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ANNUAL REPORT


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INSTITUTE OF TRANSPORT STUDIES
The Australian Key Centre in Transport Management
The University of Sydney and Monash University
1996 Annual Report
Edited and produced
by Rhonda Daniels
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INSTITUTE OF TRANSPORT STUDIES
The Australian Key Centre in Transport Management

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ITS: The Australian Key Centre of Teaching and Research in Transport Management was established in July 1995 as a joint venture between the University of Sydney and Monash University. ITS grew out of two existing centres – the Institute of Transport Studies 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. The Institute at Sydney and the Monash Transport Group were leading Australian centres in transport management and traffic education and research in their own right prior to the establishment of the Australian Key Centre.

The Institute of Transport Studies (ITS) has nodes at the University of Sydney and Monash University. The Director of ITS is Professor David Hensher, Professor of Management at the University of Sydney. A Deputy Director is located at each node: Professor Bill Young (replacing Professor Ken Ogden who resigned from Monash in November 1996) at Monash, and Associate Professor Paul Hooper at Sydney.

The Key Centre in Transport Management will be regarded by industry and government throughout Australia and the Asia-Pacific region as the first place they should contact for expertise on state-of-the-art management practices in transport.

The Key Centre is guided by an Advisory Committee of eminent academic, industry and government representatives, chaired by Professor John Taplin, AM. Its role is to provide advice on any matters referred to it by the Key Centre Executive, as well as to initiate matters for consideration that are of interest to the Key Centre, such as the teaching and research program and opportunities for participation of industry and government. The Advisory Committee met twice in 1996, once in Sydney and once in Melbourne.

ITS provides education programs at a range of levels: PhD, Masters and Graduate Diploma, continuing education workshops, management development seminars and Certificate programs. In addition, ITS also conducts transport related research. The Institute has an extensive program of related activities including publications, participation at conferences, software development and links to other leading transport research institutes.
1996: first full year of Key Centre

1996 is the first full year of the Key Centre, with all DEETYA funded staff in place at both nodes.

Building on the first 6 months of the Key Centre, specific tasks undertaken and completed in 1996 were:

1. The introduction of three courses at ITS Monash delivered by ITS Sydney. The courses were Travel Choice Analysis and Modelling, Costing and Performance Measurement, and Pricing and Financing in the Transport Sector. Over 50 participants attended the courses, with approximately 60% being students enrolled in the MEngSc program.

2. The introduction of Traffic Engineering and Management as a week long course delivered by ITS Monash in both Melbourne and Sydney, with 98 attendees. Items 1 and 2 represent the objective of offering graduate programs at locations currently not serviced by the specific course area.

3. The detailed design of a number of non-award certificate programs, building on the success of the current Certificate of Transport Management for the Bus and Coach Industry. The new Certificates (to be introduced in 1997) are a Certificate of Transport Management (Maritime), Certificate of Logistics Management, Certificate of Freight Management and Certificate of Supply Chain Management. Certificates of Transport Management in Rail, Aviation and Parking are currently under discussion.

4. Commencement of discussions in South-East Asia to introduce the Certificate of Logistics Management in Malaysia and Singapore in 1997 with possible extensions throughout South-East Asia. A proposal for a joint venture with an educational training group is well advanced.

5. Negotiations are well under way with the Victorian Bus Proprietors Association to deliver the CTM (Bus and Coach) in Victoria, building on the success of the NSW program. The program will be offered by distance education. A cooperative venture between ITS Sydney and ITS Monash to widen the scope of the distance education programs to other states is being investigated.

6. Review of existing Graduate Diploma and Master of Transport Management programs at ITS Sydney in order to introduce the new areas of teaching which the Key Centre proposal promoted – namely the freight and logistics area with a specialisation in maritime transport and supply chain management. The review resulted in a new delivery format emphasising modular subjects (each equivalent to 14 contact hours), capable of being offered in any teaching mode and location. In addition a Graduate Certificate of Transport Management has been designed to complete a fully articulated set of offerings from non-award CTM, to Graduate CTM, to Graduate Diploma to MTM.

7. We have completed a number of important research projects. In particular the diversity of research is illustrated by:
   - an economic impact study of Sydney Airport (which was subsequently summarised and published by the NSW Chamber of Commerce);
   - a GIS based bus route planning program to enable bus operators and regulators to calculate optimal contract areas as well as predict capital needs and revenues;
   - a decision support system with embedded full matrices of direct and cross elasticities for choice of ticket type and mode in Sydney and Newcastle derived from new developments in discrete choice modelling;
   - research on the corporatisation and privatisation of Australian ports;
   - road safety research including the benefits of sealing road shoulders, and improving motorcyclists’ safety;
   - transport policy work including Melbourne’s Integrated Transport Strategy, and strategic public transport planning; and
   - the commencement of a subscription international benchmarking program for bus and coach operators.
8. Achievements in publications included the following:
   - David Hensher and Jenny King edited the *Proceedings of the 7th World Conference on Transport Research*, a 4 volume set of 150 papers published by Elsevier;
   - Ken Ogden’s book *Safer Roads: A Guide to Road Safety Engineering* was published by Avebury;
   - completion of a book on the bus and coach industry to be published by Allen and Unwin in 1997;
   - commencement of a book on stated choice methods; and
   - a comprehensive review of environmental management in the transport sector, to appear in a Routledge publication on environmental management.

9. A paper jointly authored by Peter Daly won 2nd place award for a distinguished contribution for an outstanding paper at the 3rd East-West Congress on Engineering Education in Gdynia, Poland, a conference supported by UNESCO.

10. The design and implementation of a GIS-laboratory capability at ITS Sydney with one short course completed on an introduction to GIS for transport planning.

1997 initiatives

Major new initiatives planned for 1997 include:

1. The introduction of the new Certificates in Transport Management (Maritime), the Certificate of Logistics Management in Sydney and Malaysia and the CTM (Bus and Coach) in Melbourne.

2. Development of a GIS based school bus routing and capital investment research project in association with the bus industry.

3. Major overhaul of a previous research project on greenhouse gas emissions, redesigning the travel choice system and the complex computer software to make the system more behaviourally realistic as well as easier to implement for scenario planning.

4. Introduction of the maritime program in the graduate degrees at ITS Sydney.

5. Research on the linkages between telecommuting, compressed work weeks, travel behaviour, energy and emissions.


7. Research into the links between game theory and discrete choice models to gain a better understanding on interactive agents in the freight/logistics sector.

David A. Hensher
Director
MEETING OBJECTIVES

Objectives

The primary object of the Institute is to undertake graduate teaching, management development programs, grant and contract research and development in the field of transport studies.

The work of the Institute also has the following objectives:

• To provide a focus for University work in areas of transport management and to establish an environment attractive to those committed to excellence in graduate transport programs and research;
• To collaborate with key players having an interest in transport studies and its applications;
• To offer specialised training courses, workshops, short courses and seminars on topics of interest in the area of transport management; and
• To seed the development of innovative ideas in transport policy and professional practice in Australia, in which the Institute of Transport Studies plays a role.

Achieving objectives

These objectives are achieved by:

• Developing and offering graduate transport programs, certificate, management development programs and short courses at both ITS Sydney and ITS Monash;
• Bringing high quality transport management programs to people outside Sydney and Melbourne as well as widening the offerings of courses in Melbourne and Sydney through access to courses provided by both ITS Monash and ITS Sydney;
• Contributing to Australia’s growing participation in the Asia Pacific region in a leadership role in transport management;
• Widening the range of courses available for middle level professional managers in critical areas of transport not currently served;
• Equipping managers in all disciplines (ie engineering, economics, planning), the small business sector and local government to succeed in the face of technological, economic and institutional change;
• Building on the recognised need for stronger links between education of technical specialists and managers in transport;
• Undertaking research to develop state-of-the-art management practices and technical processes;
• Transferring the knowledge developed through research to client groups through the Institute’s publications, workshops, conferences, seminars, and by participation in networks of transport managers and engineers; and
• Conducting activities that are directly or indirectly related to the attainment of the above objectives.
**MEETING OBJECTIVES**

Objectives and performance measures

The following table summarises performance measures to show how the Key Centre is meeting the objectives outlined in its application. More detail is provided in specific sections throughout the annual report.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Performance measure</th>
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| 1. Australian transport management expertise highly regarded              | • Requests for working papers  
• Requests for involvement in research and consultancy projects  
• Strong enrolments in all levels of education programs from PhD, graduate program, Certificate programs and short courses  
• Editorial positions held by staff on leading international journals     |
| 2. Programs outside Melbourne/Sydney                                      | • Negotiations to offer CTM (Bus and Coach) in Victoria via distance education  
• Road Safety short course taught in Thailand  
• Parking Policy, Design and Data short course taught in Malaysia  
• Discussions to offer CTM (Freight) in Malaysia and Singapore in 1997 |
| 3. Contribute leadership in Asia Pacific                                  | • Participation in Asia Pacific conferences  
• Maritime research for Asia Pacific countries  
• Hosted visits by Ministry of Communications (China), road safety officials from China and transport officials from Thailand |
| 4. Courses in critical areas for middle managers and 5. Equip small business | • Certificate programs in bus and coach, maritime and freight management, with Certificates in other areas under development  
• Graduate transport management programs reviewed and revised in 1996 to reflect industry demands  
• Range of entry points depending on tertiary qualifications and work experience  
• Short courses and workshops to meet specific needs                      |
| 6. Link transport engineering and management education                    | • Short courses integrating engineering and management  
• ITS Monash transport engineering courses offered in Sydney  
• ITS Sydney management courses offered in Melbourne                     |
| 7. State of the art research                                              | • Many research projects for range of government and private clients  
• Transport GIS lab established at ITS Sydney  
• Publications in leading journals and conference proceedings reflect the quality of research  
• 3 new PhD commencements in 1996, ITS Sydney                             |
| 8. Transfer of research to transport community                            | • Through publications including working papers, conferences, journals and books such as *Safer Roads: A Guide to Road Safety Engineering*; and *Traffic Engineering and Management*  
• Through presentations and attendance at conferences and seminars         |
ITS Sydney

