2006 conference
Undergraduate student scholarships

The Traffix Group generously offers two scholarships to students who have an interest in and intend to pursue careers in transport engineering. The students must be in levels 2 and 3 of the Bachelor of Engineering degree at the time of application, and are awarded $1,000 and $1,500 respectively, as well as six to twelve weeks' work experience with the company. In 2006, the level 2 scholarship was awarded to Leigh Furness and the level 3 scholarship to Chris Arnott.

Postgraduate degrees by coursework

Graduate Certificate in Transport and Traffic
Postgraduate Diploma in Transport and Traffic
Master of Transport
Master of Traffic
Master of Infrastructure Engineering and Management (course management responsibility)

Trends in enrolments in the postgraduate coursework program are shown in graph below. Enrolments stabilised in 2006 with the postgraduate program in transport and traffic continuing to attract strong interest from throughout Australia and overseas. A new unit covering public transport planning and management was introduced in semester 2, 2006.

Postgraduate Coursework Enrolments

Transport and traffic related units offered in 2006, as part of the distance education postgraduate coursework degree programs, are listed below along with details of the unit co-ordinator:

CIV5301 Traffic engineering fundamentals (Rose)
CIV5302 Road traffic: engineering and management (Young)
CIV5303 Quantitative methods (Sarvi)
CIV5304 Intelligent transport systems (Rose)
Postgraduate student awards

The VicRoads prize in Transport Engineering is awarded to the postgraduate student who has achieved the highest average mark in their coursework units. The 2005 award was won by Kate Mould. Kate has recently started in a new role as a Project Officer at the City of Ballarat in the Transport and Traffic group. Prior to this, Kate worked as a transport planner and traffic engineer in the Melbourne office of the International consulting firm ARUP. Kate completed her Bachelor of Engineering (Civil) (Honours 1) at Monash University in 1999.

This year saw a number of postgraduate students complete their coursework degrees. Some of them chose to attend the graduation ceremonies held throughout the year (photos below). One of the students, Chris DeGruyter was well known to us since he completed his undergraduate civil engineering degree at Monash. For two of the other students, Lindsay Smith and Kevin Flynn the graduation ceremony provided an opportunity for them to meet the staff for the first time.
Master of Infrastructure Engineering and Management

Using the same format and operational methods as the ITS (Monash) postgraduate programs in transport and traffic, the Department of Civil Engineering developed a distance education masters program in infrastructure engineering and management in 2001. The course consists of eight units dealing with asset management, project management and project and policy evaluation, with specialisations in traffic, transport and water engineering. As a result of the experience gained in running the Bus and Coach and Transport Masters courses, it is managed by the Administration Manager of ITS (Monash), Brenda O’Keefe, on a contract basis for the Department. The course had 38 students enrolled in 2006.
Postgraduate research degrees

Trends in higher degree by research enrolments [MEngSci (Research) and PhD], are shown below. Postgraduate research student enrolments strengthened considerably in 2006 with most of the students enrolled in the Masters planning to transfer to the PhD program.

![Postgraduate research enrolments](image)

Trends in postgraduate research student enrolments

Students engaged in research degrees at ITS Monash during 2006 were:

Daniel Csikos: Exploring commuter stress and public transport reliability
Mahmoud Mesbah: Optimisation of transit priority systems
Mark Karpovitch: Transport, infrastructure and engineering projects based on transferred technology financed in China
Md. Aftabuzzaman: Public transport performance measures of road traffic congestion relief
Md. Iqbal Kabir: Transport and land use modelling: a Melbourne Case Study
Mike Shackleton: A model for management of a public-good transport related research institutions
Richard Yeo: Effects of large road freight vehicles on the performance of typical Australian road pavements: the performance of cemented pavement materials under heavy axle loading.
Roger Toleman: Tollroads and sustainability: Friends or foes?
Sara Moridpour: Lane changing behaviour of heavy vehicles
Tan Yan Weng (external): A study of parking in multi-use facilities.
Tim Martin: Predicting pavement performance at a road network and road program level.

Two students submitted their PhD dissertations in 2006 and are awaiting the reports from their examiners:

Rita Seethaler: Incorporating the psychological principles of persuasion into a community-based TravelSmart campaign
Ruimin Li: Incorporating travel time variability into travel time prediction models
Research student awards

The following ITS (Monash) students received the two prizes awarded at the 2005 CAITR conference:

Daniel Csikios was awarded the postgraduate student prize for his paper on ‘The impact of reliability on passenger wait time’, and

Yannick Michel was awarded the undergraduate student prize for his paper on ‘A Freight Capacity Model’.

Transport industry education programs

The transport industry education programs remain core activities of ITS (Monash). Following the launch of the Bus and Coach accreditation course in 1999, enrolments have stabilised as new operators join the industry or existing operators employ new staff or seek to upgrade their qualifications. Enrolments in the course in Parking Management also remain steady but are much smaller than the Transport Management Course in Bus and Coach Operations.

Enrolments in the Transport Management Course in Bus and Coach Operations
Transport management course in bus and coach operations

The Transport Management Course in Bus and Coach Operations, which forms part of the industry accreditation system, was launched in March 1999. The distance education delivery is supplemented by a half day introductory ‘face-to-face’ session at the beginning of each semester, for students who are new to the course. Since the course was introduced in 1999, over 1500 operators have successfully completed this educational component towards their accreditation.

The Department of Infrastructure initiated an external review of the Transport Management Course in 2006 to examine whether the course has achieved its original objectives and whether those objectives were still relevant to current day bus and coach operations. The results of the review were extremely encouraging and are summarised in the following quote from the final report:

“From the feedback received it was evident that there are high levels of satisfaction from all stakeholder groups regarding the course in its current form. There are similar satisfaction levels regarding the delivery mode and the staff of the Institute of Transport Studies, Monash. There is no doubt that the course is successful in meeting its original criterion, and that it remains relevant to the bus industry.

The course remains relevant to the industry by means of the effective quality improvement process established by ITS Monash, where relevant feedback from key stakeholders is incorporated into the course in an ongoing manner. This process has contributed to keeping the course responsive to the needs of the industry and the key stakeholders.”

The review also provided some valuable insight into potential pathways for working towards mutual recognition of interstate courses and this is one of the issues which will receive attention in 2007.

Education program in parking management

The Education Program in Parking Management was initiated by ITS (Monash) in February 1998. It is a national course offered by distance education. The program was developed by ITS (Monash) and the Parking Association of Australia Inc., in consultation with parking operators, equipment manufacturers, consultants and local government engineers. The course is aimed at operators, managers, engineers, analysts and planners working in the parking area. The education program aims to develop knowledge and understanding of parking specialisations which will assist participants to advance their careers in the parking industry by providing knowledge of management, policy, design, technology and information systems. The program is built around four units which each comprise 12 topics, and there are self-assessment review questions for each topic and an assignment for each unit. There were 5 enrolments in the course in 2006.

Transport industry education program and postgraduate coursework program awards

In 2006, the presentation of awards to outstanding students in the Transport Management Course in Bus and Coach Operations and the postgraduate program in Transport and Traffic was again held in conjunction with the fifth annual Ogden Lecture. This high profile evening was
held at the State Library of Victoria Theatrette in Melbourne in early August and provided the ideal forum in which to recognize the achievements of our most successful students.

A large audience participated in the evening, including senior officers of the Department of Infrastructure (DOI) and the Executive Director of the Bus Association of Victoria (BAV), as well as many industry, government and academic representatives. The awards are sponsored by industry and government and recognise outstanding performance of bus and coach operators completing subjects in the course.

The winners of the 2006 awards were as follows:

- **Bus Association of Victoria** award for best overall performance in the Transport Management Course in Bus & Coach Operations (bus and coach operations, AO accreditation) - Simon Millar, Wendouree
- **Bus Association of Victoria** award for best overall performance in the Transport Management Course in Bus & Coach Operations (charter and coach operations, AC accreditation) - Michael Di Lisio, Ararat
- **Department of Infrastructure** Small Operator Award for Unit 4101 Introduction to legislation and operations - Wendy Quinn, Echuca
- **iComply**, AC/AO Operator Award for Unit 4101 Introduction to legislation and operations - Robert Ettery, Traralgon
- **The Pitcher Partners** Large Operator Award for Unit 4102 Financial management - Brooke Mellington, Rainbow
- **Grenda Transit** Large Operator Award for Unit 4103 Human Resource Management - Simon Millar, Wendouree
- **The Ventura National Bus** Award for Unit 4104, Marketing, planning and operations - Michael Thorn, Dandenong
Professional Development

Public Transport Planning II - Network and Strategic Perspectives

This workshop was held on 4th and the 5th October 2006 at the Bayview Conference Centre, Monash University. There were 55 participants, the largest attendance yet for this now annual event. Attendance was from a wide variety of professional backgrounds including public transport operators and state government agencies from throughout Australia and overseas. The course was presented by Professor Currie and also Professor Avi Ceder from the Technion Israel Institute of Technology. Topics covered included strategic perspectives on planning public transport, performance monitoring and network design as well as operational perspectives. While this was the third public transport planning workshop hosted by ITS (Monash) it covered new subject matter. During 2006, plans were developed for three separate workshops which are to be offered in 2007.

Tram Planning - Lessons from Toronto

This workshop was held on 8th November at the Monash City Campus in Collins Street. The aim of the workshop was to learn from the planning approaches adopted in Toronto Canada, the second largest tram system in the western world where trams have to share roadspace with car traffic. Melbourne has the largest tram system in the world. The workshop is part of an initiative by the Chair of Public Transport to develop links between cities running streetcar based transit systems. The workshop was hosted by ITS (Monash) and features a number of presentations by Professor Amer Shalaby from the University of Toronto. The morning session covered general tram planning issues while the afternoon session covered micro-simulation approaches in streetcar modelling. There were some 70 invited participants including planners from Yarra Trams, DoI, VicRoads and Local Government. Prof Currie and Dr Sarvi of ITS (Monash) also spoke alongside Mr Chris Wilson a consultant from Masson Wilson Twiney. A follow up presentation, focussing on ‘Tram Planning Lessons from Melbourne’, is planned in Toronto for 2007.
RESEARCH AND POLICY

ITLS-Sydney

http://www.itls.usyd.edu.au/research/research.asp#professional_activities

Current projects

ASSESSING WILLINGNESS TO PAY FOR URBAN WATER, WASTEWATER, GAS AND ELECTRICITY DELIVERY SERVICE STANDARDS
D. Hensher, R.A. Letcher (ANU) and D. Graham (ActewAGL)
2006 to 2009
This ARC Linkage project (with ANU and ActewAGL) over 2006-2009 aims to develop understanding of the nature of willingness to pay (WTP) for utility services standards and the appropriate role of WTP in regulating prices and service quality. Given the current prevalence of service failure in Australia and the pressure on governments and utilities to invest in maintaining and improving infrastructure, this research is necessary to assess the level of investment required and the extent to which customers should pay. The research will be directly applicable to all gas, electricity, water and wastewater utilities and regulators in Australia. Results will also be crucial in developing regulation policy relating to the use of S-factors and regulation of service quality in Australia.

SELECTIVE DEVELOPMENTS IN CHOICE ANALYSIS
D. Hensher and J. Rose
2006 to 2008
Developments in data and modelling paradigms in choice analysis are developing at a fast pace. This research takes a selective view of some of these developments, especially four broad themes - information processing strategies, especially in the context of stated choice studies; agency interdependency (with a strong applied focus), developments in the design of choice experiments, and a smorgasbord of themes centred on expanding the behavioural capabilities (and longer term forecasting accuracy) of discrete choice models.

SAMPLING ERROR FOR MULTI-DAY SURVEYS
P. Stopher
2006 to 2007
ITLS has amassed a substantial amount of multi-day data, through the use of GPS surveys of up to 28 days duration. An issue that arises with multi-day data is to determine what are the required sample sizes and how to estimate sample statistics, bearing in mind that the observations of one person on multiple days are not independent observations. The project will investigate how to compute the intrapersonal variability and covariance, and how to modify the variance of the sample of multi-day observations to correct for the lack of independence in the observations. From this, we will be able to assess needed sample sizes and the sampling errors that will result from multi-day surveys.
VALUATION OF CAR PASSENGER’S TRAVEL TIME SAVINGS: TREATMENT OF PASSENGERS IN CARS USING TOLLROADS

D. Hensher
2006 to 2007

All studies that develop estimates of the value of travel time savings (VTTS) for car travel, assume that the VTTS of the driver is the only relevant measure of the worth of time savings. If a car has multiple occupants, the passengers are typically excluded in the valuation. The literature has singularly failed to address this important issue other than with rare exception, to establish VTTS for the driver given the number of passengers. This research investigates the role that the passenger plays in the VTTS of the vehicle trip, identifying the extent to which time-cost trade-offs is a driver or a group decision. The implications on travel time benefits ignored in previous studies and hence impact on infrastructure justification, may be profound.

APPROXIMATION OF BAYESIAN EFFICIENCY IN EXPERIMENTAL CHOICE DESIGNS

J. Rose, M. Bliemer and S. Hess
2006, ongoing

This research compares different types of simulated draws over a range of number of draws in generating Bayesian efficient designs for stated choice studies. The research focus is on how closely pseudo Monte Carlo, quasi Monte Carlo and polynomial cubature methods are able to replicate the true levels of Bayesian efficiency for Stated choice (SC) designs of various dimensions. The authors conclude that the predominantly employed method of using pseudo Monte Carlo draws is unlikely to result in leading to truly Bayesian efficient SC designs. The quasi Monte Carlo methods analyzed here (Halton, Sobol, and Modified Latin Hypercube Sampling) all clearly outperform the pseudo Monte Carlo draws. Results to date show that the polynomial cubature method examined, incremental Gaussian quadrature, outperforms all, and is therefore the recommended approximation method for the calculation of Bayesian efficiency of stated choice designs.

ASYMMETRICAL PREFERENCE FORMATION IN WILLINGNESS TO PAY ESTIMATES IN DISCRETE CHOICE MODELS - ONGOING

J. Rose, S. Hess and D. Hensher
2006, ongoing

Individuals when faced with choices amongst a number of alternatives often adopt a variety of processing rules, ranging from simple linear to complex non-linear treatment of each attribute defining the offer of each alternative. In recent years, there has been a growing interest in the choice process as a basis of understanding how best to represent attributes in choice outcome models. In this paper, in the context of choice amongst tolled and non-tolled routes, we investigate the presence of asymmetry in preferences, drawing on ideas from prospect theory to test for framing effects and differential willingness to pay according to whether we are valuing gains or losses. The findings offer clear evidence of an asymmetrical response to increases and decreases in attributes when compared to the corresponding values for a reference alternative. The degree of asymmetry varies across attributes and population segments, but crucially is independent of the inclusion or otherwise of an additional constant for the reference alternative, contrary to earlier findings.
DESIGNING EFFICIENT DATA FOR STATED CHOICE EXPERIMENTS: ACCOUNTING FOR SOCIO-DEMOGRAPHIC AND CONTEXTUAL EFFECTS IN DESIGNING STATED CHOICE EXPERIMENTS

J. Rose and M. Bliemer

2006, ongoing

Identifying methods for reducing the number of respondents required for stated choice (SC) experiments is important for transport studies given increases in survey costs. Such reductions, however, must not come at the cost of a lessening in the reliability of the parameter estimates obtained from models of discrete choice. Recognition of this has resulted in growing interest in a class of SC designs known as efficient designs, which balance reliability concerns with sample size issues. To date, however, the literature on generating efficient designs has only considered experiments that involve only attributes of the experiment. Covariates that may be used in data analysis have therefore ignored to date. In this research, we demonstrate that if covariates are to be used in data analysis, then the efficiency of a SC design may be lessened. We demonstrate how efficient SC experiments may be constructed to account for covariates, and how minimum quotas may be established in order to retain a fixed level of efficiency.

DESIGNING STATED CHOICE EXPERIMENTS: STATE-OF-THE-ART

J. Rose and M. Bliemer

2006, ongoing

Stated choice experiments are often used in transportation studies for estimating and forecasting behaviour of travellers, road authorities, etc. These kinds of experiments rely on underlying experimental designs. This research is designed to analyse and describe in as simple manner as possible, the processes of designing stated choice experiments and is intended to give an overview of the current state-of-the-practice and more importantly the current state-of-the-art. Different design types are examined and described. Orthogonal designs are mainstream under practitioners, but nowadays many researchers realize that so-called efficient designs are able to produce more efficient data in the sense that more reliable parameter estimates can be achieved with an equal or lower sample size. Different types of efficient designs are examined, including possible algorithms for generating efficient designs.

