

Transport Research Institute, Edinburgh Napier University

2014 HIGHLIGHTS

In February 2014, **Professor Keith Dickinson** was appointed Interim Director of TRI on a part-time basis and was involved in the search for the new Director.

We are pleased to announce the appointment of **Prof Tom Rye** as Director of the Transport Research Institute (TRI). He will take up his duties in January 2015.

Tom is an international expert in the field of mobility management, parking management and comparative transport policy assessment. He joins TRI after spending a period as Professor of Transport at Lund University in Sweden, during which he led the successful creation of the K2 National Knowledge Centre for Public Transport (www.k2centrum.se), a joint initiative of Sweden's research funding agencies, national transport agency, three regional public transport bodies and three research organisations including Sweden's national transport research laboratory. As a result of his previous teaching and research activity at Napier between 1996 and 2012 he is known throughout Scotland - as well as more widely across the rest of Europe - for his strong academic and research reputation in the area of transport policy.

Tom will take overall responsibility for ensuring that TRI is internationally recognised by academics, public policy makers, the transport industry and investors and for the relevance, quality and rigour of its research and its teaching in areas that contribute to more sustainable and healthy mobility.

We are delighted to welcome Tom back to Edinburgh Napier and we look forward to him leading TRI through our next stage of development.

TRI successfully organised the first **ENRICH project workshop** – "Traffic Management and Optimisation in CSCs", held on 9-10 October, to share and exchange expertise on EC-China container supply chain network simulation, visualisation and optimisation. The workshop brought together over 20 delegates from project partners based in China, Norway, Sweden, Norway and UK.

Borders, ports and Scotland's double periphery **Seatrade Global** has published a new piece on developments in the Scottish port sector. Drawing on research conducted by TRI on the Dryport project, Dr Jason Monios was quoted on the topic of Scotland's peripheral status and the need to be proactive in supporting the port and shipping sectors.

TRI successfully organised the **Scottish Transport Applications and Research (STAR) Conference** on behalf of Transport Scotland, the national transport agency of the Scottish Government. The STAR Conference was held on 21 May 2014 at 'The Lighthouse' in Glasgow City Centre. This was attended by up to 120 delegates from various public and private sector institutions across Scotland. The Conference was aimed at everyone engaged in any aspect of transport from research to campaigning, strategic planning, policy development, project management to operations and infrastructure provision and maintenance. As well as a Civic Welcome from Glasgow City Council and an address delivered by Keith Brown MSP, Minister for Transport and Veterans, the Keynote Presentation was given by Professor Andrew McNaughton, Technical Director at HS2 Ltd.

A rapid electric vehicle charger has now been installed at ENU's Merchiston campus. Funding for the device and its installation was provided by the Energy Saving Trust and secured by Professor Tariq Muneer of the Transport Research Institute.

The 3-phase facility draws a 125-amp current and is the latest technology that will charge any e-car that is available throughout Europe. The rapid charger is able to fully charge an EV within twenty minutes, compared to four hours using a standard 32 amp charger.

Prof Muneer commented; 'I am extremely grateful to the Energy Saving Trust for their funding of the rapid charger. It will be appreciated not just by staff at Edinburgh Napier University Napier, but by all Scottish users of e-cars'.

STAFF NEWS

Helen Condie left TRI in August 2014 to take up a project management post in the Institute for Informatics and Digital Information within the School of Computing.

Catriona O'Dolan left TRI in September 2014 to take up a PhD in Glasgow Caledonian University.

Dr Ravindra Kuma left TRI in June 2014 after spending almost a year working on sustainable transportation research projects. He has returned to India (Delhi) to take up the position of Principal Scientist in the Transportation Planning Department.

Academic visitors who spent time at TRI during 2014 include: Morten Svindland from Molde University, Norway; Alexandre Mayeux from ENTPE (National Graduate School of Sustainable Civil Engineering, Transport & Planning), France with an interest in urban transport; Felix Gallin from TU Bergakademie Freiberg, Germany with an interest in energy

process Engineering/Transport Mechanics/Transport Modelling; Anna Galevko from Moscow Automobile & Road State Technical University, Russia with an interest in the organisation of transportation and management of transport; Hiroki Kawakami from Kyushu University, Japan with an interest in modal choice of inter-city transportation; Thu Hang Nguyen from Thai Nguyen University, Vietnam; Dr Ivanova Stoyanka from the University of Architecture, Civil Engineering & Geodesy Department of Computer aided Engineering in Bulgaria; Rosaldo Rossetti from the University of Porto Rua, Portugal. Ruggiero Lovreglio from the Politecnico di Bari, Italy stayed with us from 2013 until Aug 2014.

