Editorial

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Welcome to the October 2013 issue of *Transport*. Maintaining safe transport systems and understanding how user behaviour affects safety performance is of primary importance. This issue is dedicated to the subject of road safety with six papers looking at pedestrian, motorcycling and vehicle safety issues.

The issue starts with a review by Mujalli and de Oña (2013) of 19 modelling techniques used to model injury severity of traffic accidents involving four-wheeled vehicles and addresses the characteristics and limitations of each. This is followed by a study of lighting conditions and their impacts on the frequency and severity of road accidents on urban and rural roads in Greece using police records (Yannis *et al.*, 2013). The results highlight the considerable potential for reducing accident severity through the greater provision of street lighting at night.

Bedeley *et al.* (2013) address the issue of pedestrian crossing behaviour and how the complex interactions between pedestrians and their immediate environment need to be better understood. The paper applies a Bayesian network modelling approach to investigate factors influencing pedestrian crossing behaviour and shows that pedestrians often exhibit rational crossing behaviour influenced by personal motives rather than external factors.

Salehi *et al.* (2013) examine the effects of vehicle speed, traffic volume and lane width on the perceived safety of 60 motorcyclists, travelling in a range of mixed traffic conditions in Malaysia. Motorcyclists feel less safe when travelling in high speed situations, in dense traffic and narrow lane conditions with the authors advocating segregated lanes for motorcyclists to improve safety. A paper by Saffarzadeh *et al.* (2013) addresses 'time-to-collision' as an important safety indicator related to detecting rear-end accident potential in traffic safety evaluations. Time-to-collision is calculated based on the assumption of constant speed, constant acceleration and linear acceleration for leading and following vehicles and the paper suggests that applying time-to-collision indicators based on the assumption of linear acceleration in collision avoidance systems would be the most beneficial in reducing driver errors.

The final paper (Roussiamanis *et al.*, 2013) reviews, analyses and compares the changes that have occurred in the models used for estimating the required stopping sight distance in German, American and Australian guidelines for the geometric design of

rural roads, and examines relevant human factors that have not yet been sufficiently incorporated into design guidelines.

The editorial advisory panel is aware that our readership encompasses many different strands within the transportation field: transport planning and infrastructure; industry and academia; roads and railways; air and water. Our main challenge is to try to ensure that, during the course of a year's issues, our journal will publish papers drawn from across all these strands, so that you will all find something of interest, and will spread the word among your colleagues. If you find your particular area is unrepresented, why not consider writing a paper yourself; we are always grateful for suggestions for future issues. The panel looks forward to hearing from you.

REFERENCES

- Bedeley RT, Attoh-Okine NO and Lee E (2013) Modelling pedestrian crossing behaviour using Bayesian networks. *Proceedings of the Institution of Civil Engineers – Transport* **166(5)**: 282–288, <http://dx.doi.org/10.1680/tran.11.00007>.
- Mujalli RO and de Oña J (2013) Injury severity models for motor vehicle accidents: a review. *Proceedings of the Institution of Civil Engineers – Transport* **166(5)**: 255–270, <http://dx.doi.org/10.1680/tran.11.00026>.
- Roussiamanis N, Kaltounis A, Vardaki S and Kanellaidis G (2013) A review of stopping sight distance in road design guidelines. *Proceedings of the Institution of Civil Engineers – Transport* **166(5)**: 305–312, <http://dx.doi.org/10.1680/tran.11.00049>.
- Saffarzadeh M, Nadimi N, Naseralavi S and Mamdoohi AR (2013) A general formulation for time-to-collision safety indicator. *Proceedings of the Institution of Civil Engineers – Transport* **166(5)**: 294–304, <http://dx.doi.org/10.1680/tran.11.00031>.
- Salehi S, Hamid H, Arintono S, Hua LT and Davoodi SR (2013) Effects of traffic and road factors on motorcycling safety perception. *Proceedings of the Institution of Civil Engineers – Transport* **166(5)**: 289–293, <http://dx.doi.org/10.1680/tran.11.00009>.
- Yannis G, Kondyli A and Mitzalis N (2013) Effect of lighting on frequency and severity of road accidents. *Proceedings of the Institution of Civil Engineers – Transport* **166(5)**: 271–281, <http://dx.doi.org/10.1680/tran.11.00047>.