Academic and research staff

David Hensher, BCom(Hons) PhD, FASSA FCIT FAITPM CompIEAust MAPA
Professor of Management
Director, Institute of Transport Studies

A Fellow of the Academy of Social Sciences in Australia, President of the International Association of Travel Behaviour Research and Vice-Chair of the International Scientific Committee of the World Conference of Transport Research, David has published extensively (over 190 papers) in the leading international transport journals and key journals in economics as well as five books.

Major areas of teaching and research are transport economics, transport strategy, sustainable transport, productivity measurement, 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.

Garland Chow, BS MBA DBA
Collex Professor of Logistics and Freight Transport Management (from July 1996 to July 1997)

Garland is visiting ITS in 1996-97 from the University of British Columbia. He has written extensively on the economics, regulation and management of the trucking industry in North America. He is on the editorial board for Logistics and Transportation Review.

Paul Hooper, BEc(Hons) MTransEc PhD, FCIT
Associate Professor in Transport Management and Deputy Director, Institute of Transport Studies

Paul is a recognised specialist in aviation and tourism policy and its implications for the transport sector. Paul has far ranging experience in the transport industry, with major projects spanning all modes of transport. He specialises in the transport-tourism interface and in aviation policy and management. Paul was on special studies leave in Semester 2 1996.

Ann Brewer, BA MCom(Hons) PhD
Associate Professor in Transport Management and Director, Industry Programs

A recognised specialist in human resource management and business communications, Ann has experience in a number of industries, with major projects on current issues such as organisational change, work practices and employee commitment. Ann has published numerous papers and three books. Her most recent book on Change Management looks at strategies for Australian organisations. Ann is co-author of a forthcoming book on the bus and coach industry.

Ross Robinson, BA MA PhD, MCIT
Associate Professor of Maritime Transport Director, Maritime Program

Ross is a recognised specialist in port development policy, ports development strategies, port efficiency and port-related logistics efficiency in Australia and in countries in Southeast and East Asia. He was named in 1994 by UNCTAD as one of the world’s leading researchers in the fields of shipping and ports.

Sophia Everett, BA MA (Hons) PhD MPP, MCIT
Senior Lecturer in Maritime Transport Deputy Director, Maritime Program

Sophia is a recognised specialist in the formulation and implementation of Australian maritime policies and in maritime transport policies of countries in Southeast Asia and East Asia. Sophia has a special interest in port corporatisation and privatisation and in 1995, with Ross Robinson, won the Australian Chamber of Shipping Research Award.

Professor Jonathan Richmond, BSc MSc PhD
NSW Department of Transport Visiting Professor of Transport Planning (until July) Associate Professor of Transport Planning (July – November)

Jonathan is the inaugural NSW Department of Transport Visiting Professor. His research and teaching interests include transport
planning, strategic planning, appraisals of transit performance, ethics in transport and planning, urban economics and transportation geography.

**Tu Ton, BEng MScEng PhD**  
Senior Research Fellow (from March)

Tu has skills in traffic and transport engineering; EIA of transport infrastructure; and traffic and transport computer modelling using artificial intelligence technology including object-oriented programming, artificial neural networks and knowledge based expert systems.

**Michael Nyathi, BBus MTM PhD**  
Lecturer (from August)

**Ajay Nayar, BScEng MPT MTM**  
Associate Lecturer (until July)

**Jenny King, BBuild(Hons) MTM**  
Senior Research Analyst

**Timothy Raimond, BSc(Hons)**  
Research Analyst (until February)

**Michael Lowe**  
Computer Systems Officer (part-time)  
(unti August)

**Nigel Marks, BSc (Hons) PhD**  
Computer Programmer (part-time) (until March)

**Stephen Leonard**  
Computer Systems Officer (part-time)  
(from October)

**Full-time PhD students**

Rhonda Daniels, Ruanthi De Silva, Jajang Hasyim, Rod Katz, Michael Nyathi (until May), Jianlin Xu (until May), Sandy White

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**Administrative staff**

**Dariel Riley**  
Administrative Officer (until March)

**Fiona Campbell, DipBus.Studies**  
Administration Associate – Graduate Programs

**Julie McKone (previously Simpson)**  
Personal Executive Assistant

**Bruno Sirianni, BIT&C**  
Administration Associate – Finance and Travel

**Geoff Dickinson**  
Administration Associate – Industry Programs (May – November)

**Adjunct faculty**

**Andrew Kerr, MBA DBA**  
Managing Director, Griffin Corporate Services

Andrew specialises in strategic business planning operations management and logistics. He has previously held line and staff appointments with Australian Army supply units and senior management positions with large public companies.

**Rodney Swan, BSc(Hons) M Tech**  
Managing Director, BGP Pty Ltd

Rodney is one of Australia’s leading strategists in competitive bidding for public and private sector service projects, with a number of successful infrastructure projects to his credit. He is highly experienced in the financial and operational requirements of projects, with expert knowledge of opportunities in the transport, health and environment sectors.

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Associate Professor Ross Robinson, Dr Tu Ton, Dr Michael Nyathi and Julie McKone are funded by the Key Centre.
L to R: Sophia Everett, Ann Brewer, Michael Nyathi, Ross Robinson, Tu Ton, David Hensher, Garland Chow; inset: Paul Hooper

### Graduate program
- Paul Hooper
- Administration
- Fiona Campbell

### Certificate programs
- **Bus and Coach**
  - Ann Brewer
  - Administration
  - Vacant
- **Maritime**
  - Ross Robinson
  - Sophia Everett
  - Administration
  - Vacant
- **Freight**
  - Garland Chow

### Research
- Tu Ton
- Jenny King
- Michael Nyathi

### PhD students
- Rhonda Daniels
- Ruanthi De Silva
- Jajang Hasyim
- Sandy White

### Computer systems
- Stephen Leonard

### Administration
- Bruno Siriani

*As at December 1996*
ITS Monash

Kenneth W. Ogden, DipCE MEngSc PhD, FIEAust MITE CPEng
Professorial Fellow (40% at ITS)
Director, ITS Monash (until 22 November)

An engineer with skills in traffic engineering, road safety, freight planning and policy analysis, Ken has recently spent 10 months on secondment with the Victorian Department of Transport to help develop the Melbourne Integrated Transport Strategy. His new book titled Safer Roads: A Guide to Road Safety Engineering was published by Avebury (London) early in 1996.

William Young, BE MSc PhD, FIEAust FCIT CPEng
Professorial Fellow (10% at ITS)
Director, ITS Monash (from 22 November)
(previously Deputy Director)

A recognised specialist in parking and transport land use interaction, Bill has recently taken up an appointment as head of the Caulfield Division of Civil Engineering at Monash University however he remains actively involved with ITS Monash. His research interests also cover infrastructure management and computer systems.

Geoff Rose, BEng MSc PhD, MIEAust, CPeng
Senior Lecturer (40% at ITS)

Geoff’s professional interests cover environmental impacts and sustainable travel, non-motorised transport and the application of advanced technology to the surface transport system. His experience spans government, consulting and academia. He is currently involved in an NRMA initiated travel awareness campaign aimed at reducing air quality problems caused by motor vehicles. In Semester 2, Geoff spent 6 months on an Outside Studies Program.

Samantha Taylor, BE MEngSc(Hons), GradIEAust MITE
Lecturer (100% ITS)

Samantha’s background in transport engineering covers a broad range of areas including pavement improvement modelling and pavement surfacings. Her specialised interests are in freight movement, particularly urban road freight movement, travel demand management, use of statistics in survey analysis and data collection.

Peter Daly, BE(Hons), GradIEAust
Lecturer (30% at ITS)

Peter is a civil engineer who has specialised in transport modelling and planning. He is currently completing his PhD on activity based transport demand models. Peter’s interests include road safety and the environmental aspects of transport. He recently taught in an AUSAID sponsored road safety course in Thailand.

Hussein Dia, BSc MSc, MITE PEng
Lecturer (30% at ITS) (from November)

Hussein is a civil engineer specialising in operations research and management and intelligent transport systems. He joined Monash in November 1996.

Robin Underwood, DEng ME BCE DipT&RP CHT
Associate Professor (part-time)

Robin worked for many years with the Road Construction Authority. He has published widely in transport, including three books.

