

December

2001

John Polak was invited to take part in a high level seminar organised by the DTRL to explore the implications for demand modelling and project appraisal of recent research findings on the value of travel time savings.

RAE Result: Five-Star Rated Research In the results of the latest Research Assessment Exercise (RAE) published on 14 December, the Department of the Civil and Environmental Engineering was awarded the top (5-star) rating for the quality of its research. This is the third time in succession that the Department has achieved this distinction. As one of the most active research groups in the Department, CTS is delighted to have been able to contribute to this success and to benefit from the recognition it brings. As a whole, Imperial College is now ranked as the best University in the UK, with the exception of Cambridge, in which to undertake research. Imperial College achieved an RAE rating of 6.68 (out of a possible maximum of 7.0), which was only 0.01 of a point behind Cambridge and 0.1 of a point ahead of the third placed university, Oxford. Further information can be obtained from the RAE website at www.rae.ac.uk

November

2001

The Centre for Transport Studies is part of a consortium headed by Marcial Echenique & Partners that has been commissioned by the Department of Transport, Local Government and the Regions to undertake a thorough review of freight transport modelling techniques for use in Great Britain. The review will cover road freight and other modes and well as light goods vehicles. The Imperial College work will be led by John Polak.

The Centre for Transport Studies working in association with WS Atkins has been appointed by the Strategic Rail Authority to its Freight Panel. The Freight Panel will provide advice to the SRA over the next 3-5 years on a wide range of research issues including rail freight demand modelling and economics, studies of the different freight markets, design and evaluation of intermodal facilities and various aspects of the rail freight supply industries. The Imperial College work will be led by John Polak and will involve contributions from Dan Graham, Will Adeney and Richard Anderson.

Dr. Lin Zhao has joined the Centre to work on various navigation related projects. Initially he will contribute to the development of algorithms for the navigation function of the Vehicle Performance and Emissions Monitoring System (VPEMS). He holds BSc and MSc degrees in Automatic control theory and application from the Harbin Engineering University (HEU), and a PhD degree in Flight Vehicle Control, Guidance and Simulation from the Harbin Institute of Technology (HIT) in China. Dr. Zhao has carried out research on intelligent navigation systems and data fusion techniques, integrated navigation systems and transport telematics.

On the 27 November, the Centre for Transport Studies hosted the second meeting of the Employers' Forum of the National Masters Training Package in Transport. The Employers' Forum brings together representatives of leading Consultants, Local Authorities, Central Government Departments and Transport Operators who employ graduates in Transport Studies. The meeting attracted over 40 senior-level participants, who heard presentations from a number of the NMTP Universities on current developments in MSc teaching. The NMTP consortium is coordinated by Imperial College London and comprises additionally, University College London, Leeds University, Napier University, University of Newcastle, University of Southampton and the University of Westminster.

The Centre for Transport Studies has been awarded a grant from the Department of Trade and Industry to explore the potential application of VPEMS to transport and environmental management in India. The work will involve collaboration between CTS and the Tata Energy Research Institute (TERI) in New Delhi. The project will be led by John Polak, with contributions from Washington Ochieng and Bob Noland.

John Polak has been awarded a new project entitled "Optimising the Use of Partial Information on Urban and Regional Systems", under the European Commission's 5th Framework programme. The aim of this 3 year project is to develop, apply and test a generic statistical methodology for the combination of transport, environmental and health related behavioural data. The tests will be carried out in London and Zurich. The project is coordinated by CTS and involves collaboration with a number of institutions and authorities throughout Europe.

October

2001

Washington Ochieng has been awarded a contract by the UK Civil Aviation Authority (CAA) Safety Regulation Group (SRG) to study the strengths and weaknesses of the global positioning system (GPS) of satellites as a navigation tool for civil aircraft. The study will quantify the level of integrity (safety) afforded by GPS both at system and user levels, relate this to civil aircraft navigation requirements and finally, propose techniques for improving the performance of GPS to meet the requirements.