STAFF ACTIVITIES 2014

Dr Jason Monios was guest editor for special issues of the Journal of Transport Geography and Research in Transportation Business and Management, as well as continuing as reviewer for 13 international journals. In addition to several journal papers, he published a book on institutional issues in intermodal transport and a technical report on the Latin American port system for the United Nations. He was appointed as expert adviser to the Scottish Parliament on their national freight consultation, in addition to sitting on the Edinburgh Urban Design Panel and convening two sessions on the geography of port system evolution at the Royal Geographical Society annual conference.

Dr Yuhong Wang was appointed as a member of the Academic Committee of the 3rd International conference on Transportation Information and Safety (ICTIS 2015). He continued as a reviewer for several peer-reviewed transportation journals.

Dr Kathryn Stewart was appointed treasurer to the UTSG executive committee in Jan 2014. She has continued as programme committee member for the STAR-conference and scientific committee member for the International Symposium of Travel Demand Management and represents TRI at the Edinburgh Transport Forum. Kathryn is also a member of the Scottish Branch committee for the IMA (Institute of Mathematics and its applications) and gave an invited talk to the TSUG (Transport Statistics User Group) at the Scottish Government in June 2014.

Dr Achille Fonzone is a member of the Management Committee, Working Package Leader and Manager of the Short Term Scientific Missions of the COST Action TU1004 "Modelling Public Transport Passenger Flows in the Era of ITS". He is editing a special issue of Journal of ITS on "Modelling passenger flows of public transit and alternative collective transport systems in the era of Intelligent Transportation Systems".

In 2014 he was invited to give talks to Transport for London and Kyoto University, on the impact of real-time passenger information on public transport network performance. He partook in a doctoral defence committee at Laboratoire Ville Mobilite Transport (LMVT) in Paris in April 2014.

Dr Michael Carreno continued to act as an external expert advisor to the EPSRC REFLECT research project (A feasibility study in experienced utility and travel behaviour) and is a member of the International Organising Committee for the International Symposium of Travel Demand Management. He is also a reviewer for several peer-reviewed transportation journals.

Richard Llewellyn was appointed Junior Vice Chair on the Central and Southern Scotland branch committee of the Chartered Institution of Highways and Transportation. He sits on the City of Edinburgh Council Urban Design Panel, providing comments on developments in advance of planning applications being submitted. He is also a Member of the City of Edinburgh Council Transport Forum group, commenting on transport matters around the city.

Dr Andrew MacIver was appointed Subject Group Leader for Civil & Transportation Engineering and External Examiner for the BSc/BEng Civil Engineering programme at Caledonian College of Engineering in Muscat, Oman.

Professor Wafaa Saleh continued chairing the committee of the International Symposium on Travel Demand Management, with the 7th Symposium is taking place on April 13-15, 2015, Tucson, Arizona. Wafaa continues being a member of the scientific committee of the International Symposium on Transportation Network Reliability (INSTR) and the World Association of Sustainable Development (WASD) conference. She was invited to deliver presentations in several research centres in the Middle East including Saudi Arabia and Qatar. Professor Saleh's is continuing joint research activities with Tabuk University in Saudi Arabia and currently developing further research activities in the Middle East on traffic safety, travel demand management and female travel behaviour. She continued to supervise a number of PhD students with successful completions in the area of transport modelling and travel demand management.

Dr Damian Stantchev continued to act as reviewer of papers for the International Journal of Logistics Research and Applications. Dr Stantchev organised an international conference on 'The Future of Maritime Education and Training' in Bremen, Germany as part of the KNOWME project. The event offered a wide range of rich messages and possible solutions for a future project in maritime education as well as future policy-making and business strategy. The main aim of the conference was to showcase the results of the three-year project activities

and establish synergies with other projects and related initiatives. The remit of the conference was inclusive of the academic and the industry perspective, as well as the views of a wide range of stakeholder groups. The KNOWME project was also represented at the Maritime Job Fair in Bremen where the Go-Maritime portal and the e-courses developed as part of the project were exhibited.