Andrew Haines, BSc
Technical Support

Andrew provides technical support in the computing and systems area.

Nicole Spicer
Administrative Assistant (from March)

Samantha Taylor is funded by the Key Centre.

PhD students

John Cox, Peter Daly, Hussein Dia, Henry Le, Fotios Spiridonis
ITs: THE AUSTRALIAN KEY CENTRE IN TRANSPORT MANAGEMENT

The ITS Team

Academic staff
- Robin Underwood
- Geoff Rose
- Samantha Taylor
- Peter Daly
- Hussein Dia

Technical support
- Andrew Haines

PhD students
- John Cox
- Peter Daly
- Fotios Spiridonis

Director, ITS Monash
- Bill Young

Administration
- Nicole Spicer

As at December 1996

L to R: Ken Ogden, Bill Young, Nicole Spicer, Peter Daly, Andrew Haines, Samantha Taylor
Evaluation of fare elasticities for the Newcastle region (ITS Sydney)

This project extended the Government Pricing Tribunal Study into the Evaluation of Fare Elasticities for the Sydney Region carried out in 1995 by assessing the car and public bus fare elasticities in Newcastle; in particular, investigating the effect of time-based bus fares on the public bus patronage levels. This has enabled the State Transit Authority to undertake spreadsheet-based scenario analysis of shifts in revenue and trips in response to alternative time-based fares policies.

ITS International Bus and Coach Performance Benchmarking Program (ITS Sydney)

This is an on-going program launched by the Institute of Transport Studies in November 1995. More than 30 bus and coach operators have joined up for 1995/96 with several subscriptions received for 1996/97. A total of 35 subscriptions were received for this first year of the Program.

Analysis of the data currently available and the development of the structure for the reporting of the data is currently underway. Invitations for new subscriptions as well as for renewal of subscriptions for the 1996/97 financial year were sent out in December 1996.

BCA Transport Task Force (ITS Monash)

The Business Council of Australia (BCA) invited Professor Ken Ogden, together with Professor Bill Russell of the Graduate School of Government (Monash University), to carry out an analysis of gaps in current transport policies of the Business Council; gaps in current government transport policies; and reforms needed to facilitate the actual implementation of transport policies.

Information from a series of extremely successful consultative workshops in Sydney, Brisbane, Melbourne and Canberra, together with submissions from government and private sources, is being used to prepare a summary report and a detailed report for release in early 1997.

Melbourne's Integrated Transport Strategy (ITS Monash)

Ken Ogden worked with the State Government on Melbourne’s Integrated Transport Strategy. The strategy was released at the first of the 1996 Monash University public lectures in Transport Policy on 12 September by the Minister for Transport, The Hon. Alan Brown MP, with an explanation of the strategy presented by Ken Ogden. Ken has been present at detailed briefings for both the new Minister for Roads and Ports (Geoff Craige) and the new Head of the Department of Infrastructure (which includes the new Office (formerly Department) of Transport.

Strategic public transport planning (ITS Monash)

VicRoads has commissioned ITS Monash to undertake a scoping study of the role of buses in strategic transport planning. This project builds on the research carried out for the Transporting Melbourne study. It highlights the potential improvement gained by the integration of public transport and private transport systems.

Sydney Airport’s economic linkages (ITS Sydney)

ITS was commissioned by Sydney Airport (Federal Airports Corporation) to carry out an update of our previous research on the economic significance of Sydney Airport and to extend this work by illustrating the nature of the economic linkages that arise between the airport and the Sydney.

Sealing road shoulders (ITS Monash)

With MURAC (Monash University Accident Research Centre) and ARRB Transport Research, ITS Monash is researching the safety benefits of sealed shoulders and tactile edgelining for the Federal Office of Road Safety. The project builds on earlier work by ITS Monash staff.
Motorcyclists safety (ITS Monash)

Ken Ogden has commenced a study for Austroads, jointly with Robert Morgan, on ways in which the road and traffic environment can be made safer for motorcyclists. The study is using traffic auditing techniques to determine potential improvements. The project will indicate the magnitude of improvements that can be achieved by each countermeasure.

Road safety engineering in Papua New Guinea (ITS Monash)

Wilson Moroi has commenced a study of the evaluation of traffic accidents in road project appraisal in Papua New Guinea.

Freight-related industry needs, perceptions and expectations (ITS Sydney)

This is a two-part study undertaken for the Roads and Traffic Authority of NSW to obtain an assessment and understanding of the industry stakeholders’ freight-related transport needs, identify freight movement problem issues, evaluate responses and support for some proposed initiatives and identify industry’s expectations with regards to future infrastructure provisions and improvements.

In the first part of the study, a telephone survey was carried out while in the second part, a series of site visits and one-to-one discussions with a number of key industry players were conducted. Findings of the study are to be used as inputs in the development of the Road Freight and Commercial Travel Strategy by the RTA.

Freight data (ITS Monash)

Samantha Taylor and Ken Ogden worked with FDF Management on a freight data project for the NSW Transport Data Centre. Freight data is relatively sparse. This project investigates existing freight data sets to determine their limitations and the potential for expansion. The need for new data sets will be investigated and their requirements specified.

Research on incident detection using artificial neural networks (ITS Monash)

This project, funded by VicRoads, investigates the use of presence detectors to isolate traffic incidents on freeways. Data has been collected on freeways in Melbourne and a Neural Net has been developed to interpret this data. The project is being extended to consider freeway systems throughout Victoria.

Transport and the environment (ITS Monash)

This project with ARRB Transport Research investigates the inter-relationship between transport systems and the environmental impact of vehicle noise, emissions and fuel consumption. The project investigates local area networks and general travel patterns.

Non-motorised transport (ITS Monash)

This project, funded by NRMA, investigates the utilisation of non-motorised transport modes to meet the needs of the transport community. The project is collecting travel diary data on bicycle and pedestrian travel in the Gosford area of New South Wales. The study will point to potential improvements in the transport system that can encourage the use of non-motorised transport and the potential benefits to the general community.

Malaysian cargo through Malaysian ports: defining appropriate policies

Malaysian ports now handle up to 60% of export containers through the Port of Singapore. This project assesses the reasons why this is the case; and outlines a number of policy initiatives that may be used to reorient export flows through Port Kelang as a hub port.

Malaysian flag shipping and the national Balance of Payments

A large proportion of Malaysian cargoes are shipped in vessels of other countries. This project assesses the costs and benefits of doing so and particularly its impact on the national Balance of Payments. The project further outlines appropriate policies in
regard to the development of the Malaysian
flag fleet.

Both projects are carried out in cooperation
with the Maritime Institute of Malaysia
(MIMA) for the Malaysian government. The
final reports will be published by the
Maritime Institute; and papers will be
presented at a special conference in Malacca
in early 1997.

**Stevedoring productivity at Australian
container terminals**

This project examined the relationship
between container terminal productivity and
Enterprise Agreements (EAs). These
Agreements were seen to provide
competition within the stevedoring market
and as a basis for increased productivity. The
project found that rigidities embedded in the
EAs effectively prevent high productivity.
The project was carried out for the WA
Department of Transport.

**Reforming ports: the privatisation
debate**

This project examined privatisation
initiatives for Australian ports. It found that
privatisation legislation across Australia
varies markedly; and that under some
legislation, there are significant constraints
placed on achieving higher efficiency levels
in ports. The project was carried out under a
grant from the Australian Chamber of
Shipping.

**Asian hub/feeder nets: the dynamics
of restructuring**

This research examined the basis of change
in port/shipping networks in East and
Southeast Asia over the last decade. It found
a number of major region-wide factors of
importance such as the emergence of China,
deregulation of markets and rapid growth in
regional economies, but fundamental
changes in global liner shipping are likely to
modify existing networks. The project was
funded from various sources.

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**The impact of efficiency improvements in container handling operations on the Australian economy**

This project examined the nature of
multiplier effects of improved efficiency in
container handling operations. It suggested
that if Australian ports handled about 2
million containers, revenue spinoffs may
total $22.2 billion in current prices and have
employment impacts of 179,000. Achievable
efficiency improvements could result in
dollar impacts of almost one billion dollars.
The project was funded by a major
international maritime firm.

**Other projects**

Other projects included:

- GIS-based route planning capability and
contract area determination of service
levels for Blue Ribbon Coaches (ITS
Sydney)
- Mauritius aviation plan (ITS Sydney)
- design of a travel survey for Busways
- review of valuation of travel time savings
- review of urban goods movement models
  for the NSW Transport Data Centre.
ITS Sydney

The Education program at ITS Sydney includes:

- PhD program;
- Graduate transport management program;
- Certificate programs; and
- Executive short courses.

ITS offers a fully articulated set of programs in transport management education, as shown below. Note that articulation between programs is not automatic.

**NON-DEGREE PROGRAM**

- Certificate of Transport Management

**GRADUATE PROGRAMS**

- Graduate Certificate of Transport Management*
  - 2 core courses
  - 2 electives

- Graduate Diploma in Transport Management
  - 3 core courses
  - 3 electives

- Master of Transport Management
  - 7 core courses
  - 3 electives

- MBA
  - PhD

*Planned for 1998
PhD program

Michael Nyathi graduated in October with his thesis titled Strategic alliance partner choice in international aviation networks. Ian De Mellow submitted his thesis titled Total Factor Productivity of the NSW railways for examination in July and will graduate in May 1997.