ESTABLISHING SIGNALS OF FIRM DISTRESS: A STATED PERCEPTION ASSESSMENT OF FIRM PROFILES

D. Hensher, S. Jones, J. Rose and A. Collins

2006, ongoing

Recent developments in data paradigms designed to assess preferences for packages of attributes that may or may not exist in real markets opens up opportunities to identify the signals that experts believe are being sent about the distress level of a firm with that condition. Although revealed preference data itself has inherent merit in the sense of defining a current distress state, the ability to develop a model to predict the distress outcome relies of the pooling of observations to create between-firm variability. An alternative methodology within the discrete outcome model setting involves a data paradigm centred on experimental design in which we design future firm profiles described by packages of financial factors. By varying these profiles and offering CFO’s at least two of the packages to assess and indicate the ranking of them on a scale (from best to worse) that can be mapped into a distress index, we provide a new capability in the accounting and finance literature to predict the likelihood of a firm’s profile being perceived by CFO’s as a candidate for a specific distress classification. Specifically, given a list of financial factors identified through in depth interviews with CFO’s and evidence sourced from the published literature, we can design a stated perception experiment based on combinations of levels of each financial attribute. We use state of the art D- and S-optimal designs with priors on attribute parameters (in contrast to sub-optimal orthogonal designs- except when we have no
priors) to design an experiment used to reveal CFO’s ranking of attribute profiles. If we assume a ranking of three constructed profiles, pivoted around each CFO’s current firm’s profile on these same attributes, we can use the rank order (1,2,3,4) together with the attribute levels across the four ordered alternatives to estimate an ordered mixed logit model. This model (see Jones and Hensher 2004) can be used to identify the probability of a specific distress level for each CFO, given their mapping of each rank against a distress level scale. The estimated model can be validated with a hold out sample, drawn from the surveyed sample of CFO’s. In addition to financial factors, we recognise the influence that macroeconomic variables have on the assessment of financial performance. We propose, in the stated perception ranking design, to overlay an additional experimental design in which we vary the levels of a set of macroeconomic variables (e.g., interest rate increases, volatility in exchange rates), pivoted around levels reported by each CFO as current exposure. The survey will also collect contextual data on firm specific characteristics, financial systems in place within the CFO’s firm, the quality of management, corporate governance conditions and other factors.

ROUTE CHOICE BEHAVIOUR OF FREEWAY TRAVELLERS UNDER REAL-TIME TRAFFIC INFORMATION PROVISION—APPLICATION OF THE BEST ROUTE AND THE HABITUAL ROUTE CHOICE MECHANISMS

D. Hensher and J. Rong-Chang

2006, ongoing

The route choice behaviour on freeways between Taipei and Taichung in Taiwan under the provision of real-time traffic information is investigated. Two types of route choice selection rules (the best-route and habitual-route) are analysed using ordered probit models to identify the major influences on freeway travellers’ route choice behaviour. The level of service associated with each route is defined as a generalized cost saving and specified non-linearly with a threshold inherent to travellers. The marginal (dis)utility thresholds in the ‘best’ and ‘habitual’ behaviour models are identified through a goodness of fit grid. The results to date confirm that the thresholds for changing the inertia behaviour of drivers should be larger than the ones for choosing the best routes. In addition, the drivers are more likely to choose either the best or the habitual routes once the generalized cost savings are greater than threshold values.

SUSTAINABLE PUBLIC TRANSPORT SYSTEMS: MOVING TOWARDS A VALUE FOR MONEY AND NETWORK-BASED APPROACH AND AWAY FROM BLIND COMMITMENT

D. Hensher

2006, ongoing

Growing public transport patronage in the presence of a strong demand for car ownership and use remains a high agenda challenge for many developed and developing economies. While some countries are losing public transport modal share, other nations are gearing up for a loss, as the wealth profile makes the car a more affordable means of transport as well as conferring elements of status and imagery of “success”. Some countries however have begun successfully to reverse the decline in market share, primarily through infrastructure-based investment in bus systems, commonly referred to as bus rapid transit (BRT). BRT gives affordable public transport greater visibility and independence from other modes of transport, enabling it to deliver levels of service that compete sufficiently well with the car to attract and retain a market segmented clientele. BRT is growing in popularity throughout the world, notably in Asia, Europe and South America, in contrast to other forms of mass transit (such as light and heavy rail). This is in large measure due to its value for money, service capacity, affordability, relative flexibility, and network coverage. This research takes stock of its performance and success as an attractive system supporting the ideals of sustainable transport.
VALUATION OF TRAVEL TIME SAVINGS - PRACTICAL LESSONS IN ESTIMATION AND APPLICATION

J. Rose and D. Hensher

2006, ongoing

Recent developments in willingness to pay (WTP) methods have focussed extensively on accounting for preference heterogeneity through judicious selection of analytical distributions in random parameter logit models. In the context of valuing travel time savings, there is now an accumulated body of evidence and experience on what happens to the WTP distribution when we impose specific distributional assumptions in unconstrained and constrained forms. The evaluation of various distributions has in large part been motivated by the desire to avoid long tails and sign changes on WTP that are often deemed behaviourally implausible. Recent research has raised a more fundamental concern about the focus on alternative distributions which may be looking in the wrong place for resolving some empirically identified behavioural inconsistencies. In this research we take a close look at a range of issues that we believe will support greater behavioural realism without having to exercise analytical gymnastics to establish behavioural compliance. The issues investigated include the heterogeneity of attribute processing strategies adopted by individuals; a two-stage estimation method that first identifies anomalies in choice outcomes and then re-estimates on the remaining data set; and specific treatments of the numerator and denominator in WTP calculations.

A STATED CHOICE APPROACH TO MEASURE THE SOCIAL COSTS OF AIRCRAFT NOISE DISTURBANCES

S. Greaves, J. Rose and A. Collins

2006

This pilot project proposes an innovative stated choice approach to address the short-comings of current methods used to assess the social costs of aircraft noise. The innovations include, 1) use of visualisation cues to represent noise in a more comprehendible manner to respondents, 2) the design of stated choice experiments that are tailored more closely to the actual noise-level experiences of residences and 3) the derivation of distributions of willingness to pay to reduce exposure to noise that account for the heterogeneity in preferences (noting that all previous studies focussed on a single point or average estimate for the population).

AN INCENTIVE COMPATIBLE DYNAMIC MECHANISM FOR CARRIER COLLABORATION

M. Figliozzi

2006

This research studies the properties of a mechanism for carrier dynamic collaboration. In particular it proposes and analyses dynamic collaborative mechanisms that are incentive compatible. The dynamic collaborative environment is characterized by a set of carriers that have a proprietary set of customers that generate a stream of random demands over time. The proposed collaborative mechanism is such that carriers have the economic incentive to submit the arrived shipments or service requests to the collaborative mechanism. Intuition about the efficiency and workings of the collaborative mechanism is developed. This research is different from previous research in several aspects: 1) the mechanism is dynamic and incentive compatible, 2) there is a detailed treatment of payment and information issues that ensures the incentive compatibility (IC) property and ex-ante efficient allocations, 3) the mechanism is designed for a vehicle routing setting, 4) tradeoffs between bundling size, problem size (complexity) and timing of information revelation are discussed, 5) the allocation mechanism is presented using an MIP formulation, and 6) simulation of collaborative and non-collaborative settings are used to benchmark the benefits of dynamic collaboration. The workings of the collaborative mechanism as well as its possible limitations and applications to real-life routing problems are discussed.
APPROXIMATIONS TO THE LENGTH OF VEHICLE ROUTING PROBLEMS IN URBAN NETWORKS

M. Figliozzi

2006

This research focuses on one type of distribution structure: a distribution or service centre that provides to several retailers or customers. Within this basic distribution structure, the number of retailers/customers in a given route can increase or decrease due to economical or technological reasons. This configuration has been chosen because recent studies in urban areas have shown that deliveries from distribution centres (DC) or warehouses have one of the largest impacts on vehicle miles traveled (VMT) in urban areas. On the service side, the commercial vehicles with the largest impact on VMT are business and personal service vehicles, rental cars, and public service vehicles that mostly operate from a central depot. The one to many model (routing from one depot to many customers) is not only ubiquitous but also represents distribution activities of hypermarkets, distribution centres, producers, and repair service centres while keeping analytical complexity at a tractable level.

COMBINING GPS AND PORTABLE POLLUTION MONITORS - NEW INSIGHTS ON PERSONAL EXPOSURE IN TRAVEL MICRO-ENVIRONMENTs

S. Greaves with the School of Public Health, The University of Sydney

2006

There is growing evidence of a causal link between short-duration exposures to particulate matter less than 2.5 microns in aerodynamic diameter (PM2.5) and adverse health consequences. It is thought that much of these elevated levels occur while traveling and it is therefore critical from an overall health perspective to understand how travel choices (e.g., mode, departure time, route selection) impact potential exposure to PM2.5. I have developed an approach to study the intra-trip variability of PM2.5 through combining a personal GPS receiver with a portable PM2.5 counter, which is capable of recording second-by-second concentrations. I have completed one study for Sydney car-drivers and am currently working on a collaborative project with public health researchers to look at this issue from the perspective of cyclists and pedestrians.

DISRUPTION COSTS AND DISRUPTION MANAGEMENT STRATEGIES FOR SYDNEY BASED IMPORTERS/EXPORTERS

M. Figliozzi

2006

In this project we are surveying importers and exporters to understand what are the relevant factors that determine shippers’ decision making when a supply disruption has taken place. We are using a SP survey and we pivot the levels of the freight rate and transit time attributes in the stated choice experiment design. The respondents are being selected to represent different commodities and supply chain configurations. The variability engendered within and between shippers should provide enough variance to estimate a discrete choice model capable of separating out the influence of commodity values, service level (damage, frequency), and supply chain characteristics on shipper value of time with and without supply chain disruptions.
EVALUATING THE IMPACT OF ADVANCE INFORMATION ON REAL TIME TRANSPORTATION SERVICE COSTS.
M. Figliozzi
2006
To take advantage of potential opportunities in real-time, it is essential to acquire not only real-time information of the state of inventory management systems and/ or fleets, but also of the trade offs between cost of providing transportation services, savings in inventory holdings, and changes in customer service levels. Inappropriate use of information, in conjunction with incorrectly formulated models and inadequate algorithms, could result in undesirable consequences. The proposed research will adopt a stylized environment that captures the basic aspects of a dynamic stochastic routing problem (central fleet depot and random shipments origins and destinations). Specifically, the effects of different time windows and advance arrival information on transportation costs will be examined.

EXPLORING THE POTENTIAL OF EXPOSURE-BASED CHARGING MECHANISMS TO REDUCE EXPOSURE TO RISK IN ROAD ENVIRONMENTS
S. Greaves
2006
The primary aim of this research is to determine the effect on driver behaviour in Australia of imposing exposure-based charges. Exposure-based charges are charges that are based on the risk profile of the driver, the kilometres driven and the circumstances under which those kilometres are driven. The circumstances may include the time of day and the general traffic conditions prevailing at the time of driving. The results of this research would be of potential interest to both government agencies that are charged with raising revenues to support infrastructure investment and maintenance, and those that are charged with dealing with congestion, but would also be of interest to the insurance industry as a basis for reducing risks in driving and making premiums more equitable.

FREIGHT MOVEMENT MODEL FOR MELBOURNE
P. Stopher, S. Greaves, C. FitzGerald and J. Zhang
2006
As part of the development of new freight forecasting procedures in Victoria, ITLS has been sub-contracted to collect GPS data for a sample of trucks delivering goods in and around the Melbourne region. These data will be used to extract several items of data in particular trip origin/destination, route, and time and trip length, using customised GIS programming procedures. The data will be among the first publicly-collected data set collected on freight movements in Australia.

METHODOLOGIES TO EVALUATE AND MITIGATE THE IMPACT OF TRAFFIC CONGESTION IN URBAN FREIGHT DISTRIBUTION SYSTEMS
M. Figliozzi
2006
The major aim of this project is to develop and evaluate new methods for vehicle routing in congested urban areas. This work will build upon existing methods already studied in the literature but with the addition of constraints that reflect travel times in congested urban areas. Travel time will not be considered a known constant but a time-varying or random variable instead. Two main limitations have been identified with existing approaches: (1) handling realistic travel times: time-varying travel times that reflect the uncertainties and different travel speeds associated with peak and non-peak traffic conditions; and (2) scalability and fast
computation of routing solutions: as congestion may develop unexpectedly, routing methods for congested urban areas must have a fast response time in order to take full advantage of real-time traffic information.

TRANSPORT EVALUATION OF HOUSEHOLDS IN THE WEST
P. Stopher, S. Greaves, T. Biddle, C. FitzGerald, N. Swann, J. Zhang, and T. Bertoia
2005 to 2008
ITLS has been selected to undertake a 3-year evaluation of the effects of a variety of transport policy and investment actions by the government of South Australia in a significant portion of Adelaide’s western suburbs. This is the first 3-year evaluation of its type to be undertaken in Australia. To implement the evaluation, ITLS established two panels in three Local Government Areas - one to provide odometer readings of all household vehicles every four months, beginning in April 2005, and ending in August 2007; and the other to use personal GPS recording devices for one week each year, in the months of August-September of each of 2005, 2006, and 2007. Based on analysis of the measurement of these two panels, ITLS will be able to determine the extent to which households change their travel behaviour and also whether such changes are sustained in the short term. Of particular interest will be the effects of the project on the amount of travel and the modes of travel used by panel members over the three-year period. This project marks the first time in which a panel odometer survey and a GPS panel will be used to evaluate transport initiatives. Following the successful completion of pilot studies, ITLS is conducting continuing surveys using both panel odometer surveys of 1000 households, a GPS panel survey of 200 households with an annual survey period of 7 days travel in each wave. The current monitoring of household travel is expected to continue to late 2007.

DAY-TO-DAY VARIABILITY IN TRAVEL - ANALYSIS OF A 28-DAY GPS SURVEY
P. Stopher, S. Greaves, C. FitzGerald, T. Biddle, T. Bretin and T. Bertoia
2005 to 2007
ITLS has been pioneering the use of GPS in Australia as a means to measure personal travel. This project analyses the results of a 28-day GPS survey of 50 households specifically to look at how much variability there is in people’s daily travel. We begin by examining the evidence about the frequency with which people stay at home all day, because this has often been suggested as a possible measure of survey quality, and because, in a GPS survey, it is fairly easy for people to decide to leave the GPS device at home on certain days, or to forget to take it with them. Following this, we will look at the actual variability in daily travel for each of full-time workers, part-time workers, full-time students, and those not engaging in education or paid work. Only two households in our sample were without a motorised vehicle, so there is limited possibility to look at differences between those who own cars and those who do not. However, we examine differences between those with drivers’ licenses and those without. We also examine variability by age and household size, especially with a view to determining the extent to which individual travel reduces when there are more adults in the home to undertake various household activities.

THE MOBILITY AND ACCESSIBILITY EXPECTATIONS OF SENIORS IN AN AGING POPULATION
D. Hensher and R. Alsnih
2005 to 2007
Populations of post-industrial nations are aging. With a growing number of people living well into their 80’s and maintaining active lives, the transportation system will have to start focussing more closely on understanding their mobility and accessibility needs, so as to ensure that specific requirements of this large segment are not being ignored through the promotion of traditional ‘solutions’ and historical assumptions. This research takes a close look at the evidence on the mobility needs and travel patterns of individuals over 64, distinguishing between the “young”
elderly (aged 65 to 75 years) and the “old” elderly (over 75 years). This distinction is particularly useful in recognising the threshold of health change that impacts in a non-marginal way on mobility needs. This distinction also focuses transport planning and policy on a commitment to understanding the different needs of these subgroups of the population, identifying services and facilities that better cater for these groups. We review the evidence, in particular, on the mobility characteristics of the over 75 age group, including how they secure support through migration and settlement patterns. We use the empirical evidence from a number of western nations to identify the role of conventional and specialised public transport as an alternative to the automobile in meeting mobility and accessibility needs. In addition to the review study above, This project is funded by the ARC Discovery Program.

Seniors in an ageing population (SAPS) are a significant and growing segment of the population. As (relatively) cash rich and time poor, they have very high expectations in respect of levels of accessibility and mobility required from the transport system, as well as from other supporting networks. We currently lack policy-rich travel demand models to assist in understanding the complex dynamics that influence the travel activities of SAPS. Using ideas from stated choice methods, interactive agency choice experiments, panel econometrics and behavioural discrete choice models we propose a research program designed to understand these demands. Special focus is given to support networks and the ways in which these impact on the demand for car and public transport use, as well as meeting the access needs to health-support and leisure facilities and to supporting networks of family and friends.