The Centre for Transport Studies working in association with AEA Technology have been appointed by the Department of Transport, Local Government and the Regions to undertake an evaluation of the Department's traffic modelling and appraisal research projects. The work will involve the review both of individual projects and of the Department's research programme as a whole.

September

2001

John Polak and Heike Link were awarded the Admiral de Ruyter Prize at the 2001 European Transport Conference for their paper entitled "How acceptable are transport pricing measures? Empirical studies in nine European countries". This prize is awarded each year to the paper presented at the conference judged to contribute most towards the promotion of cooperation in European transportation planning practice.

Mr. Steve Robinson has joined the Centre for Transport Studies to undertake PhD research, supported by the EPSRC, into the measurement and analysis of network performance and reliability, under the supervision of John Polak. This work will be based on using real time traffic data from the London SCOOT system and will form part of the ongoing collaboration between the Centre for Transport Studies and the Department of Computing in the analysis of large scale transport datasets. Stephen is a graduate of the University of Warwick and has practical IT experience in the financial sector, having worked for DBS bank in Singapore for 2 years.

August

2001

Mr. Mohammed Quddus has joined the Centre for Transport Studies on an EPSRC funded project to examine the impact of road infrastructure and improvements in medical technology on traffic fatalities. This work will seek to examine statistical relationships to understand the effect of both factors on traffic fatalities in the UK. Mr. Quddus has an MSc in Engineering from the National University of Singapore.

Transport for London (TfL) has launched the London Transport Skill Initiative. This initiative, which has been developed by TfL jointly with the Centre for Transport Studies and the Transport Studies Group (TSG) at the University of Westminster, is aimed at improving the transport planning skills base in London by supporting the training of TfL and London Borough staff to Masters level. It will involve both the development of dedicated training activities and the participation of TfL and Borough staff on the existing Master courses offered by CTS and TSG. The first cohort of entrants will embark on their studies in October. Further information about the Masters course is available at www.ulcts.cv.ic.ac.uk

July

2001

John Polak gave an invited presentation at a seminar organised by the Integrated Transport Economics and Appraisal Division of the UK Department of Transport and Local Government on the subject of the modelling and appraisal of travel time variability. The presentation described past CTS work in this area, provided an overview some major remaining research issues and outlined a number of new projects underway within CTS.

Dr. Victoria Williams has joined the Centre for Transport Studies working on an EPSRC FIT Feasibility study to integrate an airspace simulation model with aircraft emissions databases. This work will evaluate the climate change impact of contrail formation and various emissions to determine various policies for reducing this impact from the aviation sector. Dr. Williams has a PhD from the Dept. of Physics at Imperial College. This project is jointly supervised by Dr. Robert Noland from CTS and Dr. Ralf Toumi from the Dept. of Physics.

The Centre for Transport Studies is a new UK subscriber to the International Road Traffic and Accident Database. This database allows analyses of international trends in traffic accidents and other road traffic variables. This provides a valuable resource for research assistants and students at the Centre.

June

2001

John Polak and Robert Noland were invited to participate in an international workshop in Paris organised by the Shell Foundation, on the topic of Sustainable Transport. The workshop drew together key experts in transport, energy and sustainability from around the world. It was the latest in a series of workshops organised by the Shell Foundation considering various aspects of sustainability.

Dan Graham and Stephen Glaister have been commissioned by the UK Department of Transport, Local Government and Regions to undertake a review and further development of models of the response of the transport sector to fuel price changes.

New research assistants Dr Kimberly Schumacher and Dr Dongping Song have joined the Centre, working with John Polak and colleagues in the Department of Computing and the Department of Earth Science and Engineering on the modelling of the UK Container market.

May

2001

Robin Hirsch, working in collaboration with Chris Wills from the School of Information Systems at Kingston University, has completed a report on 'Best Practice in Managing Software Development and Procurement' for the Electrical Installations and Safety Systems subcommittee of the UITP (International Union of Public Transport). The work reviewed the use and the perceived utility of management and procurement methods/methodologies in metros, compared with a selection of other sectors. It measured success in the use of IT/software and compared success rates with the methods used and with organisational structures and management roles. Further research will investigate the reasons why some metros find success in using particular methods and tools, and others using the same methods and tools do not.

