

Transport Research Bulletin

Transport Research
Institute Newsletter

Issue No 7 – Dec 2020



Transport
Research
Institute

Welcome to TRI's Christmas 2020 Newsletter



It has been a particularly challenging and strange year for everyone, but despite this, we have continued to be active in our research. We continue to provide master's level teaching to our campus based and online students on our industry accredited MSc in Transport Planning and Engineering. We successfully delivered our 6th Annual Electric Vehicle Event online for the first time which attracted over 200 delegates. We are looking forward to celebrating TRI's 25th anniversary next year and we have a number of exciting events lined up to mark the occasion. Watch this space!

Here is a brief summary of what we have been up to during the year. A more detailed account will be available in our Annual Report in the New Year. To ensure you are kept informed of our news and activities, please subscribe to the **TRI blog** (<https://blogs.napier.ac.uk/tri/>) for regular updates and follow us on twitter: **@EdNapierTRI**. Feel free to get in touch with us by email with any queries you may have or if you wish to be added to our mailing list: **tri@napier.ac.uk**. We'd love to hear from you.

We all wish you a happy, healthy Christmas and New Year!

Dates for your diary

Solar and Wind Power Conference – Wednesday 14th April 2021

7th Annual Electric Vehicle Event – Wednesday 13th October 2021 - Michael Matheson, Cabinet Secretary for Transport, Infrastructure and Connectivity has confirmed he will deliver the keynote address.

Newcomers to TRI

Susan Tully joined TRI as a Research Fellow on the EU HORIZON 2020 project Park4SUMP. This project aims to support the inclusion of strategic parking management in participant cities' wider mobility plans. She previously worked on the European 'ACTIVE ACCESS' project which encouraged a shift to active travel modes for short journeys. Susan has worked as a Lecturer at Edinburgh Napier University where she was module leader for the MSc/MEng Transport Policy Module.

Graduations

Unfortunately, due to Covid-19, our research students have been unable to celebrate by way of a formal graduation. However, we are delighted to report that the following students have defended their theses:

Augustus Ababio-Donkor - "Mode Choice Modelling using Elements of MINDSPACE and Structural Equation Modelling."

Emine Akgun on the matter of 'Implementing urban freight policy measures: using local transport policies to support urban consolidation centres.'

blogs.napier.ac.uk/tri/

Since it was established in 1996, the Transport Research Institute (TRI) at Edinburgh Napier University has delivered high quality transport research, consultancy and knowledge transfer projects to a range of funding bodies.



Presentation/Conference/Invited speakers

Dr Grigorios Fountas presented at the 99th Annual Meeting of Transportation Research Board (TRB) Conference, USA in January.

Prof Tariq Muneer was invited to speak at a Global Development Workshop in Pakistan about clean energy in March.

Dr Jonathan Cowie attended the online start up meeting for the SESTran/Forth Ports freight study in April, funded by Transport Scotland through the Local Rail Development Fund.

Dr Achille Fonzone was invited to speak at Automated Vehicles Symposium in July.

Susan Tully hosted the session on 'The role of smart parking in Urban Mobility Planning' at Urban Mobility Days 2020 in October.

Prof Adrian Davis gave the opening address and chaired the plenary session of the Public Health & Sustainable Transport Summit in October.

Prof Adrian Davis appeared on the live panel at the Festival of Road Safety in November.

Susan Tully gave a talk at the Polis Annual Conference in November.

Prof Adrian Davis gave a presentation from a public health perspective during the session 'Applying the Strategy locally – engagement with passengers and the needs of rural communities, regional connectivity, and delivering safe services during the COVID-19 crisis' at the The new National Transport Strategy (NTS2) – assessing the strategy and addressing the challenges for implementation which was held in November.

Dr Achille Fonzone was invited to speak at the 21st International Conference on Intelligent Data Engineering and Automated Learning (IDEAL 2020) in November.

Prof Tariq Muneer gave a presentation on solar energy at the VSESA2020 virtual conference in Saudi Arabia in December.

STAR Conference – Adrian Davis presented 'Getting the best from Active Travel' and Andrew Keba, MSc student presented "Mode Choice Changes Among NHS Workers During the Covid-19 Pandemic."

Recognition

Prof Adrian Davis

- Chair of the Transport Working Group of the Cleaner Air for Scotland Review
- Member of Programme Group on STAR Committee
- Member of a Public Health Scotland Social and Systems Recovery Transport Group looking at how the transport systems and various modes respond to COVID-19.

Achille Fonzone

- Member of Steering Group on STAR Committee

Dr Grigorios Fountas

- Member of the Editorial Advisory Board of the Elsevier's journal "Analytic Methods in Accident Research"
- Fellow of the Higher Education Academy of the UK



Richard Llewellyn

- Member and vice-chair of the Chartered Institution of Highways and Transportation's Membership and Skills Strategy Board (MSSB).
- Panel member and assessor for the Chartered Institution of Highways and Transportation Individual Route Assessment Panel (IRAP).