REDUCING SIGN VIOLATION FOR VTTS DISTRIBUTIONS THROUGH RECOGNITION OF AN INDIVIDUAL’S ATTRIBUTE PROCESSING STRATEGY
D. Hensher
2005 to 2007
A number of authors have recently argued that the selection of the distributional assumptions in mixed logit models used in deriving distributions of valuation of travel time savings (VTTS) to capture taste heterogeneity has a significant impact on the empirical evidence. A recent paper by Hess et al. (2005) points out that constraining a specific distribution by some bounding rule to ensure that the ‘wrong’ sign is not permissible is problematic in that it ignores the impact of data or model imperfections. The stream of research by Hensher and his colleagues on accounting for the attribute processing strategy in stated choice studies (the main data source of VTTS) suggest that the existence of intuitively implausible signs for a subset of the sampled population is due, to some extent, to the manner in which the information in the stated choice experiment is actually input into the estimation of the choice model, and that searching for analytical distributions that appear to deliver more acceptable VTTS across the specific distribution may be looking substantively in the wrong place for the explanation. In this research we show evidence of what happens when we take into account the attribute processing strategy in contrast to assuming, as is common practice, that all attributes are relevant as presented. The findings produce the remarkable result of significantly reducing the incidence of intuitively implausible VTTS, even with unconstrained distributions.

COMBINED MODE AND ROUTE CHOICE MODELLING - SWITZERLAND GPS TRAVEL SURVEYS
P. Stopher, C. FitzGerald and J. Zhang
2005 to 2006
ITLS leased 50 of its state-of-the-art GPS devices to Emch and Berger (E&B) in Switzerland. These devices were used for travel surveys for up to 200 persons in Berne gathering data on all modes of travel including bicycles. Depending on the raw data provided, we expect to have 2,000 car trips and 800 bicycle trips, plus other modes. ITLS will process the data for E&B and map the raw GPS data (points) to a transport network and will estimate the used routes and any
additional attributes of the trips such as trip distance, start and end time, travel time, average speed and mode of travel. E&B will include some additional questions concerning the usage of the devices to support device testing as well as activity/trip diaries. Data collection has now finished and ITLS is currently processing the raw GPS data.

DEVELOPING A METHOD FOR SIMULATING TRIP TOURS
P. Stopher
2005 to 2006
This project was designed to begin analysis of tours in place of individual trips, to improve the household travel survey evaluations that had been developed in previous research by Stopher and Greaves. In this project, we used the latest nationwide travel survey from the US, the 2001 NHTS, and grouped trips into tours. We classified the tours into simple and complex and compiled statistics on the tours. We compared the results of this work to a similar item of research conducted on the nationwide survey in New Zealand, and found comparable results.

DISAGGREGATE ASSESSMENT OF POPULATION EXPOSURE TO AIRCRAFT NOISE
S. Greaves, A. Collins and T. Bertoia
2005 to 2006
The short and long-term health impacts of the noxious by-products (noise, air pollution) of transportation activities are a daily source of contention and debate. Fundamental to this debate is assessing personal exposure or the overall time of pollutant contact by humans and the severity of that contact. Currently, this is difficult to gauge at little more than an aggregate/population level, because we simply do not have the information on either 1) the transportation activity or 2) location of people at the degree of spatial and temporal specificity required. This research considers how we might begin to tackle these dual issues from the perspective of assessing exposure of Sydney residents to aircraft noise from Kingsford Smith airport. The first issue is addressed using a newly available GIS database of individual aircraft movements provided to us by DOTARS. The second issue is tackled by adapting a procedure to ‘track’ the location of the population over the day using time and location information from the Sydney Household Travel Survey.

EVALUATION OF THE PUBLIC ACCEPTANCE AND PERCEPTIONS OF LONG RANGE MONITORING OF VOLUNTARY TRAVEL BEHAVIOUR CHANGE PROJECT
P. Stopher, N. Swann, C. FitzGerald and T. Bertoia
2005 to 2006
ITLS has pioneered the use of GPS devices to conduct household travel surveys. There are many unknowns about the use of these devices, particularly in respect to public acceptability and of this method of measurement. Response rates have varied among those that have agreed to take GPS devices for a survey. ITLS conducted focus groups amongst survey respondents to determine their reaction to being asked to do a GPS survey, why they may have dropped out, and general comments on the technique.

GPS COMPONENT FOR THE DEVELOPMENT OF A FREIGHT MODEL FOR MELBOURNE
S. Greaves, C. Fitzgerald and J. Zhang
2005 to 2006
As part of the development of new freight forecasting procedures in Victoria, ITLS has been sub-contracted to collect GPS data for a sample of trucks delivering goods in and around the
Melbourne region. These data will be used to extract several items of data in particular trip origin/destination, route, and time and trip length, using customised GIS programming procedures. The data will be among the first publicly-collected data set collected on freight movements in Australia.

INVESTIGATION OF TECHNOLOGICAL OPTIONS FOR IMPLEMENTING PAY-AS-YOU DRIVE CHARGING SCHEMES
S. Greaves
2005 to 2006
There is increasing talk of pay-as-you-go charging schemes both as a strategy to try to mitigate congestion and as a means for raising revenue to fund road infrastructure improvements. Devising appropriate technological solutions for implementing such schemes is both extremely challenging and is likely to make or break these schemes if seen is flawed or unreliable by the public. The purpose of this research is to investigate the various options including roadside options (i.e., those commonly used on toll-roads), in-vehicle options (e.g., in-vehicle electronic odometer readers, vehicle-based Global Positioning Systems (GPS), vehicle-based GPS augmentations such as dead-reckoning, GPS enabled mobile phones, and assisted GPS (AGPS)).

LONG RANGE MONITORING OF VOLUNTARY TRAVEL BEHAVIOUR CHANGE INITIATIVES
P. Stopher, S. Greaves, T. Biddle, C. FitzGerald, N. Swann, J. Zhang, and T. Bertoia
2005 to 2006
ITLS has devised and is testing methods for undertaking a long-range evaluation of the effects of voluntary travel behaviour change initiatives for the Partners in the National Travel Behaviour Change Program (NTBCP). Having evaluated long-term monitoring methods used in non travel applications, ITLS proposed the use of a dual panel approach on a 3 year rotation. This involves a number of Adelaide households providing odometer readings quarterly, as well as a control group of 200 households in Melbourne to test the transferability of this method to other cities. Additionally a panel of 50 other households in Adelaide were asked to use personal GPS logging devices for a period of one month, bi-annually. A pilot study, with 200 households in the odometer survey, and 2 waves of 50 households in the GPS survey, has now been completed. Analysis of the results is underway. The results of this study are to be used to develop information on the ideal sample size and duration for this type of survey. The Long-Range monitoring period is expected to extend from late 2007 to early 2013. Pilot testing is expected to take most of 2005 and 2006 to complete.

SIMULATING TRIP TOURS - ANALYSIS AND CLASSIFICATION
P. Stopher
2005 to 2006
This is a follow-on project from the earlier one funded by the School of Business, and has involved further detailed analysis of the NHTS data set, reclassification of tours, and a decision to group tours into simple and complex, and into mandatory, flexible, and optional. We have begun exploring the relationships between tours and demographic data, and also to categorise tours in terms of the constituent activities and the duration of the tour.
SPATIAL ALLIANCES OF PUBLIC TRANSIT OPERATORS: ESTABLISHING OPERATOR PREFERENCES FOR AREA MANAGEMENT CONTRACTS WITH GOVERNMENT

D. Hensher and L. Knowles

2005, ongoing

Scheduled transit services in many countries are provided by operators within geographical jurisdictions protected from competition with other public transit operators, although unprotected from the competition by other modes, especially the car. This increased competition in many developed economies has led to a loss of market share of urban transit and contributed to the growing crisis in escalating costs of service provision (leading to pressure for increasing subsidy support). The response to this throughout the 1990s has seen governments progressively introducing market reforms centred on competitive tendering and economic deregulation. In more recent years, performance-based contracts have become popular variants, with an increasing number of incentive payment criteria introduced to not only promote cost efficiency but also aimed at growing patronage. Where such reform has involved area wide contracts, the boundaries of the contract areas have been essentially preserved. In recognition of the growing support for bus-based transit systems (variously referred to as bus rapid transit, busways and transitways), which offer increasing promise in growing public transit patronage, the NSW government in Australia has introduced reforms that require existing operators in the Sydney metropolitan area each currently holding an area contract (87 contracts) to work together under fifteen new spatial contracts. These new contracts overlay the existing contract areas and give incumbent operators the first option to participate. In this project we assess ways in which operators might coalesce to deliver ongoing and new ‘regional’ services. Operator business preferences and potential barriers to cooperation are identified through stated preference experiments.

THE PROVISION OF CONSULTANCY SERVICES ADVICE IN REGARD TO THE ACT TRAVELSMART PROJECT

P. Stopher

2005, ongoing

ITLS was selected to provide ongoing advice to the ACT Planning and Land Authority during a period of implementation of TravelSmart initiatives in the Canberra area. This advice includes assistance in drafting requests for proposals, reviewing requests for proposals, reviewing work scopes and reviewing reports and other materials, as requested by the ACTPLA. The project is continuing.

EVACUATING FROM BUSHFIRES: EXPLORING THE USE OF VISUAL AND AUDIO CUES IN STATED CHOICE (SC) EXPERIMENTS

P. Stopher, J. Rose, R. Alsnih, A. Collins and T. Bertoia

2004 to 2006

SC experiments usually provide verbal descriptions of alternatives to respondents from which they have to choose. The verbal descriptions are created by using attributes and specific levels of each attribute. In most applications of SC in transport, the attributes of interest have been such things as travel time, waiting time, fare or toll, unreliability of arrival time, etc. These are abstract concepts for which audio and visual prompts would not be relevant. However, in recent work at ITLS, we have applied SC to determine the likely behaviour of a household in respect of evacuating from a bushfire threat. In conducting focus groups prior to designing the SC experiments, participants suggested that the use of photographs of similar bushfires would be helpful in prompting respondents to recall what a bushfire is really like. A subsequent study looked at the effects of audio and visual prompts on the results of a SC experiment in relation to
household bushfire evacuation behaviour. A small sample of households from Terrey Hills and Duffys Forest, in Sydney, was recruited to take part in the study. Computer Assisted Personal Interviewing (CAPI) interviews were conducted whereby respondents were shown a mix of scenarios with verbal descriptions of bushfires, still images of bushfires, and short video clips of bushfires. No significant differences between these conditions were found to impact on SC outcomes.

EVALUATION OF A PILOT IMPLEMENTATION OF TRAVELSMART HOUSEHOLDS IN NSW
P. Stopher, R. Alsnih, Q. Jiang, C. FitzGerald, N. Swann, and T. Bertoia
2004 to 2006
The purpose of this study was to establish, through a pilot study, the effectiveness of TravelSmart implementation in NSW. TravelSmart is a voluntary travel behaviour modification program, where conversationalists have discussions with households about alternative ways to satisfy out-of-home needs, including ways to reduce solo car driving, use of alternative travel modes, and reduction of overall travel. People are provided with relevant information that may be used to save households time, money, increase health benefits, as well as to reduce greenhouse gas emissions. The aim of the evaluation was to measure whether or not there were detectable changes in the amount (no. of kms, no. of trips) of travel as a result of TravelSmart, and whether or not there were detectable changes in the use distribution of travel (of solo car, car passenger, public transport, walking, or bicycling). The ‘before’ survey was conducted in May 2004, prior to TravelSmart tools being distributed, and the ‘after’ survey of the same panel of households in March 2005 to measure the effectiveness of the initiative. Measurements were taken of modes of travel, trip purposes, and the number of trips. Additionally, odometer readings were collected from panel households, to provide an estimate of vehicle kilometres of travel for each of the before and after periods. Each survey was conducted over a two day period per household.

PREDICTING FINANCIAL DISTRESS USING REPORTED CASH FLOWS: AN ORDERED MIXED (RANDOM PARAMETER) LOGIT MODEL
D. Hensher and S. Jones
2004, ongoing
Previous research examining the incremental information content of operating cash flows (CFO) and traditional accrual measures in financial distress prediction has been inconclusive. Many studies have employed some estimate of CFO, rather than reported CFO of firms. In most cases modelling has been confined to a simple binary logistic analysis, discriminant analysis or a rudimentary multinomial approach. Using a more robust four-state random parameter (ordered) logit design, ratios based on reported CFO were found to have higher predictive value than estimated CFO, including a cohort of traditional accrual ratio measures. The advantages of using advanced discrete choice models by researchers in this field, including their econometric implications, are discussed.
ASSESSING SOURCES OF VARIATION IN TRAVEL DEMAND ELASTICITIES: A META ANALYSIS
D. Hensher and C. Fitzgerald
2003, ongoing
Ongoing since 2003, this project is documenting studies that have established empirical estimates of direct and cross elasticities for public transport service and cost. The aim is to explain differences in the estimates as way of understanding the influence on methods, data paradigms and context in influencing variations in estimates.

URBAN FREIGHT MODELS: ESTABLISHING SUPPLY CHAIN MODELS
D. Hensher and S. Puckett
2002, ongoing
As part of a five-year ARC Discovery Program (2002-06), the aim is to develop new approach to modelling the key travel choices associated with the movement of urban freight. A central focus is on understanding the interactive agency aspect of the supply chain within which freight movement decisions are made. Thus the decision on choice of supply chain alliance and structure precedes the specification and modelling on trip decisions such a routing and chaining. The long term goal is to have a suite of choice models that can be used to evaluate the impact of transport policies such as congestion pricing on freight movements.

DIMENSIONALITY OF STATED CHOICE DESIGNS
D. Hensher
2000, ongoing
Stated choice (SC) methods are now a widely accepted data paradigm in the study of behavioural response of agents (be they individuals, households, or other organizations). Their popularity since the pioneering contributions of Louviere and Woodworth (1983) and Louviere and Hensher (1983) has spawned an industry of applications in fields as diverse as transportation, environmental science, health economics and policy, marketing, political science and econometrics. With rare exception, empirical studies have used a single SC design, in which the numbers of attributes, alternatives, choice sets, attribute levels and ranges have been fixed across the entire design. As a consequence the opportunity to investigate the influence of design dimensionality on behavioural response has been denied. Accumulated wisdom has promoted a large number of positions on what design features are specifically challenging for respondents (eg the number of choice sets to evaluate); and although a number of studies have assessed the influence of subsets of design dimensions (eg varying the range of attribute levels), there exists no single study (that we are aware of) that has systematically varied all of the main dimensions of SC experiments. This research uses a Design of Designs (DoD) SC experiment in which the ‘attributes’ of the design are the design dimensions themselves including the attributes of each alternative in a choice set. The design dimensions that are varied are the number of choice sets presented, the number of alternatives in each choice set, the number of attributes per alternative, the number of levels of each attribute and the range of attribute levels. We investigate how different designs impact on willingness to pay (ie attribute valuation), using a sample of respondents in Sydney choosing amongst trip attribute bundles for their commuting trip.
Recent research achievements

Grants


S. Greaves, D. Hensher and P. Stopher ARC-Linkage with AAMI: Exploring Behavioural Responses of Motorists to Exposure-Based Charging Mechanisms

S. Greaves School of Business Research Grant, Faculty of Economics and Business, The University of Sydney: Investigation of Technological Options for Implementing Pay-as-You Drive Charging Schemes.

S. Greaves School of Business Research Grant, Faculty of Economics and Business, The University of Sydney: Profiling Driving Risk Using Passive In-Vehicle Measurement.

S. Greaves and A. Collins School of Business Research Grant, Faculty of Economics and Business, The University of Sydney: Disaggregate Assessments of Population Exposure to Aircraft Noise.

S. Greaves The School of Public Health, The University of Sydney: Combining GPS and Portable Pollution Monitors - New Insights on Personal Exposure in Travel Micro-environments.


S. Greaves, J. Rose and A. Collins University of Sydney Research and Development Grant: A Stated Choice Approach to Measure the Social Costs of Aircraft Noise Disturbances

D. Hensher ARC-DP: Development of a behavioural system of stated choice models: modelling behavioural, pricing and technological opportunities to reduce automobile energy levels.

D. Hensher ARC-DP: Integrating Accident and Travel Delay Externalities in an Urban Speed Reduction Context.

D. Hensher ARC Linkage with ANU and ACTeWG: Assessing willingness to pay for urban water, waste water, gas and electricity delivery service standards.

To our Director, Professor David Hensher

This is an ideal team to undertake this project. The theoretical design aspects are very well covered by Hensher. Hensher is internationally reputed for his contributions to choice modelling and these contributions are directly relevant to the utility industries studied here. He has had a large amount of experience in carrying out this type of study successfully. He can be counted upon to provide a sound theoretical base for the research, and can be expected to provide valuable insights as the research proceeds. While he is prolific, his work is always of the highest standards.

ARC Linkage Application Assessor

D. Hensher University of Sydney Research and Development Grant.

P. Stopher IMIS Integrated Management Information Systems Pty Ltd (as Contractors to the Victorian Department of Infrastructure): Freight Movement Model for Melbourne.

P. Stopher School of Business Research Grant, Faculty of Economics and Business, The University of Sydney: Sampling Error for Multi-Day Surveys.
Awards

Andrew Collins, David Willis Memorial Prize, Australasian Transport Research Forum 2006 (best paper by a student or new professional)

Professor David Hensher, 2006 Engineers Australia Transport Medal for lifelong contribution to transportation.