Students in the PhD program at ITS (at the end of 1996) included:

**Full-time**

Rhonda Daniels (1993): Valuation of environmental impacts of urban freeways
Ruanthi De Silva (1996): Liner shipping
Jajang Hasyim (1996): Capacity considerations at ports
Sandy White (1996): Airport operational development in Asia
Jianlin Xu transferred to the Department of Management Studies in May.

**Part-time**

Seu Cheng (1992): Interactive agency choices in domestic freight movements
Vicki LePlastrier (1992): Holiday air travel: an individual choice approach
Ajay Nayyar (Trip timing model) and Tim Raimond (Dynamic modelling of workplace and residential location choice) suspended their PhD studies for 1996.

Graduate transport management program

The transport management program includes the Master of Transport Management (10 courses) and the Graduate Diploma in Transport Management (6 courses). There are currently 70 students in the program. 14 students graduated in June and 10 in October.

10 new Masters students and over 20 new Graduate Diploma students enrolled in 1996. In addition, there were 10 enrolments in individual courses in Semester 1, and 4 in Semester 2. Non-award enrolments allow prospective students to “sample” courses in the transport programs.

The transport management programs were reviewed by a committee chaired by Professor John Taplin of the University of Western Australia. Comments were sought from current students and graduates. A new program is to be introduced in 1998 with a 1997 transition year.

The new program is described in section 12.

Courses

ITS staff taught the following transport management courses in 1996:

**Summer Semester**

- Infrastructure Development and Financing (Swan)

**Semester 1**

- Effective Business Communications (Brewer)
- Logistics Management (Kerr)
- Quantitative Analysis (Hooper and Hensher)
- Transport Economics and Management (Hensher)
- Transport Policy Workshop I (Everett)

**Semester 2**

- Freight Operations and Management (Chow)
- Transport Policy Workshop II (Everett)
- Transport Strategy (Brewer, Nyathi)
- Urban Public Transport Operations (Ton, Richmond, Fielding)
Richard Denton, AO, FAC, a former Managing Partner and Chairman of Deloittes Haskin and Sells Australia and past President of the Institute of Chartered Accountants in Australia, spoke to Transport Strategy students on chairmanship.

Maritime program

The Maritime Program which will begin in 1997 was formally launched in December by John Jenkins, Executive Director of the Australian Chamber of Shipping, with supporting comments from the Association of Australian Ports and Marine Authorities and the Australian Shipowners Association. The Maritime Program allows industry personnel to focus on maritime issues within a broader management education program.

In 1997, the course Maritime Markets will be introduced. It will focus on the competitive structuring of the national and global shipping markets and on competition and competitive advantage in the ports sector. Another course, Topics in Transport, may focus on specific and selected issues in the ports and shipping industries.

Student awards

Mateus Magala of Mozambique received the Institute of Transport Studies prize for excellence in full-time study in the MTM program. Mark Ozinga received the Chartered Institute of Transport Ken Hillyar award for best Year 1 student in the MTM program and Frank Milthorpe received the Chartered Institute of Transport Sir Hudson Fysh award for best Year 2 student in the MTM program. Helen Bridge received the Australian Institute of Traffic Planning and Management prize for best student in the Graduate Diploma program.

TNT have announced support for the TNT Prize in Logistics Management, worth $400 in 1996. The inaugural prize was awarded to John Glynn.

The awards were presented at the Institute of Transport Studies end-of-year dinner attended by students, staff, members of the Advisory Committee and supporters of the Institute.

Certificate programs

Certificate of Transport Management (Bus/Coach)

The CTM was established in conjunction with the Bus and Coach Association (NSW) to provide managerial training for the bus and coach industry. It is the only program to meet the accreditation requirements under the NSW 1990 Passenger Transport Act.

In 1996 ITS conducted two CTM courses with over 120 students. Despite these two intakes, at the end of 1996, there was an extensive waiting list for the CTM.

In August 1996, the Certificate of Transport Management Dinner was held with the Director-General of the NSW Department of Transport as guest speaker attended by 40 CTM participants. Mr Jim Bosnjak, President of the Bus and Coach Association (NSW), welcomed and congratulated participants and Certificates were presented by Professor John Glastonbury, Pro-Vice Chancellor of the University of Sydney.

Certificate of Coach Management

The Certificate of Coach Management (CCM) is specifically designed for coach operators accredited for long distance and tourist vehicle services (including overnight charter work).

In 1996, over 450 students completed the 4 day program. Due to demand, there were 8 CCM intakes in 1996.

Both programs are being revised for a new look in 1997. A book especially for the Australian Bus and Coach Industry written by Ann Brewer and David Hensher, with research assistance from Michael Nyathi, will be published by Allen & Unwin in 1997.

Certificates of Logistics Management, Freight Management and Supply Chain Management

Professor Garland Chow, the Collex Visiting Professor in Freight and Logistics Management, has been developing the Certificates. They will be offered for the first time in 1997.
The four core modules required for all the Certificates are:

- Logistics and Supply Chain Systems and Principles
- Logistics and Supply Chain Problems and Applications
- Logistics, Freight and Supply Chain Seminar 1
- Logistics, Freight and Supply Chain Seminar 2

The additional modules for the Certificate of Logistic Management are:

- Management of Order Fulfilment Processes – Transportation and Order processing
- Management of Order Fulfilment Processes – Inventory, Storage and Materials Handling

The additional modules for the Certificate of Freight Transport Management are:

- Freight Transport Operations
- Freight Transport Marketing

The additional modules for the Certificate of Supply Chain Management are:

- Supply Chain System Design
- Supply Chain Coordination

The remaining two elective modules may be chosen from the remaining modules in the Logistics and Freight Management Certificate program or from the Maritime Certificate program, or other approved ITS modules.

**Certificate of Transport Management (Maritime)**

This program will be introduced in early 1997 with a pilot intake of 20 invited participants. The program has been designed by a committee under the direction of Associate Professor Ross Robinson.

The five modules are:

- Competitive restructuring in the maritime industries
- Managing change: redefining corporate strategies
- Managing change: reforming the organisational environment
- Measuring performance in the maritime industry
- Supply chain logistics and intermodal transportation

**Executive programs**

**Designing transport and urban forms for the Australia of the 21st century**

NSW Department of Transport Visiting Professor Jonathan Richmond chaired a one day workshop in April attended by over 60 people. Papers presented by Jonathan, Patrick Troy, David Hensher and David Bray critically reviewed the direction of current Australian policies for transport and urban form and made recommendations for the development of effective policies for the Australia of the 21st Century. The papers were later published as an ITS Working Paper.

**Transport for the Olympics – Making it work: A first forum**

This one day November workshop, coordinated by Professor Jonathan Richmond, provided an essential briefing and discussion from leading experts in transport, tourism and security for members of industries connected with the Olympics. It was an opportunity to learn from past experiences and discuss planning processes for Sydney 2000. There were over 85 participants, with extensive coverage by radio, TV and newspaper reporters.

**Competition policy and efficiency in the maritime sector: The issues**

A one day Executive Development Seminar in the Maritime Program was held on 12 December at ITS. The seminar provided industry managers with a clear understanding of the concepts, principles, legislation and the implications of competition policy as they apply to the maritime sector. Presenters included Professor Peter Forsyth, Lachlan Payne, Professor Ted Kolsen, Dr Michael Lawriwsky and Grantly Mailes.
ITS Monash

The education program at ITS Monash includes:
- PhD program;
- Master of Engineering Science by research;
- Master of Engineering Science by coursework and minor thesis; and
- Short courses.

PhD program

Kevin Gu graduated in 1996. Hussein Dia and Henry Le submitted their theses on Incident detection using artificial neural networks, and Modelling of small area traffic networks respectively in 1996.

The following students are also engaged in PhD research:
- John Cox: Minimising highway transport costs through construction
- Peter Daly: Modelling transport demand and parking management
- Fotios Spiridonis: Equilibrium modelling of location choice

Master of Engineering Science by research

Deborah Donald and Samantha Taylor have successfully completed their MEngSc (research) programs on The speed derstriction sign and its alternatives, and Urban freight activities in Sydney respectively, and graduated in October 1996.

David Emery’s project on shopping centre design is continuing. Wilson Moroi has commenced his research on evaluation of traffic accidents in road project appraisal in Papua New Guinea.

Master of Engineering Science by coursework

In 1996, one student commenced the Masters by coursework program and 10 students commenced the Graduate Diploma in Transport and Traffic Engineering, while 3 students graduated.

There were 3 students enrolled in each of the Engineering Education Australia units Traffic Engineering and Road Safety and Transport, Land Use and the Environment.