Professor Tariq Muneer has been invited to Chair the Solaris 2015 (7th International Conference on Solar Energy) being held at the University of Maribor, Slovenia from 21-22 May 2015. He is also a Member of the Editorial Board: International Journal of Future Cities and Environment, Springer.

Professor James Cooper has taken up a role in the USA in delivering research specific to taxi research, through a professor role at the University of Missouri St Louis. He is currently on Sabbatical from Edinburgh Napier University, but continues to work with the TRI to deliver UK taxi analysis and expert advice. His work in the USA in the period 2014 - 2015 includes:

- Research project for Charlotte Douglas International Airport
- Research and Expert advice to the District of Columbia Taxicab Commission
- Research project for the City of Houston, Department of Administrative and Regulatory Affairs
- Research project for the City of St Louis Metropolitan Taxicab Commission
- Expert advice and testimony for the Office of the Attorney General, Washington DC
- Expert advice and testimony to the Scottish Parliament Local Government and Regeneration Committee
- Organization of the Transportation Research Board Taxi Workshop

He provides support to PhD students as supervisor at the University of Missouri, and as visiting scholar and supervisor for transport technology projects at the Fachhochschule Dortmund - University of Applied Sciences, Dortmund, Germany.

Professor Stephen Stradling is a professor emeritus and continues to publish on driver behaviour (e.g., Accident Analysis & Prevention 2013; BMJ 2014, 2015) and modal choice (Handbook of Traffic Psychology, 2011), contribute to review projects (Novice drivers: Evidence Review and Evaluation. Pre-driver training, Graduated Driver Licensing and the New Drivers Act. Project report RPN2553. Transport Research Laboratory 2013) and speaks at road safety conferences. Prof Stradling served as a member of the ACPO (Association of Chief Police Officers) NDORS (National Driver Offender Retraining Scheme) Strategic Course Development Group developing and evaluating diversion from prosecution courses for minor moving traffic offences; as an Advisory Judge for the annual Prince Michael International Road Safety Awards; as a member of the Editorial Board for Transportation Research Part F: Traffic

Psychology and Behaviour; and as external examiner to 2 PhD theses.

Professor Dong-Wook Song took on the role of editorship for the International Journal of Logistics Research and Applications and Maritime Policy and Management in addition to sitting on editorial boards on known transport and logistics journals. He was appointed as a Visiting Professor from Shanghai Maritime University, China and called by OECD/ITF as a discussant for a Roundtable on Port Investment and Container Shipping Market, held in Santiago, Chile and remains a Council Member of IAME

Professor Mike Maher is on the Editorial Advisory Board of Accident Analysis and Prevention, and also of Networks and Spatial Economics. Prof Maher was external examiner for PhDs at Imperial College London, and Queens University Belfast. He was also involved in a 3-year research project led by Atkins / Aecom for the DfT on the effectiveness of 20 mph speed limits. The project started in July 2014. His role was to advise on the analysis of data.

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PROJECTS ACTIVE IN 2014

Projects that TRI researchers participated in during 2014 are listed below, with details of funding bodies and collaborating partners.

SUSTAINABLE ENERGY AND TRANSPORT

Intellibike by Mark Taylor: a novel approach to engineering condition assessment of cycling infrastructure

The UK National Cycle Network comprises 23,660 km of cycling and walking paths of which a significant percentage is dedicated off-road infrastructure. This represents a significant civil engineering infrastructure asset that currently contributes to the provision of a sustainable transport mode option nationwide. Commuting and recreational cyclists have observed the often hazardous conditions on these paths. There are various simple measures that could be taken to improve the maintenance of such off-road paths. Reliance on walk-over surveys (direct visual inspection) and path users notifying the local authority may not be tackling maintenance in a resource efficient manner. The proposed inspection method includes the use of an instrumented bicycle to examine cycle path condition through user perception of satisfaction and quality. A questionnaire was conducted to identify the attributes of off-road cycling infrastructure people find most important in relation to their personal satisfaction. An exploratory factor analysis was undertaken on perception study data to elucidate the determination of the variables associated with perceived user satisfaction. The study has shown that people find maintenance issues to be of high importance, especially surface issues. The results were used to assist the creation of dedicated user perception based surface condition rating-scales. The Intellibike will be used to assist local authorities in the collection of cycling infrastructure asset management condition data and ensure more efficient use of maintenance resources.