Dr Stephen Greaves, Dwight David Eisenhower Transportation Fellow
ITS-Monash

A STUDY OF PARKING IN MULTI-USE FACILITIES
Y. Tan and W. Young

PhD project
Tan Yan Weng is an Associate Professor in the School of Civil and Structural Engineering at Nanyang Technological University, Singapore. His current PhD research is in the area of parking systems design, with particular emphasis on developing an interactive stated preference approach to collect information on parking behaviour in multi-use facilities. This study investigates the application of parking modelling to the design and enhancement of multi-storey parking facilities. The PARKSIM model is used as a base and vehicle movement in multi-storey facilities modelled to enhance its present capabilities. The microsimulation model considers different user and vehicle types within a mixed use development as well as different types of parking operations. It incorporates algorithms for route choice, car following and lane-changing within the car park and external road network.

DEVELOPMENT OF A NATIONAL FRAMEWORK FOR APPRAISAL AND EVALUATION OF TDM INITIATIVES
G. Rose

This research project, being undertaken for Austroads, is developing a framework to assist in the selection and evaluation of Travel Demand Management (TDM) measures. As part of the study, experience with TDM evaluation in Australia, Europe and the North America was reviewed. The project has drawn on the UK Governments’ ‘New Approach to Appraisal’, the Auslink ‘Transportation System Management Guidelines’ and work previously undertaken by ARRB Transport Research for the Victorian Department of Infrastructure to develop a TDM measure selection toolkit and draft National Guidelines for TDM appraisal and evaluation. A series of workshops held in Melbourne, Brisbane, Sydney and Wellington was used to obtain practitioner feedback on the framework. The final report on the framework will be submitted to Austroads early in 2007.

IMPACT OF THE MONASH UNIVERSITY TRAVELSMART INITIATIVE
P. Eady and G. Rose

At the beginning of 2005, incoming students at the Monash Clayton Campus received comprehensive travel advice to encourage greater use of walking, cycling, public transport and carpooling to campus. This study drew on student responses to a questionnaire distributed six months after the program was run to evaluate its impact on travel behaviour. The TravelSmart initiative stimulated about 11 per cent of students to either try or use green travel modes. Students who received the TravelSmart packs as part of enrolment generally expected to be greater users of green travel modes at the time of enrolment and that continued through to their actual mode usage. TravelSmart treated respondents reported higher use of green modes than the respondents who did not receive TravelSmart. Information about public transport and carpool services were the most highly valued components of the TravelSmart initiative.

IMPACT OF AN OFFICE RELOCATION
W. Fu and G. Rose

This case study focused on the head office of a major organization which relocated from the city to the inner eastern suburbs. Using a series of travel surveys, the study examined employee travel behaviour prior to the move, anticipated mode of travel to work at the new location and actual mode at the new location. It was found that staff over-estimated the extent to which public transport would be used to travel to work at the new location.
COMPARING CYCLING IN MELBOURNE AND SYDNEY
G. Rose, J. Garrard, S. Greaves, C. Rissel and J. Pucher
This study is comparing cycling in Melbourne and Sydney. It seeks to examine differences in the level of involvement in cycling and the relative safety of cycling in the two cities.

UNDERSTANDING USE OF MELBOURNE’S OF-ROAD BICYCLE PATHS
G. Rose and J. Phung
This study draws on travel survey data to provide insight into usage of Melbourne’s off-road bicycle paths. Automatic loop detector data is being analysed to provide insight into the impact of weather effects, specifically rain and temperature, on the level of cycling. Intercept surveys and self completion questionnaires were used to obtain richer information on usage patterns. If the off-road facilities were not available, approximately one in five (20 per cent) of riders would change modes. A slight majority (60 per cent) of those would turn to public transport as opposed to the car to complete their trip. These results highlight the role which bicycle facilities play in moderating demand for motorised transport options particularly during the peak commuting period.

PREDICTING PAVEMENT PERFORMANCE AT A ROAD NETWORK AND ROAD PROJECT LEVEL
T. Martin and W. Young
PhD project
Tim Martin is a principal research engineer with ARRB Transport Research Ltd, and commenced his PhD in April 2001. It is postulated, and generally observed, that pavement performance is influenced mainly by levels of maintenance expenditure, climate, traffic loading and its associated dynamic effects and the structural condition of the pavement and its variability along the pavement. All factors are interrelated and correlation of these factors is prevalent in the usual historical performance databases used in quantifying pavement performance. This research aims to develop improved network and program level roughness deterioration models, including identifying the components of uncertainty associated with these models. The quantification of pavement performance will take the form of deterioration relationships expressed as a function of time, traffic loading and other variables and will cover sealed granular pavements (typical of 95% of Australia’s sealed road network) and the typical range of traffic levels and climatic conditions for pavements (network and program level) within most road networks in Australia. Pavement performance will be assessed by an overall serviceability and surface condition measure and an overall structural condition measure. More accurate deterioration models will improve the reliability of the estimates of road wear and cost allocation (with implications for heavy vehicle charging), of the estimates of the differences in road maintenance costs that are due to the various climatic regions in Australia, and of the estimates for maintenance and rehabilitation scheduling along each road in the road network (with implications for the estimation of the capital costs of increased pavement capacity under the regime of increased road use).

PERFORMANCE BASED STANDARDS FOR HEAVY VEHICLES
W. Young
This study has explored the role and potential for performance based standards in improving the economic, safety and environmental performance of the road system. This study is part of an Austroads project on performance based standards for heavy vehicles.

ENVIRONMENTAL IMPACTS OF TRANSPORT
W. Young
This project explores the relationship between land use, transport and the environment. Long term changes in transport and their impact on land use and the environment are investigated.
THE EFFECTS OF LARGE ROAD FREIGHT VEHICLES ON THE PERFORMANCE OF TYPICAL AUSTRALIAN ROAD PAVEMENTS: THE PERFORMANCE OF CEMENTED PAVEMENT MATERIALS UNDER HEAVY AXLE LOADING

R. Yeo, W. Young and K. Kodikara
PhD project
This project involves a study of road capacity to carry increasing axle loads on pavement structures incorporating cemented materials. Full scale accelerated load testing of two purpose built test pavements will be undertaken to assess the effects of axle load on pavement life. Laboratory test protocols for assessment of the elastic properties and fatigue properties of cemented materials will be investigated and the results of the full scale and laboratory tests will be compared with current theory.

TRANSFERRED TECHNOLOGY-BASED TRANSPORT, INFRASTRUCTURE AND ENGINEERING PROJECTS FINANCED AND UNDERTAKEN IN CHINA AND ASIA

M. Karpovitch and W. Young
PhD project
High economic growth rates of the economies in Asia and China have meant increased transport and infrastructure construction project activity in the region. This program of research aims to investigate and analyse the influence of systems of managing and financing large public transport and infrastructure projects on their outcome.

INCORPORATING TRAVEL TIME VARIABILITY INTO TRAVEL TIME PREDICTION MODELS

R. Li, G. Rose and M. Sarvi
PhD project
Information on travel time is important to road users and road system managers. This project is developing models which can be used to predict travel times. While traditional approaches focus on prediction of average travel time, this research is also aiming to estimate the level of uncertainty of the forecast. The models are being developed on the basis of the traffic data routinely collected by inductive loop detectors on motorways (speed, flow and occupancy) as well as probe vehicle data which can be provided by automatic vehicle identification systems. This study is being undertaken in conjunction with Transurban and Vic Roads.

UNDERSTANDING AND PREDICTING THE NATURE OF FREEWAY INCIDENTS

F. Campbell and G. Rose
Undergraduate research project
Incidents are random events such as crashes, breakdowns or spilled loads which affect freeway operations. As part of this study, a literature review was conducted to identify attempts to probabilistically model the frequency and severity of freeway incidents. Data from Melbourne’s CityLink motorway was analysed to examine the potential to develop incident models.

RELIABILITY MAPS FOR MELBOURNE FREEWAYS

R. Chudleigh and G. Rose
Undergraduate research project
Travel time reliability has been highlighted in the literature as being as important, or in some cases more important, to travelers than average travel time. This study sought to quantify the levels of (un)reliability in travel times across five freeway segments in Melbourne. Using two years of inductive loop data supplied by Vic Roads, travel time distributions were developed for each
of the freeway segments. A range of reliability metrics were then considered for mapping the
levels of reliability as a function of time of day and day of week. The research confirmed the
conclusions of European studies that the coefficient of variation, a common metric for
measuring variability, does not help to identify patterns in reliability. Clearer insight was obtained
using metrics based on the variance and skew of the travel time distribution.

DEVELOPMENT OF AN INSTRUMENTED VEHICLE UTILIZING LASER
BASED SENSING TECHNOLOGY

M. Sarvi and A. Zavabeti

In this study a sophisticated instrumented vehicle is being developed utilizing laser based sensing
technology. The key enabling technology required is an automatic and accurate system capable of
capturing real time traffic and driver data. Laser sensors and a model known as ‘SLAMMOT’ are
being used for automating the sensing and interpretation of sensing data, respectively. The laser
sensors handle the task of sensing the environment and the SLAMMOT model is employed to
interpret the data obtained by the laser sensors (ie. “sense and make sense” tasks). While the
operation of the laser sensors is based on the emission of a laser beam, recovering the reflected
beam and measuring distances to significant points in the environment draws on the SLAMMOT
model which is able to detect and model both static and moving objects in unknown
environments. SLAMMOT involves both simultaneous localisation and mapping in dynamic
environments and detection and tracking of these dynamic entities.

ACCURACY AND TRAFFIC SIMULATION MODELING

W. Young

This project looks at the reliability of traffic simulation models. In particular it investigates the
assumptions made in the model and their impact on the output. Particular attention will be paid
to assumptions about drivers risk taking.

MODELLING OF WEAVING PHENOMENA OBSERVED DURING TRAFFIC
CONGESTION

W. Young and M. Sarvi

This work focuses on a little researched area of modelling vehicle acceleration-deceleration
behaviour during weaving manoeuvres under congested traffic situations. Traffic congestion
frequently occurs at weaving bottleneck sections and it is vital to investigate traffic behaviour and
characteristics during traffic weaving processes under congested traffic flow in order to design
safer and less congested weaving points.

RESEARCH QUALITY IN TRANSPORT

M. Shakelton, G. Currie and W. Young

This project examines the quantification of quality in research. It looks at research quality in
industry, academia and research companies to investigate the best methods of ensuring and
measuring it.

APPLICATION OF PERSUASION PRINCIPLES TO A COMMUNITY BASED
TRAVEL BEHAVIOUR CHANGE PROGRAM

R. Seethaler, G. Rose and J. Allen

PhD project

Policies aiming to increase the sustainability of urban transport often face the problem of
overcoming unsustainable behaviour patterns that are principally centred around the car and
largely dominated by routine choices that do not take sustainability considerations into account.
To overcome the barrier of habitual behaviour patterns, awareness campaigns, principally based
on the provision of information about the effects of modal choice, are insufficient for stimulating
change. Social psychology offers a series of persuasion techniques that are able to reach beyond
the mere raising of awareness. For example, involving the target population in a process of personal commitment is likely to increase the up-take of the policy intervention and will therefore have a better chance of creating lasting changes in behaviour. Based on TravelSmart, the travel behaviour change (TBC) policy currently under development by the Victorian DOI, this project attempts to study the effect of different persuasion techniques individually and in combination by using an appropriate experimental design and evaluation techniques. This research is being supported by a Victorian Minister of Transport Scholarship.

EVALUATION OF THE MONASH UNIVERSITY CARPOOL SYSTEM

J. Wilcock and G. Rose

This study examined the potential for a variety of data to enhance understanding of the Monash University Carpooling system. In addition to a web-based survey of individuals registered for the carpool service, an analysis of ticket machine data and surveys of carpool usage provided a comprehensive data base for the study. While the carpool carpark provides free parking it was found that the majority of vehicles displayed a blue permit (for which an annual fee is charged) which would have allowed them to park in blue permit areas. This highlights that the carpools do not operate every day and blue permit parking areas are used on other days when the vehicle may not have sufficient occupants to qualify for carpool parking. Users value the premium location of the carpool carparks (close to the buildings) and the guarantee of a space. The majority of carpools have an explicit mechanism for sharing commuting cost, either by payments to the driver or by rotating the driver and vehicle used for commuting.

STUDY OF FREIGHT OPERATIONS

N. Abdulmalek, P. Reddy and M. Sarvi

Undergraduate research project

This project explored the lane changing behaviours of heavy vehicles and their interaction with surrounding vehicles on freeways and arterial roads under congested conditions. This research has potential to enhance freeway and arterial road operations and safety. Video and vehicle trajectory data were obtained from the Next Generation Simulation project in California. From these, heavy vehicle lane change maneuvers were identified and analysed. These individual analyses were collated to explore a number of driver stimuli affecting lane changing behaviour such as relative speeds, absolute speeds, and space gaps between vehicles. The results indicated a relationship between the lane changing vehicle and the leader and follower vehicle in the target lane. The strongest relationships were found between the accepted gap and the speed of the leader and follower vehicles relative to the lane changer, as well as the lane changer’s acceleration.

STUDY OF DRIVER INTERACTION BEHAVIOURS

R. Chase and M. Sarvi

Undergraduate research project

Being able to model different vehicle classes is becoming increasingly important given predictions that passenger vehicles will comprise a declining proportion of traffic in the future. The number of motorcycles and the level of road freight are correspondingly predicted to increase. Understanding the behaviour of these vehicle types, and their interactions will help in developing more accurate models real-life traffic problems. Existing models tend to be limited to the study of how passenger vehicles approach and pass larger vehicles, but the understanding of travel behaviour in the presence of following vehicles has not been rigorously examined. The Federal Highway Administration in North America has undertaken the Next Generation Simulation Project. One of the components of the project is an extensive data collection exercise designed to collect information that can be used for analysis and to check the validity of different transport models. The data extracted for this investigation included a 45-minute dataset collected between 7:50 a.m. and 8:35 a.m. from the southbound lane of the freeway US 101. Extensive data extraction using Microsoft Excel was undertaken to obtain information relating to the travel
characteristics of different transport classes under different conditions. Statistical tests were applied to examine relationships between the driving characteristics of the different vehicle classes. The aim of this research was to better understand how each vehicle class travels, and any interactions that may occur. From the limited information available on motorcyclists, the analysis found that these vehicles do not travel at a headway statistically different from that of the passenger vehicles but the average speed on the freeway is higher than other vehicle types. Trucks travel at a larger spacing and headway than other vehicles, but the difference in speed is not statistically different from that of a car under the same traffic conditions. The headway of passenger cars remains unaffected by the presence of a following vehicle however when unimpeded there is a statistically significant increase in travel speed. There was evidence to suggest that the change in travel speed tended to be larger if the vehicle behind was another car. This research has important implications for refinement of the ‘car following’ models which lie at the heart of many micro-simulation software packages.

INVESTIGATING TRANSPORT DISADVANTAGE, SOCIAL EXCLUSION AND WELL BEING IN METROPOLITAN, REGIONAL AND RURAL VICTORIA

G. Currie, T. Richardson, P. Smyth and D. Vella-Broderick

ITS (Monash) has won its first Australian Research Council Industry Linkage award for this 3 year interdisciplinary project to explore how transport problems impact on life opportunities and community well being. The project has a $1.1M budget and draws together international collaborations from the UK (Prof Hine, University of Ulster and Dr Karen Lucas, University of Westminster) as well as sponsorship resources from the Department of Infrastructure, The Brotherhood of St Lawrence and the Bus Association of Victoria. The project will entail case study analysis of six regions of Victoria and the development of quantitative survey instruments to explore the mechanisms and behaviors associated with transport disadvantage, understand how public transport acts to influence these issues and explore wider life impacts of lack of mobility.

A REVIEW OF AUSTRALIAN BUS RAPID TRANSIT SYSTEM DEVELOPMENTS

G. Currie

Started in 2004 this is proving an ongoing project as developments in BRT have continued in Australasia throughout 2006. ITS (Monash) has been invited to undertake presentations of our research in this area in Barcelona Spain (February 2006), Florida (January 2006) and also Bogota, Columbia at the 5th International Bus Conference (February 2007).

METLINK MARKET FUTURES RESEARCH AND DEVELOPMENT PROJECT

G. Currie, Z. Senbergs and M. Imran

This project is exploring the influences which changes in society might have on public transport travel into the future. The first of two major stages of the project are nearing completion. Phase 1 has reviewed literature and experience in a series of 11 major theme areas. These are to be workshopped with the transit industry in Melbourne and stage 2 will commence in 2007 exploring travel behaviour evidence from available secondary surveys.