Edinburgh Napier University became member of Open Transit Software Foundation

Current projects

Prof Wafaa Saleh (Project Lead), Augustus Ababio-Donkor: **DIAMOND** (EU Horizon 2020 Project) [1 Oct 2018 - 30 Sep 2021]

Dr Achille Fonzone (Project Lead): **Park4SUMP** (EU Horizon 2020 Project) [1 Sep 2018 - 28 Feb 2022]

Dr Achille Fonzone (Project Lead), Prof Christiane Bielefeldt, Dr Damian Stantchev: **SUNRISE** [1 May 2017 - 30 Apr 2021]

Dr Jonathan Cowie (Project Lead): **Smart Urban Freight Logistics Hubs** (SURFLOGH) [1 Jun 2017 – 30 Sept 2021]

Dr Achille Fonzone (Project Lead); Lucy Downey: **An Autonomous Bus Service from Park & Ride Across Forth Bridge to Edinburgh Park Train & Tram Interchange** [1 Apr 2019 - 30 Nov 2021]

Dr Achille Fonzone (Project Lead); Dr Grigorios Fountas (Co-Investigator): **Attitudes and behaviours of potential users of shared mobility in small-to-medium cities and rural environment.** [1st Oct 2019 – 31 Jul 2020]

Dr Grigorios Fountas (Project Lead); Dr Achille Fonzone (Co-Investigator): **Why bicyclists are still vulnerable to road accidents? New insights to enhance bicycle safety.** [1st Oct 2019 – 31 Jul 2020]

Prof Adrian Davis (Project Lead); Dr Grigorios Fountas: **Borders Council Eddleston Traffic Calming Evaluation** [1 Mar 2020 - 31 Jul 2020]

Prof Adrian Davis (Project Lead): **Increase total physical activity time through active travel across the population** [1 Sep 2019 - 31 Aug 2020]

Prof Adrian Davis (Project Lead): **Essential Evidence for Scotland**

Prof Wafaa Saleh (Project Lead); Augustus Ababio-Donkor: **Revealing fair and actionable knowledge from data to support women's inclusion in transport systems** [1 Nov 2018 - 31 Oct 2021]

Prof Pat Langdon & Dr Grigorios Fountas - **Project HEART; High-volume Electric and Automated Regional Transportation** (Innovate UK)

Prof Adrian Davis: Professorial Chair Funding - **Increase total physical activity time through active travel Year 2** (Paths for All Partnership)

Dr Grigorios Fountas & Prof Adrian Davis - **Monitoring & Evaluation of traffic calming measures in Scottish Borders** (Scottish Borders Council)

Dr Jonathan Cowie - **SEStran/Forth Ports Rail Freight Study** (Aecom Limited)



Publications

Davis Adrian, Whyte, Bruce: **'Making the shift to sustainable transport in Scotland'**

Davis, Adrian, Obree, David: **'Equality of restraint: Reframing road safety through the ethics of private motorised transport'**

Paul Kelly, Chloë Williamson, Graham Baker, Adrian Davis, Sarah Broadfield, Allison Coles, Hayley Connell, Greig Logan, Jill P Pell, Cindy M Gray, Jason MR Gill: **Beyond cycle lanes and large- scale infrastructure: a scoping review of initiatives that groups and organisations can implement to promote cycling for the Cycle Nation Project**

Langdon, P; Lazar, J, Heylighen, A, Dong, H: **'Inclusive Design: Looking Towards the Future'**

McTigue, Clare; Rye, Tom; Monios, Jason: **Identifying barriers to implementation of local transport policy – Lessons learned from case studies on bus policy implementation in Great Britain.**

Sheikh Shahriar Ahmed, Kevin F. Hulme, Grigorios Fountas, Ugur Eker, Irina V. Benedyk, Stephen E. Still and Panagiotis Ch. Anastasopoulos: **The Flying Car—Challenges and Strategies Toward Future Adoption.**

Sheikh Shahriar Ahmed GrigoriosFountas UgurEker Stephen E.Still Panagiotis ChAnastasopoulos: **An exploratory empirical analysis of willingness to hire and pay for flying taxis and shared flying car services**

Ugur Eker, Grigorios Fountas, Panagiotis Ch., Anastasopoulos, Stephen E.Still: **An exploratory investigation of public perceptions towards key benefits and concerns from the future use of flying cars.**

Journal Articles

Berrizbeitia, Saioa Etxebarria; Jadraque Gago, Eulalia; Muneer, Tariq. Journal Article: **Empirical Models for the Estimation of Solar Sky-Diffuse Radiation. A Review and Experimental Analysis.**

Fonzone, Achille; Fountas, Grigorios; Intini, Paolo: **'The Influence of Traffic, Geometric And Context Variables on Urban Crash Types: A Grouped Random Parameter Multinomial Logit Approach'**

Fountas, Grigorios; Fonzone, Achille; Gharavi, Niaz; Rye, Tom. Journal Article: **The joint effect of weather and lighting conditions on injury severities of single-vehicle accidents.**

Llewellyn, R., J. Cowie and M. Maher: **'Active road studs as an alternative to lighting on rural roads: driver safety perception, Sustainability'**

Sheikh ShahriarAhmed; Sarvani Sonduru Pantangj; Ugur Eker; GrigoriosFountas; Stephen E.Still; Panagiotis Ch.Anastasopoulos: **'Analysis of Safety Benefits and Security Concerns from the Use of Autonomous Vehicles: A Grouped Random Parameters Bivariate Probit Approach with Heterogeneity in Means:'**

Reports

Teuton, Joanna; Sloan, Paul; Whyte, Bruce; Cope, Andy; Macdonald, Ali; Cozzolino, Natalie; Davis, Adrian; Douglas, Margaret: **Transport use, health and health inequalities: The impact of measures to reduce the spread of COVID-19**

Teuton, Joanna; Sloan, Paul; Whyte, Bruce; Cope, Andy; Macdonald, Ali; Cozzolino, Natalie; Davis, Adrian; Douglas, Margaret: **Transport use, health and health inequalities: The impact of measures to reduce the spread of COVID-19 – Briefing**