Decentralised Off-grid Electricity Generation in Developing Countries: Business Models for Off-grid Electricity Supply (EPSRC, from October 2009 to October 2014)

Professor Tariq Muneer

This project aims to develop innovative solutions to the problem of lack of access to electricity supplies in developing countries through interdisciplinary research involving UK and South Asian (Indian) universities, NGOs, government agencies, financing institutions, and other stakeholders. The project takes a systematic view of the problem by considering local resource availability, appropriate technology choices, institutional arrangements and the financing options available.

Mainstream Innovation (ERDF "SEEKIT" Programme, from April 2013 to March 2014)

Professor Tariq Muneer

Edinburgh Napier University is a partner with ten other Scottish higher education institutions in this collaborative project, which aims to embed sustainable building design and refurbishment into practice. The project will assist Scottish small and medium sized enterprises (SMEs) to develop and test sustainable building innovations, making use of testing facilities at all the project partners' institutions.

ECONOMICS, PLANNING AND POLICY

CHAMP (EU IEE STEER, from October 2011 to September 2014)

Dr Kathryn Stewart and Catriona O'Dolan
www.champ-cycling.eu

CHAMP aims to facilitate the exchange of best practices, experiences and lessons learned (good and bad ones!) within a group of "best in class" cycling cities. The 7 partner cities have undertaken the implementation phase of the project and have all implemented and assessed 2 innovative measures. Each city also hosted an exchange workshop for both CHAMP consortium members and externals. TRI analysed the outputs of the project and completed the strategic conclusions which were published in the CHAMP brochure. The CHAMP project hosted its final conference in Ghent in September 2014 where the CHAMP "12 commandments" for good practice in cycling policy were presented and discussed.

MOBILITY MANAGEMENT AND TRAVEL PLANNING

Investigation and Modelling of Travel Behaviour in Saudi Arabia: A Disaggregate Approach (Tabuk University, from April 2012 to July 2014)

Professor Wafaa Saleh and Dr Attiyah M Al-Atawi

The project is designed to investigate and model travel behaviour and attitudes for households in Saudi Arabia. This is a very motivating and promising area of research. Although there have been a large number of research investigations in the area of travel behaviour in the western countries, there is a huge lack of studies in this area in some countries such as Saudi Arabia. Moreover, the specific characteristics of socio economic patterns as well as travel behaviour attitudes in this country make it a very interesting and unique area and hence the need for the research.

It should be noted here that for cultural reasons women don't drive in the kingdom and workplaces as well as schools for men are separate from work places for women. Hence, this current investigation is very important in order to identify the particular factors and issues which control travel behaviour and choices. The project

investigates and models travel behaviour and attitudes of households of Tabuk city in Saudi Arabia.

Identification, assessment and enhancement of accident data collection and analysis in Kingdom of Saudi Arabia (Tabuk University, from December 2013 to October 2014)

Professor Wafaa Saleh and Dr Ravindra Kumar

It has been estimated that the annual cost of traffic accidents in the Kingdom of Saudi Arabia (KSA) exceeds 6 billion US dollars, in addition to other social, health, and economic impacts, such as disability, rehabilitation, and unemployment due to traffic accident injuries. Tabuk city has high accident rate. There are not many studies, if any in Tabuk or elsewhere in the KSA on the investigation and development of a framework for accident reduction. The main aim of this project is to propose a framework to study, assess and enhance accident data collection and analysis in the Kingdom of Saudi Arabia (KSA). The proposed framework will improve the data collection and analysis process and, if implemented, will identify the hot spot location along with accident severity.

CIVITAS CAPITAL (EC FP7, from September 2013 to August 2016)

Professor Tom Rye and Dr Damian Stantchev
www.civitas.eu

CIVITAS is one of the most successful EU programmes in promoting innovative solutions for sustainable development. The CIVITAS CAPITAL project aims to contribute to the goals of the European Union's Transport White Paper by capitalising on the results of CIVITAS and creating an effective "value chain" for urban mobility innovation. CAPITAL will help to mainstream CIVITAS into other policy fields by identifying the capacity of sustainable transport measures to contribute to high-level goals. CAPITAL will create a dynamic knowledge centre and will establish national and regional networks facilitating exchanges and transfer of measures based on practical experiences. TRI's particular role is in running expert advisory groups providing specific and timely policy advice to the European Commission on how to further improve the implementation of its policy on sustainable urban transport.