SIGNAL PRIORITY MODELLING PROJECT

G. Currie and M. Sarvi

This project was commissioned by VicRoads in association with the Department of Infrastructure to explore the performance of active signal priority using traffic micro simulation. This is theoretical work supporting the development of a new generation active signal priority system for Melbourne’s tram and bus services.
DEMAND RESPONSIVE TRANSIT PILOT PROJECT DEVELOPMENT
G. Currie and Z. Senbergs
This project commissioned by the Bus Association of Victoria in association with the Department of Infrastructure is to advise and manage the development of projects for a trialling of demand responsive bus services suitable for fringe urban Australian conditions. ITS (Monash) reviewed previous research evidence and assessed the performance of DRT systems in these circumstances. A series of proposals for trial services were developed from workshops and consultation with industry. Advice on optimal design for pilot project development and monitoring was provided.

SMART CARD TICKETING AND PASSENGER INFORMATION DATA DESIGN
G. Currie and N. Wilson
This project commenced in 2006 is a collaboration between ITS(Monash) and the Massachusetts Institute of Technology in the United States. It was commissioned by the Transport Ticketing Authority who are developing the new ‘Myki’ smart card ticketing project for Melbournes’ public transport systems. The aim is to review international experience in designing the framework for managing patronage information which can be collected from smart card systems as a basis to inform future systems development in Melbourne.

SOCIAL CAPITAL COMMUNITY STRENGTHENING AND PUBLIC TRANSPORT
G. Currie and J. Stanley
This project undertaken for the Department of Infrastructure is a collaboration between ITS (Monash), the Department of Social Work at Monash University and the Brotherhood of St Lawrence Research Group. Its aim is to explore how the social policy concepts of social capital and community strengthening relate to public transport as a basis to inform policy development and research in the field.

THE IMPACTS OF TRANSIT RELIABILITY AND WAIT TIME FOR LONG HEADWAY SERVICES
D. Csikos and G. Currie
A review of theoretical research on the waiting time impact of headways and alternative service reliability has been completed and followed by primary data collection on wait times and reliability associated with Melbourne passenger rail services. Data was collected using magnetic ticket validation data and established one of the most robust models ever to test the theory associated with these issues. Results are to be reported at the 2007 Annual Meeting of the US Transportation Research Board and have been recommended for publication in Transportation Research Record.

LINKING FUEL PRICE INCREASES AND PUBLIC TRANSPORT DEMAND - MELBOURNE
G. Currie and J. Phung
This project was an empirical statistical exploration of the relationship between car fuel price changes and public transport patronage growth on Melbournes public transport. An econometric statistical model was developed which identified a significant statistical relationship between rail and bus patronage growth and fuel prices. A major finding was the significantly higher cross elasticities which were demonstrated for rail patronage in Melbourne. Results were published at ATRF 2006.
US TRANSIT RIDERSHIP AND AUTO GAS PRICES AND WORLD EVENTS - NEW DRIVERS OF CHANGE?
G. Currie and J. Phung
This project extended the econometric modeling undertaken at ITS (Monash) on changes in ridership and fuel price in Melbourne to a short term contemporary assessment of these issues for transit systems in the United States of America. The results confirmed statistically significant elasticities which demonstrated changes in market sensitivity to fuel price over short term periods before the 9/11 terrorist attacks, the Iraq war and Hurricane Katrina. Results are to be presented at the 2007 annual meeting of the US Transportation Research Board in Washington and have been recommended for publication in the Transportation Research Record.

LINKING FUEL PRICE INCREASES AND BUS DEMAND - MELBOURNE
G. Currie and J. Phung
Continuing on from previous topical research in this field a project examining the market impacts on individual bus routes is being undertaken into 2007.

SUCCESSES AND CHALLENGES IN MODERNISING STREETCAR SYSTEMS - EXPERIENCE IN MELBOURNE AND TORONTO
G. Currie and A. Shallaby
This project is part of a program of research developed by ITS (Monash) which aims to assist the Melbourne tram system learn from lessons in other streetcar (or mixed traffic) based tram systems. It is a collaboration of ITS (Monash) and the University of Toronto and has included a review of the challenges associated with streetcar operations and a comparative assessment of the policy measures aimed at addressing these challenges. The research which resulted was one of the subjects presented at the Melbourne workshop 'Tram Planning - Lessons from Toronto'. A follow on workshop is planned for 2007 in Toronto. The work is also part of a program run by the US Transportation Research Board’s committee AP070 on Light Rail Transit and will be part of a special session of the 2007 TRB Annual Meeting focusing on modernizing streetcar systems.

ASSESSING THE QUALITY OF AUSTRALIAN TRANSIT SIGNAL PRIORITY AGAINST WORLDS BEST PRACTICE
G. Currie
This project followed on from a literature review of signal priority practices undertaken in 2005 for VicRoads. It included a review of current Australian approaches to signal priority in each state and an assessment of these against world practice. A key finding was that despite much enthusiasm in the 1980’s and 1990’s for signal priority, in practice, the development of these technologies has proven problematic and little real progress has been occurring over the last few years.

TRANSPORT DISADVANTAGE AND INDIGENOUS AUSTRALIANS
G. Currie and Z. Senbergs
This project comprised a review of research and experience concerning transport disadvantage and indigenous Australians. It includes a review of issues and problems related to transport and behavioral and social issues which are related to this.

AUSTRALIANS WITH DISABILITIES - TRANSPORT ISSUES AND PROBLEMS
G. Currie, Z. Senbergs and J. Allen
This project is a collaboration of the ITS (Monash) and the Department of Design at Monash Caulfield. It is a review of current experience and research evidence on transport disadvantage issues and the full range of Australian groups facing physical, social and intellectual disabilities.
YOUNG AUSTRALIANS AND TRANSPORT DISADVANTAGE
G. Currie
This project follows on from Prof Curries’ national review of transport for rural and regional young people undertaken for the National Youth Affairs Research program in 2005. It is an update and review of issues associated with transport and access problems for young Australians.

INVESTIGATING AUSTRALIAN GOVERNMENT STRUCTURES AND PUBLIC TRANSPORT
G. Currie
This project is a review of evidence concerning the structure of local, state and federal government involvement in the planning, funding and development of public transport services. Results were presented at the 2006 Australian Institute of Traffic Planning and Management Conference.

A STRATEGIC ASSESSMENT OF AUSTRALIAN URBAN PASSENGER RAILWAYS
G. Currie and M. Imran
This project was initiated in response to an invitation to present at the 2006 AusRAIL national conference. It is a strategic critique of Australian Urban Passenger Railways from a patronage development and sustainability perspective and included a historical assessment of rails’ market development, access catchment coverage and performance in terms of network expansion.

DESIGNING FOR PEDESTRIAN
J. Ronquillo, D. Hislop and G. Currie
Undergraduate research project
This project reviewed the factors of importance to creating a safe and attractive environment for pedestrians. It includes a review of readily available research on good practices in designing for pedestrians. It also reviewed techniques for undertaking manual quantification of the relative ‘walkability’ of communities and the quality and level of service of existing provision for pedestrians. This project includes the application of self completion ‘walkability’ and “walk quality” assessments at Clayton Campus to assess the performance of existing street and path design and to identify ideas for improving the ‘walkability’ of campus.

THE DESIGN OF PUBLIC TRANSPORT INTERCHANGES AND TERMINALS
P. Constance and G. Currie
Undergraduate research project
This project included a review of research literature regarding public transport stations, terminals, interchanges and bus and tram stops to understand the design requirements, techniques for evaluating interchanges and good practices and innovations in design. The project also involved the application of the findings of this research on the Huntingdale bus rail interchange and Monash University interchange to assess their performance from a transit operations and patronage amenity viewpoint.

DESIGN OF THE CAULFIELD-HUNTINGDALE-MONASH-ROWVILLE BUS RAPID TRANSIT SERVICE
J. Neal and G. Currie
Undergraduate research project
The Victorian Government has announced it will invest over $30M on a Smart Bus service between Caulfield, Monash and Rowville on Wellington Road. The aim is to deliver Victoria’s first ‘Bus Rapid Transit’ service in line with world best practice. This project developed design concepts for the proposed service with reference to world best practice in relation to Bus Rapid
Transit (BRT). The project included a review of BRT literature, a review of existing Smart Bus services and the policy context of Smart Bus in Victoria, an assessment of existing conditions in the proposed service corridor including field surveys and the development of design concepts for the service.

A REVIEW OF THE PUBLIC TRANSPORT CUSTOMER SATISFACTION DATABASE
D. Mak and G. Currie
Undergraduate research project
This project was undertaken in association with Metlink and mined the long running Melbourne Public Transport Customer Satisfaction Database to undertaken relationships between service performance factors and customer satisfaction elements output from the quarterly survey.

INVESTIGATING PASSENGER WAITING BEHAVIOUR AT TRANSIT STOPS AND STATIONS
S. Hung, K. Shen, B. Wan and G. Currie
Undergraduate research project
This project explored the theoretical literature associated with passenger waiting behaviour at bus and rail stops concerning average waiting times and relationships to headways. A field survey was then undertaken to collect primary evidence to test the theoretical background in practice.

IMPROVING METHODOLOGIES TO ASSESS ON ROAD PUBLIC TRANSPORT PRIORITY
G. Currie, M. Sarvi and W. Young
This project examines previous approaches to allocating road space for all users and also reviews approaches to giving public transport priority in road space allocation. A new approach to determining ‘optimum’ road space allocation is developed using a Social Cost Benefit approach. Advanced micro-simulation approaches to model traffic impacts of alternative public transport priority designs is used to determine guidelines for ‘optimal’ road space allocation in relation to public transport. The research is being funded by Vic Roads.

INVESTIGATING PUBLIC TRANSPORT TRAVEL TIME VARIABILITY
M. Tiong and M. Sarvi
Undergraduate research project
This study investigates the variability of public transport travel time and aims to not only quantify that variability but also better understand the factors which contribute to that variability.

Monash Transport

In 2005, following a successful workshop which bought together researchers from across Monash with an interest in Transport research, a plan was put to the university’s senior management to provide funding to support a multi-disciplinary transport research initiative at Monash. That initiative bore fruit in 2006 through the establishment of the Monash Sustainability Institute (MSI). Four key themes have been established for MSI: Water, Climate, Energy and Transport. Geoff Rose was appointed Interim Director of the Transport Theme which will operate under the banner of ‘Monash Transport’.

Monash Transport aims to address the social, economic and environmental challenges associated with the development of a sustainable transport system for the movement of both people and freight. By building teams that cross traditional discipline boundaries, Monash Transport aims to develop and share sustainable transport knowledge between Monash and the community.
To enable Geoff Rose to develop the Monash Transport initiative, central university funding was provided to facilitate some teaching support. Dr Imran Muhammad, who had joined ITS (Monash) this year as a research fellow in the public transport area, collaborated with Geoff to assist with some of his teaching commitments in second semester - particularly in relation to CIV2282 Transport and Traffic Engineering.

The main activities undertaken by Monash Transport in 2006 were preparatory work on a number of collaborative research projects, structuring a web site and arranging a reconnection event with the Monash staff who attended the Transport Research at Monash (TRAM) workshop in 2005. The reconnection event was opened by Professor Edwina Cornish, Deputy Vice-Chancellor Research and included presentations on a number of successful research projects with developed as part of the 2005 event. A ‘Speed Dating for Transport Researchers’ activity (See Figure 12) which formed part of the event proved to be not only fun but also fertile in that a number of new collaborative research projects were generated by the staff who met at the event.

As part of the Monash Transport initiative, Geoff Rose participated in a seminar in France in October which aimed to build stronger links with INRETS, the French National Institute for Transport and Safety Research. The seminar was jointly hosted by Monash University and INRETS. Geoff has undertaken a number of collaborative projects with Dr Jean-Luc Ygnace from INRETS, and both INRETS and Monash are working to undertake more collaborative research in the future. The seminar was attended by representatives from a number of Australian universities and industry groups. To increase the interaction between Monash and INRETS, Dr Mike Regan from the Monash University Accident Research Centre is being seconded to INRETS for a three year period beginning in 2007.
On the way back to Australia from France, Geoff made a stop at Monash South Africa. The campus is currently home to round 1000 students from 25 countries with only about 20 per cent of them coming from South Africa. The campus is growing rapidly. While the initial emphasis has been teaching activities, effort is now being directed at building its research activities. Transport has been identified as one of the areas where Monash South Africa can grow its research activities and Geoff’s visit provided an opportunity to develop plans to add value to the Monash South Africa’s research activities through the Monash Transport initiative. During his visit, Geoff presented a seminar on Community-based TravelSmart initiatives in Australia.
New Frontiers in Transport Systems Seminar
In November, ITS (Monash) arranged a one day seminar to highlight insight from the leading edge of transport research. The seminar was attended by about 35 staff from a variety of transport organisations including the Department of Infrastructure, Vic Roads, RACV, Intelematics Australia, Transurban and ConnectEast. The seminar gave attendees an opportunity to hear from a range of local and international speakers. The topics covered at the seminar, and the speakers involved, were as follows:

New Frontiers in Simulation Modelling of Transport Systems - Prof. Masao Kuwahara, University of Tokyo
Transit Connection Protection – Prof Amer Shalaby, University of Toronto
Intelligent Roads - Prof. Edward Chung, EPFL Switzerland
ITS and Management of Commercial Vehicle Operations on Motorways - Dr. Majid Sarvi, ITS (Monash)
Travel Time Variability: Measuring, Mapping and Implications – Assoc Prof. Geoff Rose, ITS (Monash)
Insights from Electronic Toll Collection Data , Prof. Masao Kuwahara, University of Tokyo
GPS enabled Cell Phones for Traffic Monitoring, Prof Amer Shalaby, University of Toronto
Sabbatical Leave - Assoc Prof Geoff Rose

Geoff Rose was on sabbatical leave from the middle of 2005 until February 2006. That period proved to be very productive from a research perspective. The Department of Civil Engineering at Delft Technical University in the Netherlands provided the base for this period of leave with the research activities focused in two main areas: applications of advanced technology in transport and travel behaviour analysis. A total of nine papers were submitted/presented while on his Outside Studies Program (OSP), four of those in international journals and another three in international peer reviewed conferences. A number of new research initiatives were also begun covering the analysis of travel time reliability and the evaluation of voluntary travel behaviour change programs. Discussions with a number of international research groups resulted in plans to develop a formalized arrangement for research co-operation with the Collaborative Research Centre for Advanced Mobility at the University of Tokyo. Foundations were also laid to position Monash to collaborate with the French National Institute of Transport and Safety (INRETS) in seeking funding as part for the European Commissions 7th framework for transport research and development. While his OSP activities were focused primarily on research, Geoff also delivered an off-campus distributed learning postgraduate unit in Intelligent Transport Systems (CIV5304) while overseas. Geoff attended and spoke at the MoVe 2005 conference in Venice which brings together researchers, politicians, government officials, industry and consulting representatives with an aim of developing mobility management applications in Italy. In January 2006, Geoff attended the US Transportation Board’s 2006 conference where he presented two papers in conjunction with current postgraduate students (Ruimin Li and Rita Seethaler).

Study Trip to Japan

Dr Majid Sarvi travelled to Tokyo to work with Professor Masao Kuwahara over the summer of 2005/2006. The project was entitled “A three dimensional driving simulator combined with a traffic simulation to study driving behaviours”. The main aim of this research was to utilize a three dimensional dynamic driving simulator linked with a network traffic micro-simulation to study driving behaviour. Having adequate and accurate understanding of driving behaviour is vital to traffic and transport engineers. One of the most challenging driving tasks occurs when a driver is involved in a dynamic combination of lateral and longitudinal movements (e.g. lane changing and merging manoeuvres). There have been few comprehensive research publications concerned with traffic behaviour and characteristics in these situations. The absence of reliable data with which simulated processes, such as car following, may be compared presents a significant challenge, and one that has become increasingly apparent in the development of models of driving behaviour in these situations over the last few years. Obtaining such data and the associated increase in model validity that this would allow is increasing in importance in order to assess the effectiveness of new, advanced telematic systems which are designed to improve traffic flow and safety. One source of such data to assist in this process is the use of laboratory based simulators. In these experiments, the driver is placed in a fully controlled virtual environment where his reactions to external stimuli can be accurately measured in a systematic manner.

Developing Collaborative Research Links

In 2006, ITS, Monash has developed closer research links with the University of Tokyo. In a special ceremony held as part of the ‘New Frontiers in Transport Systems’ seminar a Memorandum of Understanding was signed between ITS (Monash) and the Collaborative Research Center for Advanced Mobility at the University of Tokyo. The MOU was signed by Assoc. Prof. Geoff Rose and Prof Masao Kuwahara.
Professor Masao Kuwahara signing the MOU between ITS (Monash) and the Collaborative Research Center for Advanced Mobility at the University of Tokyo

Public Transport Design Research Initiative
In 2005 ITS (Monash) joined with the Industrial Design group at Monash Caulfield to develop a design research initiative focusing on the public transport field. A number of significant activities followed in 2006 including:

Volgren Monash PhD Research Scholarship
Australia’s largest bus vehicle manufacturer Volgren has sponsored a 3 year PhD research scholarship at Monash University to study innovative vehicle designs for the bus industry. The project includes funding for a full time research student to be supervised by the Monash design school in association with ITS (Monash).

