



## 5.4 Poster Programme

TOPIC A: TRANSPORT MODES - GENERAL	
2C - Monday, 11 July: 13:30-15:30	
Session Chair: Mark Hansen	
A1-PO1®	<b>Crowding and passenger flow effects on optimal departure lounge configuration</b> W. Klumpenhauer <sup>1*</sup> , A.G. de Barros <sup>1</sup> , S.C. Wirasinghe <sup>1</sup> , <sup>1</sup> University of Calgary, Canada
A1-PO2®	<b>Research of flight delay propagations effects based on Copula function</b> W.W. Wu <sup>1*</sup> , C.L. Wu <sup>1</sup> , S.P. Qiu <sup>1</sup> , <sup>1</sup> Nanjing University of Aeronautics and Astronautics, China
A1-PO3®	<b>The impact of aircraft take-off thrust setting on NO<sub>x</sub> emissions</b> G. Koudis <sup>1</sup> , J. Hu <sup>1</sup> , A. Majumdar <sup>1</sup> , R. North <sup>1</sup> , M. Stettler <sup>1*</sup> , <sup>1</sup> Imperial College London, UK
A3-PO1®	<b>Comparison of bus rapid transit and light rail transit systems: A case study of Metro Orange Line and Gold Line in Los Angeles, CA</b> S. Zhang <sup>1*</sup> , <sup>1</sup> China Academy of Urban Planning & Design, China, <sup>2</sup> Texas A&M University, USA
A3-PO2®	<b>Ecology, energy efficiency and resource efficiency as the objectives of rail vehicles renewal</b> M. Szkoda <sup>1*</sup> , A. Tulecki <sup>1</sup> , <sup>1</sup> Cracow University of Technology, Poland
A3-PO3®	<b>Study on train headway in different turning-back mode of urban mass transit station</b> W.G. Wang <sup>1,2*</sup> , L.H.X. Liu <sup>2</sup> , Z.X.Q. Zeng <sup>1</sup> , <sup>1</sup> Tongji University, China, <sup>2</sup> CASCO Signal Limited Company, China
A3-PO4®	<b>Deformation response of metro tunnels to adjacent tram track construction</b> Y. Shan <sup>1*</sup> , Q.M. Gong <sup>1</sup> , S.H. Zhou <sup>1</sup> , X.H. Zhang <sup>1</sup> , S.H. Xu <sup>1</sup> , Z.G. Zhao <sup>1</sup> , <sup>1</sup> Tongji University, China
A3-PO5®	<b>Calculating the value of connection conflicts</b> A. Stelzer <sup>1</sup> , <sup>1</sup> Technische Universität Darmstadt, Germany
A3-PO6®	<b>Measuring the ability of anti-destroying of weighted network for the urban rail transit system: The case study of Guangzhou</b> M.X. Zhao <sup>1</sup> , Q. Gu <sup>1*</sup> , <sup>1</sup> South China University of Technology, China
A4-PO1	<b>Analysis of bus delay factor and real-time prediction model of bus arrival time</b> Y. Ishikawa <sup>1*</sup> , Y. Matsumoto <sup>1</sup> , <sup>1</sup> Meijo University, Japan
A4-PO2®	<b>Evaluating the effects of traffic congestion and passenger load on connecting bus fuel and emissions compared with passenger car</b> X. Chen <sup>1</sup> , X. Shan <sup>1*</sup> , J. Ye <sup>1</sup> , F. Yi <sup>1</sup> , Y. Wang <sup>1</sup> , <sup>1</sup> Tongji University, China
A4-PO3®	<b>Bi-level programming model for exclusive bus lanes configuration in multimodal traffic network</b> B.F. Si <sup>1*</sup> , M. Zhong <sup>1</sup> , <sup>1</sup> Beijing Jiaotong University, China, <sup>2</sup> Wuhan University of Technology, China

TOPIC B: FREIGHT TRANSPORT AND LOGISTICS	
2D - Monday, 11 July: 15:30-17:10	
Session Chair: Michael Browne	
B1-PO1®	<b>The modelling of milk-run vehicle routing problem based on improved C-W algorithm that joined time window</b> M.H. Huangmei <sup>1</sup> , S.J.Y. Yangjingshuai <sup>1</sup> , T.M. Mateng <sup>1*</sup> , L.X.L. Lixiuli <sup>1</sup> , T.W. Wangting <sup>1</sup> , <sup>1</sup> Chang'an University, China
B1-PO2®	<b>The overseas development of logistics companies and public policy in Korea</b> T. Lee <sup>1*</sup> , <sup>1</sup> The Korea Transport Institute, Republic of Korea

