



School of Computing, Engineering, and the Built Environment Edinburgh Napier University

PHD STUDENT PROJECT

Funding and application details

Funding status: Self funded students only

Application instructions:

Detailed instructions are available at <https://blogs.napier.ac.uk/scebe-research/available-phd-student-projects/>

Prospective candidates are encouraged to contact the Director of Studies (see details below) to discuss the project and their suitability for it.

Project details

Supervisory Team:

- DIRECTOR OF STUDY: Adrian Davis (Email: A.Davis@napier.ac.uk)
- 2ND SUPERVISOR: Jonathan Cowie

Subject Group: Built environment

Research Areas: Architecture and Built Environment: Urban Planning, Psychology: Other (traffic psychology)

Project Title: The effectiveness of School Street Closures: Impact evaluation

Project description:

There are currently no published peer reviewed papers looking specifically at School Streets projects. I published a report collated from grey literature and interviews with local government officers (Davis, 2020) which examined the perception of displacement parking associated with School Streets.

An engineer from a Scottish local authority who were an early adopter of School Streets discussed the implementation and evaluation of those projects in her ENU TRI MSc dissertation (Monteith-Skelton, 2017). School Street projects are an area of research focus for a number of other organisations including Sustrans, whose

funding has supporting the introduction of many schemes in Scotland and some in England and Wales. Sustrans continue to hold seminars on the topic including a webinar focusing on Road Safety and Traffic Displacement (Sustrans Scotland, 2022)

The area of barriers and attitudes towards active travel is widely researched with academics across High Income Countries examining decision making especially in the context of the potential health benefits that come from a physically active childhood enabled through active travel. Emerging from another ENU TRI MSc addressing school street closures (Underwood, 2023) was the conclusion that there remained unexplained factors in determining the difference in opinions between superficially similar locations. Further research is needed for a more detailed study to identify and control for additional variables to be able to provide further insight into individuals' attitudes when potentially making changes for their own good and for the benefit of others within the context of the journey to school, and specifically where that journey has been regulated by the introduction of restrictions on behaviour (School Street Closures).

Most traffic and transport schemes rely on the basic principle that the majority of road users will comply with signed restrictions (Speed Limits, Weight restrictions, Cycle lanes etc) as it is not practical, feasible or desirable to use physical measures to enforce compliance. In the current changing transport landscape where the Scottish government is planning to regulate for wider use of 20mph speed limits (most without physical measures - and Wales has recently done so through a default national 20mph speed limit in place of 30mph) and exert greater influence on reducing use of the private car in favour of active travel, understanding individual's attitudes towards these types of restriction, and how they are likely to behave will help inform the delivery of such measures.

Consequently, this subject is ripe for exploration and the contribution that a PhD candidate could make to expanding the current slim knowledge base with more rigorous research. It would also add value to ENU and TRI through hosting such PhD research.

References:

- [1] Davis A; 2020; School Street Closures and Traffic Displacement: A literature Review and semi-structured interviews. Transport Research Institute, Edinburgh Napier University.
- [2] Monteith-Skelton, S; 2017 Edinburgh's School Street Pilot. Dissertation, MSc Transport Planning and Engineering, Edinburgh Napier University.
- [3] Toy S, Tapp A, Musselwhite C and Davis A; 2014; Can social marketing make 20mph the new norm? Journal of Transport and Health (2014) 165-173.
- [4] Underwood, H; 2022; Normalising School Streets, Dissertation, MSc Transport Planning and Engineering, Edinburgh Napier University.

Candidate characteristics

Education:

A first-class honours degree, or a distinction at master level, or equivalent achievements in transport planning or engineering or they could have a Psychology degree given a likely focus on understanding human behaviour.

Subject knowledge:

- Traffic and highways management or traffic/transport psychology

Essential attributes:

- Experience of working in the road transport sector and in local government on travel behaviour change.

Desirable attributes:

- Awareness of a range of behaviour change models, and population health approaches
- A desire to (or experience of) contribute to sustainable transport implementation