2007 Victorian Premiers Award For Design
A design for a narrower Melbourne tram, made from aluminium, has won two Premier's Design Awards for a pair of Monash University Art and Design students. Their design of a narrow tram that runs on a single track earned Mr Ben Last and Mr Jess Cameron-Wootten the Premier's Student Design Award and Student Product Design Prize.

The narrow tram design that earned two awards for Monash students Mr Jess Cameron-Wootten and Mr Ben Last at the Premier's Design Awards
2007 - ALSTROM Design Competition ‘Light Rail 2020’
ALSTOM Australia Limited in association with Yarra Trams and United Group Ltd developed a design prize for light rail vehicles which would reflect the objectives of the Victorian Government’s 2020 urban strategy. The event was open to design schools throughout Australia. First prize was an all expenses paid trip to work at ALSTROM’s design school in Paris France. Monash University students Chris Chan, Casey Phua and Yu-Chen Pan won first prize for their design YOKOPANO. In addition Monash University students won third prize in the competition.

YOKOPANO tram design by Monash University Students Chris Chan, Casey Phua and Yu-Chen Pan Won First Prize For ALSTOM Light Rail 2020 Competition

Staff Industry Award

Professor Currie was presented with the Bus Association of Victoria’s Industry Contribution Award at the 2006 Bus Maintenance and Expo Conference at the Moonee Valley Racecourse.

2006 Bus Industry Expo at which Professor Currie was Awarded the BAV Industry Contribution Award
PUBLICATIONS

Staff disseminate research and policy work through a wide range of publications from books, journal articles, conference proceedings, working papers and project reports.

Handbooks in Transport

David Hensher was appointed in 1999 as volume and series editor for a series of Handbooks in Transport with Ken Button (George Mason University) by Elsevier Science Ltd. Six handbooks have been published under the Pergamon and Elsevier imprint over a period of five years. This now completes the series, although revised editions are being planned.

Vol 1 – Handbook of Transport Modelling, published in 2000;
Vol 2 – Handbook of Logistics and Supply-Chain Management, published in 2001;

Published:

Books


Book chapters


Rose J.M. and D.A. Hensher (2006) Accounting for individual specific non-availability of alternatives in respondent’s choice sets in the construction of stated choice experiments. In

Truong T.P. and Hensher, D.A. A reassessment of the characterisation of congestion on an urban road network - some theoretical suggestions and illustrative experiments, in: Advances in Transport Economics P. Coto (ed), Springer.

Journal Articles


Congratulations on your paper with Ken Train and Nina Shore that came out in the latest Economic Record. Its good to have an economist like yourself in the Faculty!

Associate Professor Jeffrey Sheen, Discipline of Economics, School of Economics and Political Science, Faculty of Economics and Business, University of Sydney


Conference papers


In press:

Books


Book chapters


126


**Journal articles**


Hensher D.A. and S. Jones (in press) Predicting Corporate Failure: Optimizing the Performance of the Mixed Logit Model. ABACUS.


Hensher D.A. and S.M. Puckett (in press) Congestion Charging as an Effective Travel Demand Management Instrument, Transportation Research A.


Paterson D. and Rose G. (submitted) ‘A recursive, cell processing model for predicting freeway travel times’ Transportation Research (Part C).

Puckett S.M. and D.A. Hensher (in press) The role of attribute processing strategies in estimating the preferences of road freight stakeholders under variable road user charges. Transportation Research E.


Under editorial consideration:

Books


Book chapters


Journal articles

Bliemer M. and J.M. Rose (in review) Efficiency and Sample Size Requirements for Stated Choice Studies. Transportation Research B.

Bliemer M., J. Rose and D.A. Hensher (in review) Con structing efficient stated choice experiments allowing for differences in error variances across subsets of alternatives. Transportation Research B.


Figliozzi M. (in review) Analyzing the Efficiency of Commercial Vehicle Tours: data collection and methodological implications. Special Issue, Transportation Research B.

Figliozzi M. (in review) Planning Approximations to the length of TSP and VRP problems. Transportation Research B.


Hensher D.A. (in review) Influence of vehicle occupancy on the valuation of car driver’s travel time savings: identifying important behavioural segments. Transportation Research A.


Stopher P., M. Xu, and C. FitzGerald (in review) Assessing the Accuracy of the Sydney Household Travel Survey with GPS. Transportation.

Stopher P., S. Greaves and C. FitzGerald (in review) Developing and Deploying a New Wearable GPS Device for Transport Applications”. Transportation Research B.

Conference papers


Swann N. and C. FitzGerald (in review) Sharpening the cutting edge: Using focus groups to refine GPS travel survey methodologies. Work-in-progress submitted to the ACSPRI Social Science Methodology Conference, December 2006.


In progress:


Figliozzi M. (in progress) Tradeoffs in Dynamic Cooperative Transportation Scheduling.


Figliozzi M. and Z. Zhao (in progress) Strategies to Deal with Supply Chain Disruptions: an analysis of Survey Results from Sydney based Importers and Exporters.

Greaves S. and M. Figliozzi (in progress) The Usage of GPS Technology to Study and Analyze Urban Freight Tours.

Hensher D.A. (in progress) Joint estimation of Process and Outcome in Choice Experiments: Application to Tollroads (M4)


Hensher D.A., S. Jones, J. Rose and A. Collins (in progress) Combining Data Sources in the Assessment of Business Risk.

Hensher D.A. and J. Rose (in progress) Valuation of travel time savings - practical lessons in application of VTTS

Hensher D.A., S. Jones, J. Rose and A. Collins (in progress) Combining Data Sources in the Assessment of Business Risk.

Hensher D.A., S. Puckett and J.M. Rose (in progress) Moving beyond the Limitations of Stated Preference Methods in the Analysis of Interactions: Stated Endogenous Attribute Level (SEAL) Analysis


Hensher D.A., J. Rose and S. Puckett (in progress) Recent developments in choice analysis.

Hensher D.A. and J. Rose (in progress) Valuation of car passenger’s travel time savings.


Rose J.M., I.R. Black and D.A. Hensher (in progress) Interactive agency choice experiments (IACE) and household automobile ownership.


Other publications (including non-refereed publications)


<table>
<thead>
<tr>
<th>Working Paper Number</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITLS-WP-06-01</td>
<td>The Effect of Service Quality and Price on International Airline Competition</td>
<td>Jou, Lam, Hensher and Kuo</td>
</tr>
<tr>
<td>ITLS-WP-06-02</td>
<td>Spatial Alliances of Public Transit Operators: Establishing operator preferences for area management contracts with Government</td>
<td>Hensher and Knowles</td>
</tr>
<tr>
<td>ITLS-WP-06-03</td>
<td>Selection Bias in Value of Travel Time Savings</td>
<td>Mabit</td>
</tr>
<tr>
<td>ITLS-WP-06-04</td>
<td>Heteroskedastic Control for Random Coefficients and Error Components in Mixed Logit</td>
<td>Greene and Hensher</td>
</tr>
<tr>
<td>ITLS-WP-06-05</td>
<td>Future Provision of Motorways in New South Wales: Some Comments</td>
<td>Stone</td>
</tr>
<tr>
<td>ITLS-WP-06-06</td>
<td>Variability of Personal Exposure to Fine Particulates for Urban Commuters inside an Automobile</td>
<td>Greaves and Bertoia</td>
</tr>
<tr>
<td>ITLS-WP-06-07</td>
<td>Analysis and Evaluation of Incentive Compatible Dynamic Mechanisms for Carrier Collaboration</td>
<td>Figliozi</td>
</tr>
<tr>
<td>ITLS-WP-06-08</td>
<td>Modeling the Impact of Technological Changes on Urban Commercial Trips by Commercial Activity Routing Type</td>
<td>Figliozi</td>
</tr>
<tr>
<td>ITLS-WP-06-09</td>
<td>Quantifying Opportunity Costs in Sequential Transportation Auctions for Truckload Acquisition</td>
<td>Figliozi, Mahmassani and Jaillet</td>
</tr>
<tr>
<td>ITLS-WP-06-10</td>
<td>Pricing in Dynamic Vehicle Routing Problems</td>
<td>Figliozi, Mahmassani and Jaillet</td>
</tr>
<tr>
<td>ITLS-WP-06-11</td>
<td>Influence of Vehicle Occupancy on the Valuation of Car Driver's Travel Time Savings: Identifying Important Behavioural Segments</td>
<td>Hensher</td>
</tr>
<tr>
<td>ITLS-WP-06-12</td>
<td>A symmetrical Preference Formation in Willingness to Pay Estimates in Discrete Choice Models</td>
<td>Hess, Rose and Hensher</td>
</tr>
</tbody>
</table>
Reducing Sign Violation for VTTS Distributions through Recognition of an Individual’s Attribute Processing Strategy
(Hensher)

Approximation of Bayesian Efficiency in Experimental Choice Designs
(Bliemer, Rose and Hess)

Advances in GPS Technology for Measuring Travel
(Stopher, FitzGerald and Zhang)

Pilot Testing a GPS Panel for Evaluating TravelSmart®
(Stopher, FitzGerald and Biddle)

Establishing and Using a Before-and-After Panel Survey: Case Study of New South Wales
(Stopher, Swann and Bertoia)

A Panel Approach to Evaluating TravelSmart Initiatives in the Short Term – South Australia Pilot Survey
(Stopher, Greaves, Xu, Fitzgerald and Swann)

Delivering Value for Money to Government through Efficient and Effective Public Transit Service Continuity: Some Thoughts
(Hensher)

Analysis of the Efficiency of Commercial Vehicle Tours: Data Collection, Methodological, and Policy Implications
(Figliozi)

Disaggregate Assessments of Population Exposure to Aircraft Noise
(Greaves and Collins)

The Trip Chaining Activity of Sydney Residents: A Cross-Section Assessment by Age Group with a focus on Seniors
(Golob and Hensher)

Households on the Move: Experiences of a new approach to voluntary travel behaviour change
(Ampt, Wundke and Stopher)

Mixed Method Data Collection in Travel Surveys: Challenges and Opportunities
(Ampt and Stopher)

Community Perceptions of ‘TravelSmart®’ Behaviour in South Australia
(Bertoia, Tideman and Stopher)
PROFESSIONAL ACTIVITIES

ITLS-Sydney

http://www.itls.usyd.edu.au/research/research.asp#professional_activities

Workshops, seminars and industry linkages

Dr Miguel Figliozzi attended the Third International Odysseus Workshop on Freight Transportation and Logistics. Valencia, Spain, 2006.

Dr Stephen Greaves was an invited discussant of a seminar given by Professor Larry Frank on public health, transport and urban planning (September 2006)

Professor Peter Stopher gave a presentation titled 'Congestion Management' to the Workshop on Congestion and GPS organised by the Australian Road Federation (September 2006)

Professor Peter Stopher gave a presentation titled 'Australia's Challenge - Managing Congestion' to the Smart Traffic 2006 Symposium organised by the Transport Roundtable Australasia (August 2006)

Professor Peter Stopher gave a presentation on 'Sydney's Transport Future' at a seminar on Sydney Transportation - Today and Tomorrow organised by The Association of Consulting Engineers Australia (July 2006)

Dr John Rose was the keynote speaker at the Annual Conference Australian Pharmaceutical Marketing Research Group (June 2006)

Dr John Rose was the keynote speaker at 'Applications of Choice Modelling: A hands-on approach' hosted by Cegedim (March 2006)

Media and meetings

Professor David Hensher and Dr Miguel Figliozzi met with Hamish Bowden, Manager, Business Development and Planning, BORAL Construction Materials (NSW) to discuss 'knowledge and expertise of the Sydney logistics market - particularly with respect to the modelling of the freight network' (1 February 2006)

Professor David Hensher met with Sonke Albers, Krel University, Germany (20 February 2006)

Professor David Hensher was interviewed live on Channel 10 5pm News program to discuss 'Sydney’s traffic congestion’ (21 February 2006)

Professor David Hensher, Professor Peter Stopher and Dr Stephen Greaves met with Rob Whelan, AAMI to discuss ‘opportunities to collaborate in developing innovative methods for congestion charging’ (21 February 2006)

Professor David Hensher met with Ms Ada Chow (International Development Manager, The University of Sydney) and ABC Asia representatives to discuss future plans (21 February 2006)

Professor David Hensher, Professor John Pucher and Dr Stephen Greaves met with Clover Moore (Lord Mayor of Sydney) to discuss ‘graduate transport education and challengers facing the transport system in Sydney’ (24 February 2006)
Professor David Hensher gave a keynote address hosted by the Municipal Association of Victoria Conference, titled 'Transporting Communities into 2030'. The title of his talk was 'Melbourne: A city of cities', Melbourne (1 March 2006)

Professor David Hensher was interviewed on ABC Radio 702, morning radio, to discuss 'Sydney's tollroads and the CCT half toll for 3 months' (6 March 2006)

Professor David Hensher was interviewed by Sheryl Nixon, SMH, on Sydney's tollroads (6 March 2006)

Professor David Hensher met with Dr Sarah Clifford, Transport and Travel Research Limited to discuss 'travel demand management and mobility of the elderly' (6 March 2006)

Professor David Hensher was interviewed by Nina Stephens, Channel 9 Evening News, to discuss 'Congestion charging' (7 March 2006)

Professor David Hensher was interviewed by the Australian Financial Review on 'the Faculty of Economics and Business' post graduate degree program in commerce' (3 April 2006)

Professor David Hensher presented a paper 'Transport Social Disadvantages and Wellbeing' at the 'social exclusion and transport conference' hosted by the Victorian Department of Infrastructure, the Brotherhood of St Lawrence and Monash University (5 April 2006)

Professor David Hensher met with Ms Liz Reedy, Independent Safety and Reliability Regulator to discuss 'service quality assessment in bus and rail' (11 April 2006)

Professor David Hensher attended the Bus and Coach (BCA) Conference at the Hunter Valley and gave a keynote paper on 'Challenges facing the Bus and Coach Industry' (21-23 April 2006)

Professor David Hensher was interviewed by Heath Aston, Daily Telegraph newspaper, on 'public transport needs for the NW sector of Sydney' (1 May 2006)

Professor David Hensher met with R Roberts and Chris Herbert (THIESS) to discuss 'future tollroad projects in Australia' (3 May 2006)

Professor David Hensher attended the International Office Agents Workshop which was followed by a gala dinner at Doltone House, Jones Bay Wharf (4 May 2006)

Professor David Hensher gave a seminar at Charles Sturt University on 'recent developments on choice modelling' (10 May 2006)

Professor David Hensher, Prof Peter Wolnizer [Dean] and Prof Sid Gray met with Prof Cary Cooper, PVC External Relations, Lancaster University, UK to discuss 'developments in business education and the opening up of opportunities to build a relationship with the top European business schools' (11 May 2006)

Professor David Hensher spoke at the Economic Society of Australia (NSW) lunchtime seminar 'Sydney: The City of Cities – Informed Thinking on Accessibility and Geographical Proximity', at the Reserve Bank of Australia (17 May 2006)

Professor David Hensher met with Professor Jessop, the Chartered Institute of Purchasing and Supply (CIPS), UK to discuss 'accreditation of degree programmes' (18 May 2006)

Professor David Hensher attended a meeting at the Union Club for Geoff Gallop (23 May 2006)

David Hensher wrote an article for the 'online Opinion Page'. The title of the article was 'We mustn't miss this very fast bus':


Professor David Hensher met with Simon Barrett (LEK, Melbourne), Marc-Antoine Cousin, Director (LEK, Sydney) to discuss 'the development of national public transport policy'. (24 May 2006)
Professor David Hensher met with David Ashmore (SAHA Int’ Ltd) to discuss ‘developments in bus and rail reform in the context of growing patronage’ (6 June 2006)

Professor David Hensher spoke with Jordan Baker (SMH) on ‘delays to buses in the CBD of Sydney’ (8 June 2006)

Professor David Hensher was interviewed by Adam Bell, (Sunday Telegraph) for comments on ‘Sydney’s port and fuel prices and public transport patronage’ (14 June 2006)

Professor David Hensher met with Darryl Mellish at the MoT (Sydney) to discuss ‘the new accreditation standards’ (16 June 2006)

Professor David Hensher and John Rose met with Transit NZ and BECA to ‘develop ideas in toll road time valuation’ New Zealand. (3 July 2006)

Professor Peter Stopher was interviewed by Jordan Baker and Sherrill Nixon for the Sydney Morning Herald: Expert’s solution to traffic tax: pay when it’s busy (4 July 2006)