Courses

Subjects taught by ITS Monash staff included:

Semester 1
- Transport Engineering Economics (Ken Ogden, delivered by ITS Sydney)
- Survey Methods in Traffic and Transport (Geoff Rose)

Semester 2
- Road Traffic Engineering Practice (Ken Ogden)
- Data Analysis and Statistics (Samantha Taylor)
Student awards

The following prizes were awarded to students:

- CMPS and F prize in Highway Engineering to Cin Yee Hong and Teri Etchells,
- Richardson prize in transport to Chlodaugh Smith,
- VicRoads postgraduate award to Eric Ma,
- Turnbull and Fenner prize to Nicole Feore.

Short courses

Bus industry training

Negotiations commenced with the Bus Proprietors Association for ITS Monash to deliver a Victorian version of the ITS Sydney bus training and accreditation program.

Series on Transport Economics and Management

A Short Course in Travel Choice Analysis was held on 20-21 April at ITS Monash. It was led by Professor David Hensher. A Short Course on Costing and Performance Management was held on 16-17 May. In June, Professor David Hensher presented the third and final Short Course in the series specifically on Pricing, Transport User Charges and Infrastructure Pricing.

Road Safety

Peter Daly and Ken Ogden presented a 2 day training program on aspects of road safety engineering for a group of visiting Chinese safety officials (6-7 May). This was a World Bank funded exercise, with ARRB Transport Research as the lead agency.

Ken Ogden presented segments of a VicRoads course on Accident Analysis and Prevention in Geelong (June).

Peter Daly hosted a group of visiting Thai officials on a visit to Melbourne in July and went to Thailand in November to give a 2 week short course on an AusAid funded project in conjunction with the Prince of Songkla University in Thailand.

Traffic Engineering and Management

A 3 day workshop on Traffic Engineering and Management was held in Melbourne in September and in Sydney in October, with Ken Ogden and Samantha Taylor as co-organisers. Over 100 people attended.

Bill Young presented a short course on Parking Policy, Design and Data in Kuala Lumpur, Malaysia in April, which 30 students attended.
Staff disseminate research and policy work through a wide range of publications from books, journal articles, conference proceedings, working papers and project reports.

WCTR Proceedings

David Hensher and Jenny King (with Professor Tae Oum of the University of British Columbia) edited the Proceedings of the 7th World Conference on Transport Research (held in Sydney in 1995), which was published in October 1996 as a 4 volume set of 150 papers by Pergamon Press, an imprint of Elsevier, Oxford.

Books and book chapters


Ken Ogden and Samantha Taylor edited a book titled Traffic Engineering and Management, published in 1996 by Monash University. It included the following chapters by ITS Monash staff:

- Human factors in traffic engineering, Planning and design for trucks, Traffic engineering project evaluation and Traffic engineering treatment of hazardous locations (Ken Ogden)
- Collection and use of road crash information (Geoff Rose, Mike Taylor and Bill Young)
- Traffic engineering folklore (Samantha Taylor, Ken Ogden and David Bennett)
- Development of the traffic engineering profession (Robin Underwood)
- Planning and design for parking (Bill Young)

Bill Young was co-author (with Mike Taylor and Peter Bonsall) of Understanding Traffic Surveys, published in 1996 by Gower Publishing Co, London.


Journal articles

Conference proceedings


ITS Working Papers
All Working Papers may be purchased from ITS.

ITS-WP-96-1 Urban Public Transport Futures: Broadening the Policy Debate (Edited by David Hensher)

ITS-WP-96-2 Accessible Buses in a Commercial Environment (Neil Smith)

ITS-WP-96-3 Intercity Rail Services: Evaluating Pricing Options (Hensher)

ITS-WP-96-4 Predicting Demand for High Speed Rail in the Sydney-Canberra Corridor (David Hensher)

ITS-WP-96-5 Designing Transport and Urban Forms for the Australia of the 21st Century (papers presented at ITS workshop by Jonathan Richmond, Patrick Troy, David Hensher and David Bray)

ITS-WP-96-6 Australian Airports: The Case for Privatisation (Sandy White)

ITS-WP-96-7 Changing Ownership Strategies for Australian Ports: Some Emerging Issues (Sophia Everett)

ITS-WP-96-8 Transport and Environmental Management (Hensher, Hooper, Robinson and Everett)

ITS-WP-96-9 Extending Valuation to Controlled Value Functions and Non-Uniform Scaling with Generalised Unobserved Variance (David Hensher)

ITS-WP-96-10 Economic Significance of High Speed Rail (Jenny King)

ITS-WP-96-11 An ITS Vision for Melbourne’s Southbank Precinct (Rose, Young and Iljin)

ITS-WP-96-12 Accident Analysis and Investigation: The Role of Road Safety Engineering (Ogden)

ITS-WP-96-13 Analysis of Crash Patterns at Signalised Intersections (Ogden and Newstead)

ITS-WP-96-14 Urban Goods Movement and Sydney’s Economy (Taylor, Ogden and Peachman)

ITS-WP-96-15 Comparative Performance of Freeway Automated Incident Detection Algorithms (Dia, Rose and Snell)
ITS-WP-96-16 Activity Modelling of Urban Traffic Movement (Daly and Young)

ITS-WP-96-17 Impact of Data Quantity on the Performance of Neural Network Incident Detection Models (Dia and Rose)

ITS-WP-96-18 Transport, Traffic and Land Use: Changing Roles for Local Government (Ogden and Chandler)

ITS-WP-96-19 Impact of Data Quality on the Performance of Neural Network Freeway Incident Detection Models (Dia and Rose)

ITS-WP-96-20 Local Government and its Changing Role in Transport and Land Use Integration (Chandler)

ITS-WP-96-21 The Importance of Organisational Commitment in Managing Change in the Bus Industry in Australia (Ann Brewer and David Hensher)

ITS-WP-96-22 The Outsiders: An Essay on Transport Planning Methods (David Denmark)

**Project reports**

**BCA Survey:** Daily Diary for Non Commercial Contracts, Report for the Bus and Coach Association of NSW (King).

**STA - Newcastle Buses Elasticity Study,** Report for State Transit Authority (Hensher and King).

**Assessment of Freight-Related Industry Needs, Perceptions and Expectations in NSW Part 1,** Report for the Roads and Traffic Authority of NSW (Hensher and King), and Part 2 (Chow).

**Stevedoring Productivity at Australian Container Terminals: A Review,** Report for the WA Department of Transport (Robinson, Everett).

Reforming ports: issues in the privatisation debate, Paper for the Australian Chamber of Shipping Research Award 1995 (Everett, Robinson).

Port privatisation in Malaysia: lessons to be learned, Briefing paper for APEC Congestion Study of Pacific Rim countries, November (Everett, Robinson).

Freight Capture: Options for the Port of Newcastle, Report prepared for the Port of Newcastle Strategic Development Project, Maunsell, December (Robinson, Everett).

Comments on draft report Patronage study - high and very high speed train evaluation project, Report prepared for the Very High Speed Train Evaluation Secretariat (NSW Govt, ACT Govt and Fed Govt) April (Hensher, Hooper).

Submission to Government Pricing Tribunal on the fares inquiry (Richmond).


**Transporting Melbourne,** the integrated transport strategy for Melbourne which Ken Ogden worked on in 1995, was released by the Minister for Transport and Ken at the Monash Transport Policy Lecture Series on 12 September 1996.
Competition law and policy—why we need it? (Hensher)

• Changing shipping network structures in East and Southeast Asia, Third International Maritime Conference Port and Shipping Asia: Challenges of the 21st Century, Institut Kelautan Malaysia, Kuala Lumpur, 21-22 May (Robinson)

• International Choice Symposium at Columbia University, workshop paper on recent developments in discrete choice models (To appear in Special Issue of Marketing Letters), 12-14 June (Hensher)

• Stated choice methods for land use and transportation planning, Short Course at Portland State University, Oregon, 25-28 June (Hensher, with Jordan Louviere)

• International Association of Maritime Economists, Vancouver, 26-28 June Chairman, Session on Cost Recovery in Ports (Robinson)

• Assessing the strategic role of regional ports: the case of Darwin (Robinson)

• Corporatisation strategies in Australian ports: emerging issues (Everett)

• Growth and liberalisation of competition in domestic airline markets in Asia - the domestic/international regulatory interface, Conference Panel on the international air traffic regime. Is the Asia-Pacific locked in or locked out?, 20th Asian Studies Association of Australia Conference, 14-15 February, Sydney

Productivity reform on the waterfront, Paper presented to a joint meeting of The Institute of Marine Engineers and the Royal Institute of Naval Architects, 28 February (Robinson)

• Intra-regional trade in Asia: prospects and challenges, Paper presented at Singapore 96, Singapore, 26-27 March (Robinson)

• The economic importance of major international airports: reflections on a recent study of the economic significance of Sydney International Airport, University of British Columbia Series on Transport and Logistics, Vancouver, April (Hooper)

• Concentration in world trade and Asian hubs and Australian flag shipping—some critical issues, Lectures to the Royal Australian Navy’s Maritime Studies Program at HMAS Creswell, 22 April (Robinson)

• Australian Bus and Coach Association National Conference, Darwin, 5-8 May The challenge of change in managing a business (Brewer)

Update on public transport futures (Hensher)
Management, Ahmedabad, India, 14 August (Hooper)

