Editorial

Tom Cherrett BSc, PhD, CMILT
Chairman, Editorial Advisory Panel

Welcome to the August 2012 issue of *Transport*. This issue covers a range of subjects and starts with a briefing note by Rosyidi *et al.* (2012) which discusses the use of the spectral analysis of surface waves (SASW) method to determine the stiffness of the base layer in pavement design. This is followed by a paper by Rajbongshi (2012), who critically examines the initial conditions of the temperature profile for critical stress evaluation in asphalt pavements, which is of primary concern for thermal cracking prediction. Sun *et al.* (2012a) describe an ant colony optimisation (ACO)-based algorithm which has been used to help understand where best to locate traffic counting stations across a road network. In their paper, Ramirez *et al.* (2012) address the issue of lateral force applied to the tyres of a motor vehicle in order to take curves safely and propose a new and more effective method for checking a vehicle's wheel alignment during the periodic motor vehicle inspection, based on force measurement. Staying in the area of road safety, Sun *et al.* (2012b) present an evaluation procedure which identifies the key factors influencing traffic safety at intersections using a case study from Shanghai.

The final three papers cover rail transportation. Banimahd *et al.* (2012) address the problem of railway stiffness transitions (e.g. railway tracks near bridge abutments or tunnels) in terms of track deterioration and passenger comfort utilising two types of analysis (a train-transition curve model and a three-dimensional (3D) finite-element representation of the railway track interacting with a passing train). Murray and Bian (2012) describe the development of equations and factors for a limit design methodology for concrete sleepers in flexure using a probabilistic evaluation of sleeper loading. Their method establishes the true capacity of the billions of concrete sleepers that are currently in-track around the world, leading to better utilisation of track infrastructure. The final paper, by Ison *et al.* (2012), reviews the issues associated with the growth in UK rail passengers, the demand placed on the network, the policy developed to accommodate and manage it and the capacity constraints and options identified for capacity enhancement.

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

- Banimahd M, Woodward PK, Kennedy J and Medero GM (2012) Behaviour of track-train interaction in stiffness transitions. *Proceedings of the Institution of Civil Engineers – Transport* **165(3)**: 205–214, <http://dx.doi.org/10.1680/tran.10.00030>.
- Ison S, Frost M and Watson R (2012) UK rail transport: a review of demand and supply. *Proceedings of the Institution of Civil Engineers – Transport* **165(3)**: 225–234, <http://dx.doi.org/10.1680/tran.10.00028>.
- Murray MH and Bian J (2012) Ultimate limit states design of concrete railway sleepers. *Proceedings of the Institution of Civil Engineers – Transport* **165(3)**: 215–223, <http://dx.doi.org/10.1680/tran.10.00048>.
- Rajbongshi P (2012) Critical temperature stress evaluation in asphalt pavements. *Proceedings of the Institution of Civil Engineers – Transport* **165(3)**: 167–173, <http://dx.doi.org/10.1680/tran.10.00069>.
- Ramirez M, Díaz V and Garcia-Pozuelo D (2012) A test for lateral vehicle safety related to road design. *Proceedings of the Institution of Civil Engineers – Transport* **165(3)**: 187–194, <http://dx.doi.org/10.1680/tran.10.00008>.
- Rosyidi SA, Abbiss CP, Nayan KAM *et al.* (2012) Briefing: Study of the relationship between stiffness parameters for base materials. *Proceedings of the Institution of Civil Engineers – Transport* **165(3)**: 159–165, <http://dx.doi.org/10.1680/tran.10.00010>.
- Sun D, Chang Y and Zhang L (2012a) An ant colony optimisation model for traffic counting location problem. *Proceedings of the Institution of Civil Engineers – Transport* **165(3)**: 175–185, <http://dx.doi.org/10.1680/tran.10.00004>.
- Sun J, Zhou S, Li K and Ni Y (2012b) Evaluation of safety factors at Chinese intersections. *Proceedings of the Institution of Civil Engineers – Transport* **165(3)**: 195–203, <http://dx.doi.org/10.1680/tran.10.00021>.