CIVITAS DYN@MO (EC FP7, from December 2012 to November 2016)

Professor Tom Rye, Dr Michael Carreno and Dr Damian Stantchev
www.civitas.eu/content/dynmo

CIVITAS DYN@MO is an ambitious project with strategic importance to sustainable mobility planning in four dynamic European cities. DYN@MO is short for the project motto DYNamic citizens @ctive for sustainable Mobility, which combines four European cities. This includes two leading cities, Aachen in Germany and Gdynia in Poland, as well as two learning cities, Palma de Mallorca in Spain and Koprivnica in Croatia. The mission of the CIVITAS

DYN@MO cities is to strengthen sustainable mobility by promoting non-polluting lifestyles, fostering social interaction and collaboration on the basis of the new media, and implementing integrated innovative transport services for active citizens of all ages. TRI's role is in supporting evaluation WP leader Lund University in ensuring that the critical evaluation tasks in the project are carried out in a timely manner and that high quality evaluation outputs are produced.

TAXI STUDIES AND DEMAND-RESPONSIVE TRANSPORT

San Diego Taxi Fare Standardization Study (Metropolitan Transit System of San Diego, from September 2013 to April 2014)
Dr James Cooper

The work addresses the potential for a standardized fare in the San Diego Taxi Industry. The work undertook a review of market conditions, fare and costs. The study undertook three surveys, of public users, of trade and industry, and of stakeholders with an interest in the provision of taxi services. The work also developed a detailed cost model and market model identifying the impacts of changes in the taxi fare structures, recommending a method for assessing changes in costs and standardized fare. The study recommendations have been accepted by the MTS and are being presented for application.

MARITIME TRANSPORT & LOGISTICS

An analysis of empty repositioning costs for Scottish shippers (SEStran, from April 2013 to July 2014)
Dr Jason Monios and Dr Yuhong Wang

Due to the imbalance of trade, Scottish exporters have to pay shipping lines to bring empty maritime boxes to Scotland. This is a direct cost to Scottish shippers and by extension the Scottish economy. All industry and government stakeholders have an interest in solving this problem. This project is a consultancy appointment to establish the current situation and explore innovative solutions through desktop research and stakeholder interviews.

Bulk Freight Shipping Study in Scotland (SEStran, from April 2013 to July 2014)
Dr Yuhong Wang and Dr Jason Monios

A consultancy project commissioned by SEStran to undertake a study of bulk freight shipping in Scotland with objectives to develop a baseline of the existing bulk sea freight market, analyse the underlying economics of the bulk shipping market and its future prospects, examine the case for any public sector intervention in the market, and make recommendations for potential actions to be included in future transport strategy development.

ENRICH (EU FP7 Marie Curie Action, from October 2013 to September 2017)
Dr Yuhong Wang and Dr Jason Monios

ENRICH (EC-ChiNa Research Network on Integrated Container Supply Chains) is a research staff exchange project to set up long-term research cooperation with four European and two Chinese universities. This project specifically aims to address long-lasting changes in operational, environmental, economic, technical and managerial practices in different segments of the rail, road, air and sea transport industries from an overall container supply chain perspective. In 2014, TRI successfully organised the first project workshop titled "Traffic Management and Optimisation in CSCs" in Edinburgh.

Food Port (SEStran, from January 2011 to February 2014)
Dr Yuhong Wang
www.food-port.eu

The Food Port project aims to optimise and coordinate food logistic chains in the North Sea Region by improving the accessibility and transport logistics system of different food clusters in the region. TRI was contracted by SEStran to analyse current food production and consumption patterns, logistics supply chains and trade structures, thereby revealing the importance of the food & drink industry to the Scottish economy and particularly to the regional economies in the SEStran area. This project now has been fully completed with successful achievement of policy recommendation and polite project running.