A consortium consisting of Imperial College and European industry has been awarded a contract by the European Space Agency (ESA) under the Long Term Development of Earth Observation Market initiative. The project will develop further and validate the technique of Permanent Scatterer Interferometry Synthetic Aperture Radar (PSInSAR) for the purpose of deriving high precision maps of ground displacements over time. Imperial College teams will be led by Drs Washington Ochieng and Julian Bommer, who will both contribute to the validation, analysis and interpretation aspects of the project.

April

2001

John Polak and Bob Noland have been commissioned by Transport for London to advise on the collection and analysis of data on pedestrian and cycle behaviour in London. The work will form part of the development of TfL's strategy for the monitoring of transport policies in London. The work will be undertaken in collaboration with RAND Europe and Accent.

March

2001

On the 26 March, the Centre for Transport Studies hosted the first meeting of the Employers' Forum of the National Masters Training Package in Transport. The Employers' Forum brings together representatives of leading Consultants, Local Authorities, Central Government Departments and Transport Operators who employ graduates in Transport Studies. The meeting attracted over 40 senior-level participants, who discussed ways of addressing the skills shortage in transport. The National Masters Training Package in Transport is a consortium of leading British Universities, funded by the Engineering and Physical Sciences Research Council to deliver Masters level training in transport engineering and planning. The award, totalling £1.7m over 4 years, is being used to support students' participation in Masters level training and to develop new

course content and methods of teaching. The NMTP consortium is coordinated by Imperial College London and comprises additionally, University College London, Leeds University, Napier University, University of Newcastle, University of Southampton and the University of Westminster.

Dan Graham, Richard Anderson and Stephen Glaister have completed research for the Corporation of London which provides an up-to-date Benefit-Cost assessment of the proposed CrossRail scheme; an east west rail link under Central London from Paddington to Liverpool Street. The research finds that the economic case for CrossRail is now stronger than ever. The report is available from here.

February

2001

Dr. Robert Noland has received an EPSRC grant through the Future Integrated Transport Feasibility Study scheme to develop a Model of Aviation Air Space, Emissions and the Impact on Climate Change. This research will utilize the RAMS air space simulation model to evaluate various air travel growth scenarios for the impact on total emissions, defined in three dimensional space and across time, for air space above Europe. Dr. Ralf Toumi of Imperial College's Dept. of Physics is a co-investigator on this project and will use the emissions output to examine the climate forcing impacts of the aviation sector.

John Polak has received an award under the Research Council's Joint Research Equipment Initiative (JREI) to provide computing infrastructure for the storage and analysis of very large scale (multiple Tb) datasets. The award, which is held jointly with colleagues in the Department of Computing and the Imperial College Medical School, will enable CTS to undertake new analyses of a range of very large spatio-temporal datasets arising in a number of areas of its activity, including data from instrumented vehicle fleets, the simulation traces of highly detailed microsimulation models of traffic systems and large-scale Monte Carlo simulation work.

John Polak has been invited to join the Editorial Board of the International Journal of Transport Management, published by Elsevier Science. The first issue of the journal is expected to appear in 2002.

January 2001

Dr. Washington Ochieng has been elected to the Editorial Board of the prestigious "GPS Solutions Journal". This is an international journal that contains original papers contributing to the subject of Space Geodesy, with particular emphasis on the Global Positioning System (GPS) and its applications.

The Council of the Royal Institute of Navigation at its meeting on 20 May 2001 elected Washington Ochieng to Fellowship of the Institute. In a letter from the Council to Washington, the Director of the Institute Group Captain David Broughton said that this prestigious accolade was in recognition of Washington's valuable contribution to the development and application of the civilian uses of Global Navigation Satellite Systems (GNSS), in particular his work on Space Based Augmentation and Transport Telematics Systems. The letter adds that Washington can now use the letters FRIN and if appropriate, wear the Fellows' tie.