Editorial

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According to the World Health Organization (WHO, 2018), the number of annual road traffic deaths on the world's roads has reached 1.35 million at 2018. Road traffic injuries are considered to be one of the world's largest injury prevention problems, and the leading killer of young people aged 5–29 years.

This issue of *Municipal Engineer* contains seven papers (and one book review) grouped around the subject of road safety and related issues. Road safety research provides a better understanding of transport infrastructure, vehicles technology and design, and user behaviour – all of them have major effects on the safety performance of transport systems. The burden of road safety injuries is disproportionately borne by the more vulnerable road users – pedestrians and cyclists; this is largely in conflict with governmental and municipal policy that seek to increase levels of walking and cycling.

This issue opens with a paper by Aldred (2019), exploring the risk posed to pedestrians and cyclists by car drivers on UK urban major roads, compared with urban minor roads. The analysis suggest that re-routing motor traffic to major roads in urban areas may reduce pedestrian casualties.

Employing a methodology based on case studies, Leyendecker's (2019) paper seeks to contribute to the debate about the current practices of road safety in the UK (and possibly elsewhere). The three case studies discussed in this work underline the discrepancy between the city's transport policies of favouring walking and cycling over the use of private cars and the way road safety practices are carried out and managed.

Parker (2019) provides additional insights perspective on managing the design and delivery of urban highways, with particular emphasis on 'shared space' schemes. Following concepts from behavioural sciences, he is making the argument that that 'priority and regulation, and routine application of highway engineering standards may not automatically provide the resulting safe streets that would be expected'. The views made in the

papers by Leyendecker (2019) and Parker (2019) challenge the common practice in design, policy development and evaluation of road safety initiatives.

There then follow two papers from Iran investigating the behaviour of pedestrians in the urban environment. Using video recording from intersections, Jahandideh *et al.* (2019) investigate individual characteristics (such as age, gender and dressing type) affecting pedestrians' risk-taking behaviour. Rassafi and Mohajeri (2019) applied cellular automata and discrete choice models to analyse the effects of individual characteristics (such as speed, gender and pedestrian position) and the presence of other pedestrians and obstacles, on the pattern of pedestrian movement.

Lane change is a behaviour highly involved with traffic safety, travel time and functional capacity of motorways. Using data from the United States and Iran, Edrisi and Askari (2019) provide a model for predicting the number of lane-changing manoeuvres using a model whose input is the traffic's macroscopic state.

To reduce the number of road injuries, there is a need to determine where best to implement road safety schemes, and to evaluate their effectiveness. To help practitioners with these tasks, Matthews *et al.* (2019) describes the development of a novel model to inform road safety investment decisions, followed by a description of a software application that implement the model.

The special issue ends with a book review (Lee, 2019) of a book edited by Kellerman (2018) on 'Automated and Autonomous Spatial Mobilities'.

The journal's editorial panel hopes that readers of this issue find the papers informative and stimulating. Readers are welcome to further explore the wide selection of journal papers and books available at the ICE virtual library (www.icevirtuallibrary.com).

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