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Editorial

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Editorial

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On behalf of the Editorial Advisory Panel, I would like to welcome you to this edition of *Transport*; it is my duty to introduce the current papers. This edition contains five papers and one book review. The papers cover topics such as traffic congestion and safety as well as materials evaluation and pavement design. The book review assesses a new publication on the management of air transport. We believe the papers are novel and present interesting work that will be of interest and relevance to both researchers and those working in industry.

The first paper (He *et al.*, 2016) presents the use of graphical route interface panels (Grips) and the role they could play in reducing traffic congestion. Grips present graphically real-time route options to drivers and can help reduce congestion by optimising flows and routes based on travel times. The paper evaluates their efficiency and use; the results show their use for assessing and proposing practical route guidance strategies and optimisation methods.

In a similar area to the first paper, the second paper (Easa and Hussain, 2016) presents a statistical evaluation of stopping sight distances, on approach to highway junctions. The analysis presents and compares a reliability-based design approach rather than the current deterministic approach to assess safety of junctions. This is an interesting approach to the management of safety in design and offers an alternative to the many empirical design approaches used across the world.

The third paper (Wong and Wong, 2016) focuses on the evaluation of the impact of local traffic delays and accidents. It evaluates how traffic flows round incidents in an urban area using global positioning system (GPS) data collected from taxis in Hong Kong. The method allows the traffic flow to be reconstructed and modelled and hence allows optimisation of a recovery plan. The method will be helpful for incident management by extensive use of GPS technology.

The fourth paper (Rolt and Pinard, 2016) compares California bearing ratio (CBR)-based methods and dynamic cone penetrometer (DCP) tests, for an optimised approach to the design of low-volume roads (LVRs). The approach presented, due to the volume of data that can be collected with the DCP, suggests material specifications for LVRs can be relaxed to incorporate a wider range of materials, offering broad sustainability advantages while still offering a level of assurance of performance. The authors of this paper are well-known,

long-standing experts in this area of pavement design and this paper should be a must-read for anyone designing and maintaining unsurfaced roads, be they for highway or industrial/construction use.

The final paper (Tarefder *et al.*, 2016) evaluates the mineral and chemical composition of asphalt mastic containing different levels of mica within the filler and fines. Using X-ray diffraction, scanning electron microscopy and rheometer tests, the paper shows the addition of mica increases the number of uncoated flakes in the mastic mix and that this number decreases with aging. Following further testing it is considered that the mica reduces the rate of aging in the mastic but also can reduce its stiffness. This work could be of use in optimising the design of such materials.

The book review considers a recent re-publication of *Air Transportation, A Management Perspective* by John Wensveen, currently in its 8th edition and published by Ashgate. The book, while mainly focused on the airline business, is a detailed evaluation of the management and operation of airlines in both Europe and America with, in part, a global perspective. It looks at wider issues such as industrial relations and open-skies policies, as well as considering specific topics related to management and planning processes for airlines. This would prove a useful text for anyone interested in airlines and their operation but also people studying or seeking professional development in aviation management

We hope you find this edition of the journal interesting and thought provoking. If you wish to raise any points from the papers we always welcome discussion pieces around papers for the journal.

REFERENCES

- Easa SM and Hussain A (2016) Reliability of sight distance at stop-control intersections. *Proceedings of the Institution of Civil Engineers – Transport* **169**(3): 138–147, <http://dx.doi.org/10.1680/jtran.14.00090>.
- He Z, Guan W and Zhang W (2016) Effectiveness of Grips in alleviating traffic congestion. *Proceedings of the Institution of Civil Engineers – Transport* **169**(3): 125–137, <http://dx.doi.org/10.1680/jtran.14.00047>.
- Rolt J and Pinard MI (2016) Designing low-volume roads using the dynamic cone penetrometer. *Proceedings of the Institution of Civil Engineers – Transport* **169**(3): 163–172, <http://dx.doi.org/10.1680/jtran.14.00059>.

Tarefder RA, Mannan UA and Arifuzzaman M (2016) Evaluation of asphalt mastic containing mica due to aging. *Proceedings of the Institution of Civil Engineers – Transport* **169(3)**: 173–182, <http://dx.doi.org/10.1680/jtran.15.00013>.

Wong W and Wong SC (2016) Evaluation of the impact of traffic incidents using GPS data. *Proceedings of the Institution of Civil Engineers – Transport* **169(3)**: 148–162, <http://dx.doi.org/10.1680/jtran.15.00017>.