- Keeping the Wheels Turning: Navigating your way through the logistics nightmare, 1996 Alumni Update Seminar, Graduate School of Business, University of Sydney, 21 August (Chow)
- Privatisation and corporatisation of Australian ports, Paper presented at Institute of Marine Engineers workshop, 28 August (Everett)
- Micro-economic reform - great idea, bad legislation, Paper presented at Waterfront Reform Ports and Shipping Conference, Sydney, 2-3 September (Robinson and Everett)
- Developments in Asian ports and shipping and Australian shipping and ports, Lectures to the Royal Australian Navy Maritime Studies Program, 6 September (Robinson)
- Invited paper on The economic role of major international airports to a Oracle Workshop on Management Problems and Issues in Aviation in Kuala Lumpur, 19-20 September (Hooper)
- New infrastructure for port development – the least of our worries?, paper presented at the conference on Developing Australia’s Transport Infrastructure, Sydney, 21-22 October (Robinson)
- Liberalising airline competition in India–lessons from Australia, The Airline Industry - Parallels in Regulation and Competition Between Australia and India, Business Management Workshop, Australia-India New Horizons, New Delhi, 29-30 October (Hooper)
- Keynote address, Roads in the urban community, Highways in the Next Century, Hong Kong, 23-27 November (Hensher)
- Innovation and change in international liner shipping: the adoption of very fast vessels, Keynote Address at International Conference on Ekranoplan and Very Fast Craft, jointly sponsored by the Institute of Marine Engineers, Department of Naval Architecture (UNSW), Russian Advanced Technology Group, Australian Maritime Engineering CRC Ltd and the Australian Maritime Safety Authority University of NSW, 5-6 December (Robinson)
- Malaysia’s seaborne trade and maritime transport: a policy perspective, paper presented at the MIMA/UKM Workshop on Malaysia as a Maritime Nation 11, Malacca, Malaysia, 16 December (Robinson)
- Manage training – your competitive edge, paper delivered to Network Meeting, Southern Sydney Institute, December (Brewer)

**ITS Staff seminars**

- Recent developments in discrete choice analysis, 16 July (Hensher)
- Asian hub/feeder networks: the dynamics of restructuring, 26 August (Robinson)
- Geographical Information Systems for transport, 10 September (Ton)
- Australian national shipping policy: economics or political dogma, 24 September (Everett)
- Kan I? Kant I, 15 October (Richmond)
- Logistics research program, 3 December (Chow)
- Automatic freeway incident detection, Joint IEAust/ITE Seminar, Melbourne (Dia)

**Conference and seminar attendance**

- BTCE invitation only workshop on Demand Modelling, Canberra, 14 March (Ogden, Daly)
- Institute of Transportation Engineers’ conference, Melbourne, 15-17 April (Rose and Dia)
- Chair, Seminar on Road Project Evaluation, VicRoads, 23 April (Ogden)
- Presenter, VicRoads Course on Accident Analysis and Prevention, Geelong, 3 June (Ogden, attended by Moroi)
- Overseas experience in ITS, Joint VicRoads/Victorian Road Transport Association Seminar on Real Time Information for Road Freight Operators, 18 June (Taylor and Ogden)
- Short course in Computer Applications in the Building and Property Industry, July, Monash (Young)
• IIR Conference on Freight and Logistics, 23-25 September (Chow, Nyathi)

Media

In April, Jonathan Richmond’s views on Sydney’s public transport system were reported in The Telegraph, The Sydney Morning Herald and The Sun-Herald and he made three TV appearances and did four radio interviews.

David Hensher was interviewed by Kerry Phillips of ABC 2CN on Friday 12 September on the Speedrail proposal for a high speed rail link between Sydney and Canberra.

Ross Robinson’s address on enterprise-based agreements and stevedoring productivity to the Waterfront Reform Conference was reported in Lloyd’s List, 19 February.

Ross Robinson was quoted in an editorial in Lloyd’s List Australian Weekly (9 September 1996).

Ann Brewer and David Hensher’s research was featured in article titled Telecommuting, travel behaviour and the environment by Anne Sarzin in The University of Sydney News, 24 October (page 4).

The Transport and Olympics forum received extensive coverage in the media including the Sydney Morning Herald and Daily Telegraph, Channel 7, and radio (ABC, 2GB, 2WS).

Ken Ogden appeared on SBS and with Terry Ladler on 3LO in September with respect to Transporting Melbourne.

Prize

A paper jointly authored by Peter Daly won 2nd place award for a distinguished contribution for an outstanding paper at the 3rd East-West Congress on Engineering Education in Gydnia, Poland. The conference was supported by UNESCO.
INDUSTRY LINKAGES

Other activities by ITS which contribute to industry and community linkages include positions in conference organisations, international committees and editorial positions, as well as overseas visits and public lecture series.

Positions

ITS staff hold a number of positions in local and international research organisations in the transport industry.

Conference organisation

- Member, Steering Committee of the 21st Australasian Transportation Research Forum, Adelaide September 1997 (Hensher, Taylor)
- Vice-Chair, International Scientific Committee of the World Conference on Transport Research (Hensher)
- Member, International Scientific Committee of the World Conference on Transport Research (Ogden)
- Member, Program Committee of 29th ISATA (International Symposium on Automotive Technology and Automation) (Florence, Italy June 1996) (Hensher)
- Member, Australian Conference on Tourism Research (Sydney 1997) (Hooper)

David was also a member of the Publications Committee and Co-Editor of the 7th WCTR Proceedings. Jenny King was also Co-editor of the Proceedings.

International positions

- Founding member, US Transportation Research Board Committee on Traveller Behaviour and Values (Hensher)
- Member, US Transportation Research Board Committee on Travel Forecasting and Sub-committees on Application of Behavioural Travel Demand Models and Value of Travel Time (Hensher)
- President, International Association for Travel Behaviour Research (Hensher)
- Member, US Transportation Research Forum (Hensher, Hooper)
- Member, US Transportation Research Board Committee on Urban Goods Movement (Ogden)
- Australian representative, Permanent International Association of Road Congresses (PIARC) Technical Committee on Urban Areas (Underwood)
- Member, US Transportation Research Board Committee on Citizen Participation in Transportation Planning (Underwood)
- Member, US Transportation Research Board Committee on Parking and Terminals; Committee on Telecommunications and Travel Behaviour; and Committee on Behaviour (Young)

Australian positions

- Member, Australian Bureau of Statistics Transport Statistics User Group (Hensher)
- Member, Transport Data Centre, NSW Department of Transport Technical Advisory Committee (Hensher)
- Member, Transport Research Centre (RMIT University) Advisory Committee (Hensher, Ogden)
- Member, University of Sydney Department of Marketing Advisory Committee (Hensher)
- Member, Australian Capital Territory Transport Reform Advisory Group (Hensher)
- Research Associate, Centre for Applied Economic Research and Analysis, James Cook University of North Queensland (Hooper)
- Member, Board of the NSW Section of the Chartered Institute of Transport, and Director, Education and Training (Hooper)
- Member, Travel and Tourism Research Association (Hooper)
- Member, International Networking Group, Air Transport Special Interest Group, World Conference on Transport Research (Hooper)
- Member, Transport and Logistics Course Advisory Committee, RMIT University (Ogden)
- Member, Steering Committee for the study Transporting Victoria, the State Government’s transport strategy for regional Victoria (Ogden)
• Judge in the Australian Road Federation’s awards for the John Shaw Award for outstanding contribution to the road industry (Ogden)
• Member, Independent Advisory Committee appointed by the Minister for Planning and Local Government to review planning provisions for parking throughout Victoria (Ogden)
• Member, Transport Branch Committee of Institution of Engineers Australia (Victorian Division) (Ogden, Rose, Taylor)
• Chair, Institution of Engineers Australia National Committee on Transport (Rose)
• Member, Transport and Mobility Reference Group established by the City of Hobsons Bay in Melbourne. The reference group has been established to guide the development of the Transport and Mobility layer of the Hobsons Bay Strategy (Rose)
• Chair, Standards Australia Technical Committee MS/54, Local Area Traffic Management Devices (Underwood)
• Vice-President, Australian Section of the Institute of Transportation Engineers (Young)
• Member, Standards Australia Parking Committee (Young)
• Secretary, Parking Association of Australia (Young)
• Fellows of the Chartered Institute of Transport (Hensher, Hooper, Young, Underwood)
• Member, International Association of Maritime Economists, International MultiModal Association (UNCTAD Geneva), World Conference of Transportation Research, Chartered Institute of Transport, Institute of Australian Geographers, Institute of Public Administration (Australia) and Australian Institute of Political Science (Everett, Robinson)

David is Associate Editor of Asia Pacific Journal of Transport, Area Editor of Transport Reviews; and is on the editorial boards of Transport Policy; Transportation; Transportation Research; International Journal of Transport Economics; Logistics and Transportation Review; Journal of Transport Economics and Policy; Transportation Planning and Technology; and Journal of Retail and Consumer Services.

Paul Hooper on the Editorial Board of Logistics and Transportation Review.

Ross Robinson is Regional Editor of Journal of Maritime Policy and Management.

Ken Ogden is on the Editorial Board of Transportation Planning and Technology, Road and Transport Research, and Logistics and Transportation Review.