Professor Peter Stopher was interviewed on ABC Talk Radio (720 AM) on GPS-based, distance-based road user charging (4 July 2006)

Professor Peter Stopher was interviewed on 2GB Talk Radio (873 AM) on GPS-based, distance-based road user charging (4 July 2006)

Professor David Hensher met with Michael Haskins to commence development of new accreditation standards for MoT accreditation of bus and coach operators (7 July 2006)

Professor David Hensher met with Scott Lennon, PWC for a luncheon meeting as a general update on the partnership with PwC (10 July 2006)

Professor David Hensher gave a presentation on ‘the future of freight logistics at Sydney Ports’ at the Air and Sea Freight Council Annual awards (24 June 2006)

Professor David Hensher, John Rose and Andrew Collins met with Dr Melvyn Weeks, University of Cambridge. Topic of discussion was ‘latest developments in discrete choice modeling’ (31 July 2006)

Professor David Hensher attended the Chilean Millenium Foundation Conference on Sustainable Transport and presented an invitational paper on ‘Information processing’ in Santiago, Chile (4-13 August 2006)

Professor David Hensher presented an invitational resource paper at the IATBR Conference in Kyoto, Japan. The paper, ‘Selective Developments in Choice Analysis and a Reminder about the Dimensionality of Behavioural Analysis’ was jointly authored by Sean Puckett and John Rose (14-22 August 2006)

Professor David Hensher attended the BCA Conference at the Hunter Valley and gave an overview presentation of the recent developments in bus contracting worldwide (22 September 2006)

Professor David Hensher met with Jim Glasson, Director General of Transport Ministry of Transport for wide ranging discussions on transport reform in NSW, opportunities for cooperative research and the involvement of the MoT’s research activities with ITLS (24 October 2006)

Professor David Hensher met with Mag Elisabeth Lackner, to discuss ‘future cooperation between respective universities’. Mag Lackner is a scientific researcher and lecturer at the Chair of Industrial Logistics at the University of Leoben (8 December 2006)

Professor Hosted lunch to thank Media for supporting the Faculty (12 December 2006)
Positions

Editorial Positions

Professor David Hensher:
Series and Volume Editor (with Professor Kenneth Button) of Pergamon/Elsevier Handbooks in Transport
Area Editor, Transport Reviews, Taylor and Francis Ltd., London
Editorial Advisory Board of Transportation, Elsevier Publishers
Editorial Advisory Board of Journal of Asian and Pacific Transport
Editorial Advisory Board, Transportation Research, Pergamon Press
Editorial Advisory Board, International Journal of Transport Economics
Editorial Board, Journal of Transport Planning and Technology
Editorial Board, Cooperative Transportation Dynamics
USA National Academy of Sciences, Transportation Research Board Committee on Traveller Behaviour and Values
USA National Academy of Sciences, Transportation Research Board Committee on Travel Forecasting

Professor Peter Stopher:
Editorial Board, Transport Reviews
Editorial Board, Transport Policy
Editorial Board, Journal of Transportation and Statistics

Professional Committees
Dr. Miguel Figliozi:
Intermodal Freight Terminal Design and Operations Committee, Transportation Research Board, Academy of Sciences
Freight Transportation and Logistics Planning Committee, Transportation Research Board, Academy of Sciences
Transportation and Logistics Society, Institute for Operations Research and Management Science (INFORMS)
**Professor David Hensher:**
Advisory Committee of Transport Research Centre, Melbourne University
Vice-Chairman, International Steering Committee of the World Conference on Transport Research Society
NSW Dept of Transport Technical Advisory Committee
Standards Committee on Logistics, Australia

**Conference Committees**

**Professor David Hensher:**
Executive Chair and Co-Fonder, International Conference on Competition and Ownership in Land Passenger Transport

**Professor Peter Stopher:**
Co-Chair of Organising Committee, International Conference on Travel Survey Methods

**Professional Associations**

**Dr Stephen Greaves:**
Institute of Transportation Engineers, USA

**Professor David Hensher:**
Economic Society of Australia and New Zealand
Transportation Research Board, USA
Australasian Transport Research Forum
American Transportation Research Forum
Chartered Institute of Transport, UK
World Conference of Transport Research Society
International Association of Travel Behaviour
American Planning Association
Australian Institute of Traffic and Planning Management
Australian Institution of Engineers

**Professor Peter Stopher:**
American Society of Civil Engineers, USA
Committee on Environmental Issues, Transportation and Development Institute, American Society of Civil Engineers, USA
Committee on Planning and Economics, Transportation and Development Institute, American Society of Civil Engineers, USA
Committee on Survey Methods, Transportation Research Board, National Academies of Science and Engineering, USA
Committee on Traveller Behaviour and Values, Transportation Research Board, National Academies of Science and Engineering, USA
Institute of Engineers Australia, Civil College, Australia
Panel on Project TCRP Synthesis Topic SH-07, Transit Cooperative Research Program, National Academies of Science and Engineering, USA

Referee of papers

Dr Miguel Figliozzi has reviewed papers for the following journals:
Transportation Science; European Journal of Operational Research; Transportation Research Part B; Transportation Research Record (for the following committees: Network Modeling, Freight Transportation and Logistics Planning, Intermodal Freight Terminal Design Operations); Australian Economic Review; and International Symposium on Transportation and Traffic Theory (ISTTT).

Dr Stephen Greaves has reviewed papers for the following journals:
Transportation Research Record; Journal of Transport Statistics; Transportation; Road and Transport Research; Australasian Transport Research Forum; and Thinking on Two Wheels Conference.

Professor David Hensher has reviewed papers for the following journals:
Transportation Research (A,B,E); Transportation; Journal of Transport Economics and Policy; Journal of Transportation and Statistics; Environment and Resource Economics; Review of Economics and Statistics; Environment and Planning A; Transport Reviews; Transportation Research Board Journal; Transport Policy, Regional and Urban Economics; Economic Record; Journal of Transport Geography; and Applied Economics. He is also a regular reviewer of chapters for books in the Elsevier Science Series.

Professor Peter Stopher has reviewed papers for the following journals:
Transportation; Transportation Research A; Transportation Research Board; Transport Reviews; Transportation Research Forum; Australasian Transport Research Forum; Transport Policy; Journal of Transportation and Statistics; and Road and Transport Research
Sixth Annual Ogden Transport Lecture
The Ogden Transport Lecture was initiated in 2001 by the Institute of Transport Studies (ITS) to recognise Professor Ken Ogden’s role in founding the transport program at Monash in 1969. The 2006 Ogden Lecture was held on 17 August at the theatrette in the State Library of Victoria in Melbourne. The keynote address was given by Professor Nigel Wilson from the Department of Civil Engineering at Massachusetts Institute of Technology. Professor Wilson address was titled ‘Realistic Public Transport Futures in an Uncertain World’ and considered opportunities and challenges for public transport in western developed countries. Drawing on a range of international contexts, the lecture identified common themes including the challenges of urban congestion and how transit systems must develop to realise the opportunities presented by these developments.

Professor Graham Currie, Organiser, National Conference on Transport Social Exclusion and Well Being, Melbourne 5th-6th April 2006

Professor Graham Currie, Victorian Roads Based Public Transport Advisory Council – Public Forums – Geelong

Professor Graham Currie, City of Newcastle, NSW Presentation on the Independent Review of the NSW State Government Decision to Close the Newcastle Branch Line’ February 2006

Professor Graham Currie and Professor Geoff Rose attended the Monash Ogden Transport Policy Lecture – N Wilson MIT August 2006

Professor Graham Currie, ‘Bus Rapid Transit in Australasia’ – Presentation to the Centre for Urban Transport Research at the University of Southern Florida, January 2006


Professor Graham Currie, ‘Modelling Demand Responsive Transit with Litres II’ Presentation to the Transport Operations Research Group, University of Newcastle Upon Tyne, UK February 2006

Professor Graham Currie, ‘Research Perspectives on Light Rail for Sydney’ Presentation to the Institute of Transport and Logistics, University of Sydney, March 2006
Media and meetings

Professor Graham Currie was on the debating panel on Radio Adelaide ‘Commentary on Glenelg Tram Extension, January 2006
Professor Graham Currie was interviewed for the Sunday Age on ‘Free Public Transport’, 5 March 2006
Professor Graham Currie was interviewed on the Darryn Hinch Show on ‘Free Public Transport’, 6 March 2006
Professor Graham Currie was interviewed by John Fayn, ABC on ‘Myki Smart Card’, November 2006
Professor Graham Currie was interviewed for the The Age on ‘party electoral commitments in transport’, November 2006

Positions

Editorial positions

**Professor Graham Currie**
Editorial Board, Road and Transport Research Journal

**John Clements**
Advisory Board, International Journal of Logistics: Research and Applications

**Professor William Young**
Advisory Board, Transportation Journal

Professional committees

**John Clements**
Fellow, Chartered Institute of Logistics and Transport, United Kingdom
Member, Chartered Institute of Logistics and Transport (Victorian section), General Committee and Passenger Transport Group Committee

**Professor Graham Currie**
International panel member, Transport Cooperative Research Program Project H-32 ‘Determining elements needed to create high ridership transit systems’
Full member, Transportation Research Board Committee AP050 ‘Bus transit systems’
Full member, Transportation Research Board Committee AP075 ‘Light Rail transit systems’
International friend, Transportation Research Board Committee AP025 ‘Public transportation planning and development’
International friend, Transportation Research Board Committee ‘Transit capacity and quality of service’
Academic network member, Union Internationale des Transports Publics (UITP)
Academic member, Victorian Road Based Public Transport Advisory Committee
Steering committee member, Victorian Auditor Generals Office (performance audit of rail franchising arrangements)

**Professor Geoff Rose**

Member, Institute of Transportation Engineers (ITE) Australia and New Zealand Section
Member, Australian Institute of Traffic Planning and Management (AITPM)
Member, Monash University Car Parking Policy Committee
Member, Monash University Transport Planning Committee
Member, Monash University Faculty of Engineering Senior Lecturer Promotions Committee
Member, Transport Reference Group, Victorian State of the Environment Report, Commissioner for Sustainability
Member, Institute of Transportation Engineers (ITE) Australia and New Zealand Section

**Dr Majid Sarvi**

Member, Transportation Research Board
Member, Institute of Transportation Engineers (ITE) Australia and New Zealand Section
Student Chapter Coordinator, Institute of Transportation Engineers (ITE) Australia and New Zealand Section
Member, Institution of Engineers Australia Victorian Division Transport Branch Committee

**Professor William Young**

Fellow, Chartered Institute of Logistics and Transport, United Kingdom
Fellow, Institute of Transportation Engineers, USA
Fellow, Institute of Transportation Engineers (ITE) Australia and New Zealand Section
Member, Advisory Committee, NRTC Committee on Performance Based Standards
Member, Monash University Faculty of Engineering Board, Steering Committee
Chair, Monash University Faculty of Engineering Graduate and Further Education Committee
Deputy Chair, Monash University Faculty of Engineering Committee
Member, Monash University Education Committee
Treasurer, AITPM Victorian Committee
Conference committees

Professional associations

Astrid de Alwis
Member, Chartered Institute of Logistics and Transport

Referee of papers

Professor Geoff Rose
Road and Transport Research, the ATRF Conference, the Thinking on Two Wheels Conference, US Transportation Research Board, ASCE Journal of Transportation Engineering and the International Symposium on Transportation and Traffic Theory

Professor Graham Currie
Transport Reviews, ATRF, AITPM, TRB, Road and Transport Research, Australian Planner, Applied GIS, Australian Road Research Board

Dr Majid Sarvi
ARRB journal, the International Symposium on Transportation and Traffic Theory, ASCE Journal, IEEE Journal on Intelligent Transport, 2nd International Symposium on Simulation

Overseas and Interstate Visits

Professor Geoff Rose had the following overseas / local visits:
Delft Technical University, The Netherlands
INRETS, Lyon and Paris Laboratories
University of Maryland
University of Central Florida
Monash South Africa
Transportation Research Board Annual Meeting January 2006
Institute of Transport and Logistics Studies, The University of Sydney, March 2006

Professor Graham Currie had the following overseas / local visits:
Centre for Urban Transport Research at the University of Southern Florida, January 2006
Transport Operations Research Group, University of Newcastle Upon Tyne, UK February 2006
Dr Majid Sarvi had the following overseas / local visits:
2nd symposium on simulations, Lausanne, Switzerland

Other activities

Professor Geoff Rose, Professor William Young and Professor Graham Currie were Reviewers, City of Melbourne, issues consultation papers on transport
Professor William Young was a Reviewer, Department of Infrastructure, Central City Access Model
Professor Graham Currie, Technical advisor/reviewer, ‘NSW Decision to Maintain Rail Services in Newcastle NSW (Feb 2006)
SEMINAR SERIES

ITLS-Sydney


31 January 2006
Professor Werner Delfmann, ITLS Visiting Professor, Director, Department for Business Policy and Logistics, University of Cologne
Organizational efficiency in European transport networks - A quantitative analysis
Abstract: Challenged by a high level of dynamics and competition, the management of transportation companies is more and more forced to allocate resources as efficient as possible. Though this issue has received considerable attention in academic discussion, the flow of information between and within organizational units in transportation networks is often disregarded. This research paper presents a method of distributing and bundling information systematically within the transportation networks and analyses its impact on efficiency. The objective is to identify optimal organizational structures depending on possibilities and limits of information technology in transportation networks. Based on a framework of hypotheses a simulation model is developed and applied to empirical data.

14 February 2006
Bill Lilley, Research Scientist, Division of Energy Technology, CSIRO
Assessing environmental impacts resulting from the implementation of Intelligent Transport Systems (ITS).
Abstract: Addressing air pollution impacts of ITS is important because air quality rates as a major environmental concern in urban areas, especially with regards to health impacts on vulnerable people. Estimation of the outcomes of ITS on air pollution may show potential benefits and allay fears that improved traffic efficiency will just increase traffic volumes and hence increase air pollution. This presentation describes the application of a planning tool using a Lagrangian Wall Model (LWM) to estimate levels of air pollution within and around major roads and changes resulting from the implementation of generic ITS measures.

7 March 2006
Professor Graham Currie, Chair of Public Transport, ITS Monash University
Research perspectives on Light Rail for Sydney
Abstract: This presentation reviews the authors research designed to provide an evidential basis for often polarised debates in public transport. In this case the context is the Sydney Light Rail debate. The research includes a ‘meta’ study of behavioural research on how passengers value trip attributes of LRT vs bus travel, a review of the challenges of Melbourne’s streetcars and a comparative assessment of LRT/bus impacts on transit oriented development. The findings are far from conclusive with regard to the Sydney LRT debate however they point the way to what is and isn’t required for quality public transport futures.
14 March 2006
Professor Dominique Bouf, ITLS Visiting Professor, Senior Researcher, Transportation Economics Laboratory, Lyons

Making transit irresistible: the dark side

Abstract: This seminar is a follow on to seminars praising public transit in Europe. It will be a reply and in a sense will describe the dark side of “making public transit irresistible”. In Western Europe, France is one country which has gone very far in the direction of promoting public transit. Through this example, we will present: That the goals of this policy are not always very clear; - That the cost of this policy is very high; - Finally, that the efficiency is questionable. The main examples presented will be Paris and Lyon, with some new developments on Lyon’s policy to promote cycling, which appears to be more symbolic than truly efficiency oriented.

11 April 2006
Dr Tharit Issarayangyun, Renzo Tonin and Associates Pty Ltd

Health and well-being impacts by aircraft noise

Abstract: This research aims at developing a better understanding of the impacts of aircraft noise on community health and well-being by exploring two core research questions: (1) “Is health related quality of life worse in community chronically exposed to aircraft noise than in community not exposed?”; and (2) “Does long-term aircraft noise exposure associate with adult high blood pressure level via noise stress as a mediating factor?”. The Sydney (Kingsford Smith) Airport has been selected as a case study. The health survey instruments have been developed and piloted, and then translated from English into Greek and Arabic. A postal self-administrative health survey has been implemented in the areas surrounding Sydney Airport and in the control group. The total sample size was 1,500 with 47% response rate. Factorial analysis of covariance revealed that “Health related quality of life of community chronically exposed to high aircraft noise level were worse than the control area”. Binary logistic regression analysis found that “Subjects (aged 15 - 87) who have been chronically exposed to high aircraft noise level have the odds of 2.61 of having chronic noise stress. In addition, person suffered from noise stress has the odds of 2.74 of having hypertension compared with those without chronic noise stress”.