GreCOR – Green Corridor (EU Interreg IVB North Sea Region Programme, from January 2012 to June 2015)
Dr Jason Monios
www.greacor.eu

The Green Corridor project promotes the development of a co-modal transport corridor in the North Sea Region. Important in this collaborative approach is the focus on secondary networks, logistics hubs and the regional hinterland around the corridor. The role of TRI is to develop a business model for an extended logistics hub which can lower transport and logistics costs for users, particularly through the collaboration between smaller shippers. GreCOR works in close collaboration with public and private stakeholders, and its overall aim is to improve knowledge about the logistic needs and conditions and develop and implement the first green corridor in the North Sea Region in a strategic policy setting. GreCOR has 14 partners and a total budget of €3.7million.

KNOW-ME (EC FP7, from June 2011 to June 2014)
Professor Kevin Cullinane and Dr Damian Stantchev
www.know-me.org

The KNOWME project was successfully completed in 2014. It focused on the 'human factors' in shipping, a priority issue in the EU "Maritime Transport Strategy 2009-2018",

and provided an in-depth investigation of aspects relating to the attractiveness, training, retention and career development in the seafaring profession. The KNOWME project delivered a strategy and actions to promote the 'image of shipping' and the Go-Maritime e-portal application with useful information for seafarers (including training options) as well as opportunities for interactive learning.

Scottish Parliament national freight consultation (Scottish Parliament, from December 2014 to August 2015)
Dr Jason Monios

The goal of this national consultation is to identify and understand some of the challenges facing the freight transport industry in Scotland, including domestic and international links as well as the interconnectivity of rail, road air and sea freight services and to identify key areas for development, improvement and change. Dr Monios was appointed expert adviser to the committee.

TEN-TaNS (EU Interreg IVB North Sea Programme, from June 2013 to June 2015)
Professor Alfred Baird
<http://www.tentans.eu/>

The 'Trans-European Transport Network and the North Sea Region (TEN-TaNS)' Project was approved in June 2012 and ends in June 2015. Led by the Aberdeenshire Council, TEN-TaNS is developing a toolkit to help assess maritime transport projects for EU TEN-T funding support. The TEN-TaNS project is investigating core and comprehensive networks more deeply and how the development of these networks can be supported by public authorities and infrastructure providers at a regional level. Current policy developments are being analysed and the requirements of being part of the TEN-T network in terms of infrastructure and services will be clarified for all transport and intermodal modes and translated to the regional level via a toolbox specifically developed in the TEN-TaNS project. TEN-T and the North Sea Region project will analyse opportunities and consequences for transport of the new European TEN-T Guidelines, the Connecting Europe Facility, the Clean Power for Transport Initiative and the Europe 2020 Strategy. In Scotland as part of TEN-TaNS TRI will be investigating two specific major maritime infrastructure projects and their potential to attract EU TEN-T funding.

PHD COMPLETIONS IN 2014

Modelling the Relationship between Pilgrim Pedestrian Casualties and Land Use Type: A Case Study of Al Madinah Al Monawarah

Raed Alahmadi, supervised by Professor Wafaa Saleh and Dr Kathryn Stewart (Completed)

CURRENT PHD PROJECTS

Trends in Urban Areas and its Impact on the Performance of the Transport System and the Community

Mohamed Al-Ali, supervised by Professor Wafaa Saleh and Dr Andrew MacIver

Analysing and Modelling Motorways of the Sea in Spain

Xavier Gese Aperte, supervised by Professor Alfred Baird and Dr Kathryn Stewart

Modelling Car Following Behaviour

Joseph Appiah, supervised by Professor Wafaa Saleh and Dr Kathryn Stewart

Modelling the Relationship between Pilgrim Pedestrian Casualties and Land Use Type: A Case Study of Al Madinah Al Monawarah

Raed Alahmadi, supervised by Professor Wafaa Saleh and Dr Kathryn Stewart

Provision of Transport for the Night Time Economy in the United Kingdom with Particular Reference to the Role of the Taxi Sector

Moirra Weir, supervised by Dr Jonathan Cowie and Professor Alfred Baird

The Potential for "Green" Fiscal Measures to Lessen the Environmental Impact of Private Car Use in Scotland

Sarah Borthwick, supervised by Dr Michael Carreno and Professor Kevin Cullinane

Development of an integrated model for improving contractor selection procedures on major construction projects in Libya

Othoman Elsayah, supervised by Professor Naren Gupta and Dr Ben Zhang

Fuel Cell powered rail based vehicles

Narayanan Khizanathan, supervised by Professor Naren Gupta and Mr Alan Davidson

Intelligent Transport Systems as Applied to Travel Information

Karol Gruszczynski, supervised by Dr Andrew MacIver, Dr Simon Smith and Professor Tom Rye