Geoff Rose is Editor of Transport Engineering in Australia.

Bill Young is Associate Editor of Transportation.

Reviews of papers
Staff reviewed papers for a wide range of transport journals and conferences. Paul Hooper was invited as an independent expert referee for the Foundation for Research, Science and Technology (New Zealand).

Policy Workshops

Transport Policy Workshop (ITS Sydney)

Transport Policy Workshop, a core course in the MTM and Graduate Diploma programs, is a weekly forum open to the public in which leading transport professionals present policy issues for discussion. Speakers in the 1996 series were:

Semester 1
• Nicholas Clark, Managing Director, Nicholas Clark and Associates
• David Mortimer, Managing Director, TNT
• David Kilsby, Associate, Sinclair Knight Merz

Editorial positions


Paul Hooper is on the Editorial Board of Logistics and Transportation Review.

Ross Robinson is Regional Editor of Journal of Maritime Policy and Management.

Ken Ogden is on the Editorial Board of Transportation Planning and Technology, Road and Transport Research, and Logistics and Transportation Review.

Geoff Rose is Editor of Transport Engineering in Australia.

Bill Young is Associate Editor of Transportation.
• John Mant, Consultant, Phillips Fox
• Dale Budd, Managing Director, Speedrail
• Prof Jordan Louviere, Dept of Marketing, The University of Sydney
• Michel Boström, Director, Boström & Associates
• Prof Jonathan Richmond, NSW Dept of Transport Visiting Professor, ITS
• Dr Hugh Milloy, Assistant Secretary, Sydney West Airport Taskforce
• Dr Maxine Cooper, Director Environment Management, Dept of Recreation and Health (Brisbane)
• John Burton, Managing Director, AAT Kings
• Dr Sophia Everett, Deputy Director, Maritime Program, ITS

Semester 2
• Tony Davidson, State Manager, FCL Interstate Transport Services
• John Menadue, Director, Research Institute for Asia and the Pacific
• Professor Pete Fielding, Director, University of California, Study Centre for Australia
• Professor Gordon Mills, Director, Centre for Microeconomic Policy Analysis, The University of Sydney
• Professor Michael Lawriwsky, Director, ANZ Securities Corporate
• Ian Rischbieth and John Cappelleti, AirServices Australia
• Mark McKenzie, Manager, Engineering and Environment, NRMA
• Emeritus Prof Ted Kolsen, University of Queensland
• Lachlan Payne, Executive Director, Australian Shipowners Association
• Caroline Stone, Director, PPM Consultants
• Graham Taylor, Project Manager, Trans Research
• Anthony Sheldon, Assistant Secretary, Transport Workers Union

Transport Policy Seminar series (ITS Monash)
The public lecture series in transport policy, sponsored by the Department of Infrastructure, was again presented in 1996 in collaboration with the Graduate School of Government. The series had the theme of issues in strategic urban transport planning and featured the following speakers over 5 nights:

12 September – 10 October
• The Hon Alan Brown MP, Minister for Transport
• Ken Ogden, ITS Monash
• John Sanderson, RACV
• Paul Mees, Public Transport Users Association
• Garry Grimmer, Melbourne Convention and Marketing Bureau
• Janine Kirk, Committee for Melbourne
• John Bowdler, Department of Transport and Regional Development
• Hon Geoff Craige MP, Minister for Roads and Ports
• John Stone, Environment Victoria
• Professor Pete Fielding, University of California, Irvine

Maintaining international contacts
David Hensher visited the USA in June–July. At New York University he had discussions with Prof Bill Greene and Prof Joe Steckel on logit models and group choice making. He also spent a week at the University of California at Irvine working on two joint papers with Professor Tom Golob in the areas of latent attitudinal segments and environmental conservatism; and structural linkages between compressed work week opportunities and company policy. At Portland State University, together with Prof Jordan Louviere of the Department of Marketing, Sydney University he ran a workshop on stated choice methods, hosted by the Centre for Urban Studies.

In July-August, he attended the Conference on From Telecommuting to Teleworking to the Virtual Organisation at Brunel University (31 July - 2 August) where he presented papers, and the International Conference on Theoretical Foundations of Travel Choice Modelling, Stockholm (7-11 August).

He also visited the University of Westminster Transport Studies Group and Professor Peter Jones to discuss their teaching and research program. He also spent time with IATBR

Paul Hooper was on special studies leave in Semester 2 undertaking research on aviation policy and competition in Asia with particular emphasis on India. Visits were made to the Indian Institute of Management Ahmedabad, the Central Road Research Institute of India, Air India and the Director General of Civil Aviation India. Papers were presented at the Asian Studies Conference in Melbourne and at the Business Management Workshop in New Delhi. Work is proceeding on a book about the Indian deregulation experience.

In Semester 2, Geoff Rose spent 6 months on an Outside Studies Program, most of which was spent at the University of Newcastle upon Tyne, England. He presented papers at international conferences on intelligent transport systems.

Ken Ogden, Samantha Taylor and Peter Daly visited New Zealand in August-September.

Peter Daly visited Prince of Songkla University (Thailand), the Land Transport Authority Singapore, and Nanyang Technological University Singapore.

Ross Robinson and Sophia Everett received invitations to visit the Academy of Sciences, Beijing; Korean Maritime Institute; Port of Singapore Authority; Maritime Institute of Malaysia and the Institute Kelautan Malaysia. Ross and Sophia attended the annual meeting and conference of the International Association of Maritime Economists in Vancouver in June.

**Overseas visitors**

Mr Paul Ouimet, Vice President of the Western Transportation Advisory Council, a non-profit association of business, labour and government organisations in Western Canada’s transportation system visited ITS Sydney in January. WESTAC is based in Vancouver, BC and Mr Ouimet was in Australia carrying out research into reform of the Australian transport sector.

Professor Sten Wandel, Logistics and Transport Systems, Department of Management and Economics, University of Linkoping, Sweden, visited ITS Sydney in February while researching developments in industry in Australia.

Dr Ingemar Ahlstrand of the Royal Institute of Technology, Department of Traffic and Transport Planning, Stockholm visited ITS Sydney on 1 March to discuss social cost benefit analysis developments.

Andrew Daly of Hague Consulting Group (author of Alogit software program) visited ITS Sydney for one week in December as part of the Sydney Travel model design project for the Transport Data Centre, NSW Department of Transport.

On 21 November, ITS Sydney hosted a visit by a delegation from the Ministry of Communications (Transportation) of China. The group was briefed on the Institute of Transport Studies by Professor Hensher and was addressed on the application of new technology in transport by Dr Tu Ton, Senior Research Fellow at ITS.

**Visitors to ITS Monash**

Professor Sten Wandel, Logistics and Transport Systems, Department of Management and Economics, University of Linkoping, Sweden also visited ITS Monash.

Richard Le of Massey University New Zealand visited ITS Monash to learn about research and teaching activities.

Barbara Sabey visited ITS Monash to discuss road safety research in Australia.

Pete Fielding from University of California Berkeley visited ITS Monash as part of an Overseas Student Program.
The management structure of the Key Centre is shown in the diagram below.

The role of the Advisory Committee is to provide advice on any matters referred to it by the Key Centre Executive, as well as to initiate matters for consideration that are of interest to the Key Centre, such as the teaching and research program and opportunities for participation of industry and government. The Advisory Committee met twice in 1996, once in Sydney and once in Melbourne.
Advisory committee members

Chair: Professor John Taplin
Department of Information Management, University of Western Australia

Mr Neil Aplin
Secretary, Tasmanian Department of Transport

Dr Kay Axhausen
Institut fur Strabenu and Verkehrsplanung, Leopold-Franzens-Universitat

Dr Peter Barnard
General Manager, Policy, Planning & Public Affairs, Australian Meat & Livestock Corporation

Mr David Berry
Manager, VicRoads

Mr Jim Bosnjak
President, Bus and Coach Association (NSW) / Westbus

Mr Laurie Breues
General Manager, Commercial Operations, Sydney Ports Corporation (from Dec 1996)

Professor Michael Brisk
Dean, Faculty of Engineering, University of Monash

Mr Piers Brogan
Business Sector Manager, Transport, RUST PPK Pty Ltd

Mr Hugh Brown
Manager, N.D. Lea International Ltd

Mr Bob Cain
Manager, BDW Aviation Services

Professor Garland Chow
Faculty of Commerce and Business, University of British Columbia (Collex Professor of Logistics and Freight Transport Management at ITS from July 1996)

Mr Alan Coutts
Director-General, NSW Department of Transport (until Dec 1996)

Mr Murray Cullinan
Assistant Secretary, Planning, Department of Transport (Vic)

Mr Doug Dean
Managing Director, Collex Waste Management Pty Ltd

Mr Terry Dene
Acting Executive Director, NSW Road Transport Association

Mr Brian Fitts
Sinclair Knight Merz

Mr Paul Forward
Director, Road Network Information, Roads and Traffic Authority

Mr Barry Garnham
Consultant for Lend Lease

Professor John Glastonbury
Pro Vice Chancellor, The University of Sydney

Professor Philip Goodwin
University Colleges, London

Mr Roger Graham
Director, Roger Graham & Associates Pty Ltd

Professor Paul Grundy
Department of Civil Engineering, Monash University

Dr Maurice Haddad
Director, Bureau of Transport and Communications Economics (until October 1996)