19 April 2006
Associate Professor Jay Sankaran, D/o Information Systems and Operations Management, The University of Auckland

The impact of road traffic congestion on supply chains: modelling and empirics

Abstract: We report findings from a longer-term agenda of research into the impact of road traffic congestion on supply chains, with particular reference to the Auckland region of New Zealand. The first phase of the research entailed case studies of the impact of road traffic congestion on manufacturers and distributors and their supply chains. We found that congestion affects businesses in varied ways and degrees depending on the nature of the market for the company’s products, the nature of raw materials and finished products, the location of the factory/warehouse, etc. Further, congestion is often an amplifier of delays and costs, which themselves burgeon for a variety of other reasons. These include business growth, increasing levels of service, urban sprawl, bio-security regulation, etc. The second phase of the research involved the exploration, through both mathematical modelling and simulation, of some key insights from the first phase. Specifically, we analysed the impact of both congestion and shrinking consignment sizes on distribution costs. Our analysis suggested various hypotheses that

150 __________________________________
shaped the design of a questionnaire that is presently being administered to manufacturers and distributors.

2 May 2006

Professor John D Landis, Chair of the City and Regional Planning, University of California, Berkeley

A GIS and accessibility-based approach to jobs-housing balance: Methodological and policy issues

Abstract: Balancing Jobs and Housing: A GIS Approach Achieving a jobs-housing balance has become one of the watchwords of regional, metropolitan and local urban planning. This presentation will review different approaches to balancing job generation and housing construction, paying special attention to the GIS-based commute shed method. The commute shed identifies individual highway and transit commute sheds around each job center, and uses them to apportion forecast housing construction so as to minimize excess commuting. The commute shed method can also be used to identify historical and projected imbalances in job generation and housing construction as input into housing market models and metropolitan plans.

9 May 2006

Dr Stephane Hess, ITLS Visiting Research Scholar, Senior Researcher Institute for Traffic Planning and Transport Systems, Swiss Federal Institute of Technology

Understanding air travel choice behaviour

Abstract: Given the dynamic nature of the air travel business, the long-term horizon of any policy decisions, and the precarious financial situation of many airlines, accurate forecasts of air passenger behaviour are an important input into the planning process in many large metropolitan areas. As such, and given the increasing availability of tools such as discrete choice models, it should be no surprise that the number of studies aiming to model air travel choice behaviour has increased over recent years. However, despite this increased interest in this area of research, there is still a general lack of appreciation of the complexity of the choice processes undertaken by air travellers. This is reflected in the fact that most existing studies look only at a subset of the choices faced by air travellers, and fail to recognise the potential bias introduced into their results through these simplifications. Furthermore, important issues arise due to the generally low quality of the data used in such studies. This presentation discusses the findings of three separate studies of air travel choice behaviour, making use of revealed preference (RP) data collected in Greater London and the San Francisco Bay area, and stated preference (SP) data collected in an internet-based survey in the US. Aside from providing insights into how passengers make their choice of airport, airline and access mode, the presentation also discusses the advantages of advanced model structures, while however also looking at the problems of increased estimation cost and specification issues.

6 June 2006

Dr Stephen Greaves, Senior Lecturer in Transport Management, ITLS

Valuation of aircraft noise: A stated choice approach

Abstract: This seminar provides an overview of experience thus far in the use of stated choice (SC) methods for valuation of aircraft noise. The context for the study is concern over the social costs associated with rapidly growing air traffic and increasing numbers of people residing in...
close proximity to airports and aircraft flight paths (particularly in Sydney). The arguments for using SC methods are presented together with the particular challenges faced in applying them to valuation of non-market goods such as noise. Following this a conceptual approach is outlined which encompasses three major innovations to addressed perceived short-comings of current methods. These innovations include, 1) use of visualisation cues to represent noise in a more comprehensible manner to respondents, 2) an experimental design that is tailored more closely to the actual noise-level experiences of each individual participant based on where they live and their noise sensitivity, and 3) the derivation of distributions of willingness to pay to reduce exposure to noise that account for the heterogeneity in preferences (noting that all previous studies focussed on a single point or average estimate for the population).

Please note, in keeping with staff seminars, this is very much work in progress and will mainly be a conceptual presentation of the issues and approaches with a view to soliciting advice and feedback from the audience.

13 June 2006

Professor John Pucher, ITLS Visiting Professor, Rutgers University

Urban transport crisis in China and India: Impacts of rapid economic growth

Abstract: Professor Pucher's talk will provide a comparative overview of urban transport in the world’s two most populous countries: China and India. Cities in both countries are suffering from severe and worsening transport problems: air pollution, noise, traffic injuries and fatalities, congestion, parking shortages, energy use, and lack of mobility for the poor. The urban transport crisis in China and India results from continuing population growth, urbanization, suburban sprawl, rising incomes, and skyrocketing motor vehicle ownership and use. Prof. Pucher critically assesses government policies in each country and suggests a range of specific improvements. Above all, he advocates a slowdown in the massive roadway investment in recent years and a shift in emphasis to expanding and improving public transport, cycling, and walking facilities. While continued growth in motor vehicle use is inevitable, China and India should restrict motor vehicle use in congested city centers and increase taxes, fees, and charges to reflect the enormous social and environmental costs of motor vehicle use. At the same time, much stricter regulations should be imposed on manufacturers to produce cleaner, more energy-efficient, quieter, and safer cars, motorcycles, buses, and trucks. Mitigating the many social and environmental impacts of rising motorization is obviously important for the future well-being of Chinese and Indian cities. It is also crucial to the future of the rest of the world. Unless the problems of motorization in China and India can be effectively dealt with, the world faces sharp increases in Greenhouse gases, accelerating climate change, and rapid depletion of a range of nonrenewable resources.

4 July 2006

Professor Dominique Bouf, ITLS Visiting Professor, Senior Researcher, Transportation Economics Laboratory, Lyons

China in 2050, interurban transportation

Abstract: The LET recently carried out a study on China in 2050. Why 2050? The reason is that China will very likely be developed in 2050. The strong economic growth of China is coming after several other examples, notably Japan and Korea. What is more specific to China is the size of the population, the extent of the territory, and its density (in the East and Centre regions). So China is facing unprecedented challenges, to serve this vast territory. In this presentation, I will address the question of interurban transportation. The basic methodology is to compare China to currently developed countries. To that end, various scenarios are built on macro economics, demographics, urbanization and regional balance.
Low Cost Carrier (LCC) vs. Full Service Airline (FSA) competition: What happens after the effects of LCC entries stabilize?

Abstract: Many studies have found that a Low Cost Carrier's (LCC) entry substantially reduces prices in the air travel markets via its actual, adjacent and potential competition effects. However, aside from the fact that LCC entries lead to reduction of Full Service Airline's (FSA) prices, little is known about how airlines compete after LCC enters. In addition, although LCCs' characteristics are well documented, most of the previous studies have failed to treat explicitly the aspect of product differentiation between FSAs and LCCs. Using a panel data for the non-stop domestic route markets to/from Chicago, this study empirically estimates an Almost Ideal Demand System (AIDS) for carriers competing in the same city pair markets. This enables us to calculate carrier-specific demand equations and identify substitution possibilities between FSAs and between LCC and FSA. Competition analysis is also carried out by empirically estimating LCC and FSA's reduced form price equations. Our key results are as follows: (1) there are strong evidences of product differentiation effect between services provided by FSAs and LCCs; (2) when we remove the data for the first two quarters after the Southwest's entry (during which most of FSA's initial price responses have occurred), our reduced form fare equations show that FSA's average prices become more sensitive to the number of FSAs in the market than the number of LCCs and/or regional carriers present in the market. This shows that competition between FSAs will continued to be important even when a major LCC is present in the market; (3) further we find that Southwest's pricing is much more responsive to the number of LCCs and/or regional carriers present in the market while being pretty insensitive to the number of FSAs present in the market; (4) as expected, airlines with higher market shares (regardless of whether they are FSA or LCC) tend to charge higher prices, indicating market dominance effect on pricing; (5) for an identical increase in frequency share, Southwest drives higher positive price benefit than United does; (6) on the other hand, for an identical increase in share of available seats, United derives higher positive price benefit than Southwest does. Our results has the following policy implications: (a) importance of anti-trust implications of mergers between FSAs even in the presence of one or more LCCs in the market; (b) increase in market concentration by merging or liquidating one or more FSAs would benefit FSAs more than LCCs; (c.) Only another LCC can effectively discipline an LCC’s pricing.

Energy crisis? Climate change? - Breathe easy - How a properly-balanced transport system can help preserve and improve our urban environment

Abstract: At the start of the 21st century, Australia and New Zealand, like much of the developed world, finds itself at a critical decision point. For half a century, our cities have followed a growth pattern that has only been possible because of readily available, affordable motorised transport. Most of us now live considerable distances from where we work, shop or socialise, but we still manage to get around in reasonable times due to a very effective road system. Without this easy mobility, our cities would have been quite different - more like the older, more compact suburbs close to our city centres. They would probably also be safer and healthier, because with the motorised, dispersed city has come a distressing road toll and a fall in personal fitness (because travel distances are too great for walking). Many of us thought that this low-rise expansion could go on indefinitely, but it's now clear that we were wrong and that we will have to re-engineer our cities over the next few decades.
5 September 2006
Dr John Rose, Lecturer in Transport and Logistics Management, ITLS
Designing efficient data for stated choice experiments: Accounting for socio-demographic and contextual effects in designing stated choice experiments

Abstract: Identifying methods for reducing the number of respondents required for stated choice (SC) experiments is important for transport studies given increases in survey costs. Such reductions, however, must not come at the cost of a lessening in the reliability of the parameter estimates obtained from models of discrete choice. Recognition of this has resulted in growing interest in a class of SC designs known as efficient designs, which balance reliability concerns with sample size issues. To date, however, the literature on generating efficient designs has only considered experiments that involve only attributes of the experiment. Covariates that may be used in data analysis have therefore ignored to date. In this paper, we demonstrate that if covariates are to be used in data analysis, then the efficiency of a SC design may be lessened. We demonstrate how efficient SC experiments may be constructed to account for covariates, and how minimum quotas may be established in order to retain a fixed level of efficiency.

12 September 2006
Rhonda Daniels, A/Director, Transport Strategic Planning, NSW Department of Planning

Implementing the Metropolitan Strategy - A Transport Perspective

Abstract: In December 2005, the NSW Government released its Metropolitan Strategy City of Cities - A Plan for Sydney's Future to guide the city's growth over the next 25 years. The Strategy provides an integrated approach to strategic planning with actions grouped into themes on economy and employment, centres and corridors, housing, transport, environment and resources, parks and public places, and implementation. Many agencies are involved in implementing the Strategy. Rhonda Daniels, NSW Department of Planning, will speak on the process for implementing the Metropolitan Strategy including subregional planning, State Infrastructure Strategy, monitoring and performance indicators; and discuss progress on selected transport actions including demand management measures such as parking policy and TravelSmart, and related work.

Visit the Metropolitan Strategy website: www.metrostrategy.nsw.gov.au

3 October 2006
Ross Cameron, Consultant, Investment Banking Group, Macquarie Bank Limited

The role the private sector can play in the transport solution

Abstract: There are a number of concerns around the private sector's involvement in the transport industry. Despite these concerns, a large transport infrastructure backlog has meant that the private sector has become largely involved in delivering transport projects. The successful integration of these projects relies on aligning the public and private sector goals. This presentation will address these issues and the role that the private sector can play in the transport solution going forward.
10 October 2006

Liz Ampt, Head of Behavioural Research, Steer Davies Gleave Australia

Voluntary travel behaviour change and the reduction of greenhouse gas emissions

Abstract: Voluntary travel behaviour change (helping people to help themselves) is now being used as a policy tool throughout Australia to reduce greenhouse gas emissions in the private transport sector. Almost all states have programs that help people to change - either through the community at large, or specifically through schools and workplaces. Liz will present examples of various approaches to change, and examine the likely degree of change for each of the approaches. She will give many examples from applications in Sydney, Melbourne and Adelaide.

17 October 2006

Professor Peter Stopher, Professor of Transport Planning, ITLS

Can GPS measurement replace conventional travel surveys?

Abstract: Since the mid-1990s, GPS measurement of travel has become a growing method of data collection. Predominantly, it has been used as a method for checking the accuracy of conventional methods of travel surveys, such as the computer assisted telephone interview (CATI) and the face-to-face interview. In this use, it has usually been applied with a small subsample of households, who are asked to carry a GPS device around at the same time that they are also asked to complete a conventional diary and interview. However, more recently, GPS has started to be used as a primary data collection method in itself, especially in the evaluation of travel behaviour change policies. In this paper, we explore the uses that have been made of GPS measurement of travel, the necessary specifications of a GPS travel survey, and the potential of this procedure to replace more conventional methods, such as the travel diary. Data from recent applications of GPS measurement are used to explore the amount of information provided, and compare this with the information obtained from a diary survey. Issues of potential bias are examined in terms of response levels and characteristics of those who respond to the GPS survey and those who respond to a more traditional diary-based survey. Finally, the additional potential information obtained by having people carry GPS for a week or longer is explored, together with the implications that longer periods of measurement have for sample sizes required for the use of travel survey data.
ITS-Monash

ITS (Monash) holds regular Transport Research Workshops (TRWs) at which staff, students and visitors are able to present recent research results, discuss grant applications and workshop new ideas for projects.

Staff and Research Students at one of the TRW Seminars

At each TRW, a formal presentation is made by one of the ITS (Monash) staff or students or by a visiting researcher.

Presentations made during 2006 included:

‘On my bike - Reflections on an OSP Experience based in the Netherlands’ – Assoc. Prof Geoff Rose (ITS Monash)
‘Transport Research Initiatives at PATREC’ – Professor Fred Afflick, PATREC, WA
‘Safer Journeys to School: Issues and Practices in Northern Ireland and Great Britain – Professor Julian Hyne, University of Ulster, Ireland
‘Assessment and reduction of the impacts of large freight vehicles on urban traffic corridor performance’ – Euan Ramsay (QUT, Brisbane)
‘Dynamic traffic modelling and management of motorway networks’ – Professor Michiel Bleimer, Technical University of Delft, The Netherlands
‘Development on an instrumented vehicle’ – Dr Majid Sarvi (ITS, Monash University)
‘Identifying the Institutional Barriers to Sustainable Urban Transport’ – Imran Muhammad (The University of Melbourne)
‘Tollroads and Sustainability’ – Roger Toleman (ITS, Monash University)
‘Passenger Arrival Profiles at Suburban Railway Stations : Impacts of Reliability and Headway on Wait Time’ - Daniel Csikos (ITS, Monash University)
‘Optimal Design of Transit Short-Turn Trips’ - Professor Avi Ceder (MIT and Technican Institute of Israel)
‘MILATRAS (Micro simulation Learning-based Approach for Transit Assignment): A New Modelling Framework for the Transit Assignment Problem’ - Professor Amer Shalaby (University of Toronto, Canada)

‘Learning (in more ways than one) about the users of Melbourne’s off-Road bicycle paths’ - Assoc. Professor Geoff Rose, (Director ITS, Monash University)

‘Practical Applications of Traffic Micro-simulation’ - Dr. Jeffery Archer (Accident Research Centre, Monash University)

Professor Julian Hine (centre) visited ITS (Monash) as part of the collaborative research on transport and social exclusion he is conducting with Professor Currie. Prof. Hine delivered a TRW address which focussed on school travel in Northern Ireland and Great Britain.
FINANCIAL STATEMENTS

ITLS-Sydney

The University of Sydney

Institute of Transport and Logistics Studies
Statement of Income for the year ended 31 December 2006
(University account codes: F0701 00000, 11111, F0702 00000)

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<tr>
<th>INCOME</th>
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<th>2005</th>
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<td></td>
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Ian Ford
Finance Director - Faculty Operations
Office of the Provost and Deputy Vice-Chancellor
12 March 2007
### Institute of Transport and Logistics Studies

**Balance Sheet as at 31 December 2006**

(University account codes: F9701 00000, 11111, F0702 00000)

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<th>2006</th>
<th>2005</th>
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<td><strong>CURRENT ASSETS</strong></td>
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<td>Cash Balances (including Funds in Reserves earning Uni. Pool Interest)</td>
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<td>Deposits</td>
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<td>Prepaid Income</td>
<td>12,200</td>
<td>108,325</td>
</tr>
<tr>
<td><strong>TOTAL LIABILITIES</strong></td>
<td>12,200</td>
<td>108,325</td>
</tr>
<tr>
<td><strong>NET ASSETS</strong></td>
<td>3,059,115</td>
<td>2,352,187</td>
</tr>
<tr>
<td><strong>EQUITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accumulated Funds</td>
<td>869,115</td>
<td>152,187</td>
</tr>
<tr>
<td>Reserves</td>
<td>2,200,000</td>
<td>2,200,000</td>
</tr>
<tr>
<td><strong>TOTAL EQUITY</strong></td>
<td>3,069,115</td>
<td>2,352,187</td>
</tr>
</tbody>
</table>

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Ian Ford  
Finance Director - Faculty Operations  
Office of the Provost and Deputy Vice-Chancellor  
12 March 2007
ITS-Monash

The ITS-Monash financial statements are supplied separately to the ARC.
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