Modelling the Effects of Road Tolling in Microsimulation Models

Eva Martinez, supervised by Dr Kathryn Stewart and Professor Wafaa Saleh

Reduction of car dependency through the enhancement of public transport in Riyadh, Saudi Arabia

Al Othlman Othman, supervised by Professor Margaret Grieco and Professor Wafaa Saleh

PAPERS AND PUBLICATIONS

Al-Atawi, Attiyah M., Kumar, R., Saleh, W. (2014). A framework for accident reduction and risk identification and assessment in Saudi Arabia. *World Journal of Science, Technology and Sustainable Development* (WJSTSD, Forthcoming).

Al-Atawi, Attyah M., Kumar, R., Saleh, W. (2014, August 2014). Traffic accidents reductions in Saudi Arabia: Barriers and the way forward. Paper presented at WASD 12th International Conference, Le Meridian Versailles - Montreal, Canada.

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Al-Atawi, Saleh, W. (2014)b. Identification assessment and enhancement of accident data collection and analysis in KSA. *Urban Transport Conference. WIT Transactions on The Built Environment*, Vol. 138. Portugal.

Bergqvist, R., Monios, J. (2014). The role of contracts in achieving effective governance of intermodal terminals. *World Review of Intermodal Transport Research*, 5(1), 18-38.

Bordagaray, M., Fonzone, A., dell'Olio, L., Ibeas, A. (2014). Considerations about the Analysis of ITS Data of Bicycle Sharing Systems. *Procedia - Social and Behavioral Sciences*, 162, 340-349.

Carreno, M., Ge, Y., Borthwick, S. (2014). Could green taxation measures help incentivise future Chinese car drivers to purchase low emission vehicles?. *Transport: Special Issue on Travel Demand Management*, 29(3).

Carreno, M. (2014). Invited Guest Lecture- Mobility Management- can it be applied in China? Paper presented at Shanghai Maritime University, Shanghai, China.

Carreno, M. (2014, August, 2014). Keynote Speech - Mobility Management - Can it help solve China's traffic problems? Paper presented at Ninth International Conference on Traffic and Transportation Studies (ICTTS), Shaoxing, China.

Carreno, M. (2014, May). Understanding user needs: How can ITS ensure they are met? Paper presented at 2nd Conference on Sustainable Urban Mobility, Volos, Greece.

Cowie, J. (2014). Performance, profit and consumer sovereignty in the English Deregulated Bus Market. *Research in Transportation Economics*, 48, 255 - 262.

Cowie, J. (2014, January). Re-regulating the deregulated - a case study of the Scottish bus industry. Paper presented at 46th Annual UTSG Conference, Newcastle University.

Flitsch, V., Herz, N., Wolff, J., Baird, A. (2014). Maritime policy in the North Sea Region. *Maritime policy in the North Sea Region: Application of the cluster approach. Maritime Economics & Logistics*, p. 1-17. <http://www.palgrave-journals.com/mel/journal/vaop/ncurrent/full/mel201412a.html>.

Fonzone, A., Schmoecker, J. (2014). Effects of Transit Real-Time Information Usage Strategies. In: *TRB Annual Meeting Compendium of Papers*.

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Fylan, F., Stradling, S. (2014). Behavioural Change Techniques used in road safety interventions for young people. *Rev. Eur. Psychol. Appl.*, <http://dx.doi.org/10.1016/j.erap.2014.02.003>.

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- Knez, M., Celik, A., Muneer, T. (2014).** A sustainable transport solution for a Slovenian town. *The International Journal of Low Carbon Technologies*, ISSN 1748-1317.
- Knez, M., Muneer, T., Jereb, B., Cullinane, K.P.B. (2014).** The estimation of a driving cycle for Celje and a comparison to other European cities. .
- Kumar, R., Parida, P., Shukla, S., Saleh, W. (2014).** : MOVES model for idling emission of signalised junction in developing country. *World Journal of Science, Technology and Sustainable Development (WJSTSD)* Forthcoming.
- Kumar, R., Parida, P., Saleh, W. (2014).** Effect of type of lead vehicle on following headway behaviour in mixed traffic. *World Journal of Science, Technology and Sustainable Development*, 11(1), pp.28 - 43.
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