Mr Stephen Hunter
Director, Bureau of Transport and Communications Economics (from October 1996)

Professor Yoshi Hayashi
Department of Geotechnical and Environmental Engineering, Nagoya University

Professor Soon-Kil Hong
Director, Institute for Aviation Industry & Policy Studies, Hankuk Aviation University

Dr Ian Johnstone
Executive Director, ARRB Transport Research Ltd

Professor Adib Kanafani
Director, Institute of Transportation Studies, University of California Berkeley
MANAGEMENT STRUCTURE

Mr Doug Kneebone
Recently retired Chairman, PPK Pty Ltd

Professor Jordan Louviere
Department of Marketing, The University of Sydney

Mr Kevin Norris
Executive Director, Bus Proprietors Association (Victoria)

Professor Juan de Dios Ortuzar
Professor of Transport Engineering, Pontificia Universidad Catolica de Chile

Professor Tae Oum
Faculty of Commerce, University of British Columbia

Dr Neil Primrose
Assistant Secretary – Trade Coordination, Federal Department of Transport

Professor Wilfred Recker
Director, Institute of Transportation Studies, University of California, Irvine

Professor Stephen Salsbury
Department of Economic History, The University of Sydney

Mr John Sanderson
Assistant General Manager, Public Policy, RACV

Dr Derek Scrafton
Director-General of Transport, Government of South Australia

Mr Karmjit Singh
Chairman, The Chartered Institute of Transport (Singapore)

Mr David Singleton
State Manager, Ove Arup & Partners

Mr Neil Smith
Consultant, Bus and coach industry

Mr Robert Smith
former Manager, Bus & Coach Northern Region, Mercedes-Benz (Australia) Pty Ltd

Professor Daniel Sperling
Director, Institute of Transport Studies, University of California Davis

Ms Judi Stack
Chief Executive, Rail Access Corporation (from Dec 1996)

Mr John Stanley
Deputy Chairman, National Road Transport Commission

Mr Jim Stevenson
Chief Executive Officer, Cardina Shire Council

Dr Alastair Stone
Managing Director, Pacific Infrastructure Corporation

Professor Mike Taylor
Director, Transport Systems Centre, University of South Australia

Mr Don Telford
Executive General Manager, Logistics, TNT Australia

Professor Marty Wachs
Department of Architecture and Planning, University of California, Los Angeles

Mr John Walker
Chief Executive, Chief Ministers Office, ACT

Ms Rhonda Waller
Operations Manager, Road Transport Forum

From ITS Sydney

Professor David Hensher
Associate Professor Paul Hooper
Associate Professor Ann Brewer
Associate Professor Ross Robinson
Dr Sophia Everett
Dr Tu Ton
Dr Michael Nyathi

From ITS Monash

Professor Ken Ogden (until November 1996)
Professor Bill Young
Dr Geoff Rose
Ms Samantha Taylor
Hussein Dia
Mr Peter Daly
# Financial Statement

DEETYA, which provides funds for the Key Centres Program, requires a financial statement of income and expenditure using specified categories, as set out below.

## Income

<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>ARC Centre grants</td>
<td>$308,000</td>
<td>$69,123</td>
<td>$326,000</td>
<td>$75,273</td>
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<tr>
<td>Other ARC programs</td>
<td></td>
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<td>$10,000</td>
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<tr>
<td>Other Commonwealth Govt grants</td>
<td>$409,380</td>
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<td>$360,262</td>
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<td>State Govt grants</td>
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<tr>
<td>Local Govt grants</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry/Private funds</td>
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<td></td>
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<td></td>
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<tr>
<td>Contracts/Consulting</td>
<td>$335,294</td>
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<td>$798,895</td>
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<td>Host institution support</td>
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<td>$37,500</td>
<td>$37,500</td>
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<td>Other income sources/interest</td>
<td>$782,873</td>
<td>$76,937</td>
<td>$877,785</td>
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<tr>
<td>Carried forward from previous</td>
<td>$507,801</td>
<td>$3,748</td>
<td>$624,434</td>
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<tr>
<td><strong>Total income</strong></td>
<td><strong>$2,418,348</strong></td>
<td><strong>$187,308</strong></td>
<td><strong>$3,034,876</strong></td>
<td><strong>$255,363</strong></td>
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## Expenditure

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<th></th>
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<tr>
<td>Salaries</td>
<td>$979,198</td>
<td>$61,695</td>
<td>$984,753</td>
<td>$123,000</td>
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<td>Equipment</td>
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<tr>
<td>Accommodation</td>
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<td>$6,264</td>
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<td>Travel</td>
<td>$32,146</td>
<td>$9,715</td>
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<tr>
<td>Consumables</td>
<td>$18,061</td>
<td>$72,921</td>
<td>$16,500</td>
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<tr>
<td>Other expenditure</td>
<td>$702,583</td>
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<td>$941,499</td>
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<tr>
<td><strong>Total expenditure</strong></td>
<td><strong>$1,793,914</strong></td>
<td><strong>$164,718</strong></td>
<td><strong>$2,018,096</strong></td>
<td><strong>$255,363</strong></td>
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<tr>
<td>Carried forward</td>
<td>$624,434</td>
<td>$22,590</td>
<td>$1,016,780</td>
<td>$0</td>
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</table>
LOOKING FORWARD: 1997

Staff

New appointments to be made at ITS Sydney in 1997 include a Senior Lecturer in freight and logistics; an Administration Associate for the Maritime program (part-time); and a Research Analyst (part-time).

Research

Research will continue on on-going projects.

In maritime, there are research initiatives to look at cost structures in Australian shipping; further assessment of privatisation legislation in Australian ports; maritime legislation, deregulation and efficiency in Indonesian ports.

ITS Monash will continue activities in intelligent transport systems, activity modelling and parking studies.

Education

Graduate program

In 1996, a revised graduate transport management program was presented to the Graduate School of Business, for full implementation in Semester 1, 1998. 1997 will be a transitional year for the graduate transport management program.

The current program remains highly competitive but the revised program builds on this excellence to offer an even better program. The new program retains the Graduate Diploma and Master of Transport Management degrees, but requirements are now specified as “units” rather than the number of subjects to be completed.

The new modular structure of units provides greater flexibility. The program includes a set of five specialisation modules: transport systems; logistics; aviation; maritime and urban transport. Participants have sufficient flexibility in the program, especially at Masters level to complete more than one specialisation.

Examples of new subjects in the revised program include: Managing a Transport Business; Making Policy in the Transport Sector; Information Processing and Forecasting and Foundation Skills in Transport.

In 1997, a maritime subject, Maritime Markets, will be offered for the first time. The course will focus on the competitive structuring of the national and global shipping markets, and competition and competitive advantage in the ports sector. Its emphasis will be on the dynamics of change in both industry sectors including the factors driving change, the impacts on industry structure, the way the sectors operate, and efficiency and productivity impacts.

A second new subject in 1997 is Topics in Transport, a flexible unit which may focus on specific and selected issues in ports and shipping industries.

To assist existing students in 1997, a transition structure has been devised for the core transport offerings from the current to the new program. Existing management subjects and electives will be readily available.

Certificate programs

New Certificate programs to be offered for the first time in 1997 include the CTM (Maritime) and Certificates in Freight, Logistics and Supply Chain Management. Development will continue on other Certificate programs.

Executive programs

A wide range of short courses and executive programs are scheduled for 1997.

Travel Activity Analysis and Methods

On 10-12 March 1997, the Institute of Transport Studies will be holding a 3 day development course on Travel Activity Analysis and Methods. The course will be presented by Professor Tom Golob from the University of California, Irvine and Professor David Hensher.
LIMDEP short course
During July - August 1997, there will be a 3 day short course on “Limited dependent variables and qualitative choice methods” (LIMDEP in practice). The course is to be presented by Professor William Greene from New York University and Professor David Hensher.

Maritime workshops
Workshops will be held in-house and possibly interstate and overseas locations on port infrastructure and cost recovery; and setting and achieving strategic development goals for ports.

Second Transport and Olympics Forum
Following the success of the inaugural Transport and the Olympics Forum in 1996, another Forum will be offered in late 1997.

Other workshops planned for 1997 include change management and aviation.

Executive programs at ITS Monash
A 3 day workshop will be held in July 1997, to be facilitated by Peter Daly.

Workshops on Transport, land use and the environment, and Traffic, highways and safety will be held in July 1997 at the Australian Defence Force Academy, co-ordinated by Peter Daly and Bill Young.

A 5 day workshop on parking and management will also held in July, co-ordinated by Bill Young and Russell Thompson.

Publications
Publications to appear in 1997 include:


• Young, W. and Bowyer, D.P. (1996) Modelling the environmental impact of changes in urban structure, Environment and Planning B.

Industry linkages
In 1997, staff will continue their active program of industry and community linkages through participation in conferences and seminars, editorial work and meeting responsibilities of other positions held. Staff will maintain contact with leading international researchers and organisations through overseas visits and by hosting visitors.