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B2-PO1 <sup>®</sup>	<b>Organizational mode innovation and credit supervision in road freight transportation under smart mobile devices applications services</b> Y. Yu <sup>1*</sup> , Y. Li <sup>1</sup> , T. Xia <sup>1</sup> , H. Deng <sup>1</sup> , L. Bao <sup>1</sup> , W. Li <sup>1</sup> , <sup>1</sup> Tongji University, China
B2-PO2 <sup>®</sup>	<b>Shandong province road freight structure situation analysis and development strategies</b> C.D. Chen <sup>1*</sup> , R.H. Zhang <sup>1</sup> , L.J. Fan <sup>1</sup> , <sup>1</sup> Shandong University, China
B2-PO3	<b>Industry practices in biomass facilities in the Netherlands</b> I. Dafnomilis <sup>1*</sup> , D. Schott <sup>1</sup> , G. Lodewijks <sup>1</sup> , <sup>1</sup> Delft University of Technology, The Netherlands
B3-PO1 <sup>®</sup>	<b>Concentration degree of the market of intermodal freight transport networks in the EU: Model application</b> H. Saeedi <sup>1</sup> , B. Wiegman <sup>1*</sup> , R. Zuidwijk <sup>1</sup> , <sup>1</sup> TU Delft, The Netherlands
B3-PO2 <sup>®</sup>	<b>Challenges and innovation opportunities in load multimodal transport - LMT in Brazil: Cluster technique application as a support tool for decision making</b> A. Maia <sup>1</sup> , A. Guimarães <sup>1*</sup> , <sup>1</sup> Agência Nacional de Transportes Terrestres - ANTT, Brazil
B4-PO1	<b>Developing city logistics policy through identifying parcel freight determinants in the City of Seoul</b> S.B. Seo <sup>1</sup> , C. Ahn <sup>2</sup> , J-S. Lee <sup>1*</sup> , <sup>1</sup> The Korea Transport Institute, Republic of Korea, <sup>2</sup> Sungshin Women's University, Republic of Korea
B4-PO2 <sup>®</sup>	<b>Assessment of freight transport flows in the city centre based on Szczecin example - Methodological approach and results</b> K. Kijewska <sup>1*</sup> , S. Iwan <sup>1</sup> , K. Konicki <sup>1</sup> , D. Kijewski <sup>1</sup> , <sup>1</sup> Maritime University of Szczecin, Poland
B5-PO1	<b>A new method to optimize regional railway fast freight route in China</b> L. Ling <sup>1*</sup> , F. Li <sup>1</sup> , <sup>1</sup> Tongji University, China
B6-PO1 <sup>®</sup>	<b>A microeconomic method for valuation of externalities arising from disasters</b> V. Cantillo <sup>1*</sup> , I. Serrano <sup>1</sup> , L. Macea <sup>1</sup> , <sup>1</sup> Universidad del Norte, Colombia
B6-PO2 <sup>®</sup>	<b>Analysing impacts of natural disasters on logistics activities: Flood risks and petroleum fuels in Queensland, Australia</b> W. Wisetjindawat <sup>1</sup> , M. Burke <sup>2*</sup> , M. Fujita <sup>1</sup> , <sup>1</sup> Nagoya Institute of Technology, Japan, <sup>2</sup> Griffith University, Australia

## TOPIC C: TRAFFIC MANAGEMENT, OPERATIONS AND CONTROL

3A - Tuesday, 12 July: 08:30-10:10

Session Chair: Hideki Nakamura

C1-PO1	<b>Calibration of microscopic simulation models for the analysis of un-signalized intersections</b> S.F.G. Oliveira <sup>1</sup> , L. Vasconcelos <sup>1*</sup> , A. Bastos Silva <sup>2</sup> , <sup>1</sup> Polytechnic Institute of Viseu, Portugal, <sup>2</sup> University of Coimbra, Portugal
C1-PO2 <sup>®</sup>	<b>Fuzzy neural network system for urban expressway speed prediction under rainy weather</b> H.Y. Sun <sup>1*</sup> , J.S. Yang <sup>2</sup> , Y. Zou <sup>1</sup> , L.B. Li <sup>1</sup> , B. Wu <sup>1</sup> , <sup>1</sup> Tongji University, China, <sup>2</sup> Qingdao University of Technology, China
C1-PO3 <sup>®</sup>	<b>Prediction of arrival flow profile of transit stream on link</b> Z.P. Liu <sup>1,2*</sup> , K.P. Li <sup>1,2</sup> , Y. Ni <sup>2</sup> , <sup>1</sup> Wuhan University of Science and Technology, China, <sup>2</sup> Tongji University, China
C1-PO4 <sup>®</sup>	<b>Dissipating transit congestion of emergency events through Information guidance on mobile terminals</b> K. Bo <sup>1,2*</sup> , J. Teng <sup>1</sup> , X. Liu <sup>3</sup> , H. Liu <sup>3</sup> , H. Shi <sup>1</sup> , <sup>1</sup> Tongji University, China, <sup>2</sup> Shanghai Maritime University, China, <sup>3</sup> China Academy of Transportation Sciences, China

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C1-PO5 <sup>®</sup>	<b>Large-scale, high-fidelity dynamic traffic assignment: Framework and real-world case studies</b> Q. Yang <sup>1*</sup> , R. Balakrishna <sup>1</sup> , D. Morgan <sup>1</sup> , H. Slavin <sup>1</sup> , <sup>1</sup> <i>Caliper Corporation, USA</i>
C1-PO6 <sup>®</sup>	<b>Research on the Macroscopic Fundamental Diagram for Shanghai urban expressway network</b> X.S. Shi <sup>1*</sup> , H.F. Lin <sup>1</sup> , <sup>1</sup> <i>Tongji University, China</i>
C1-PO7 <sup>®</sup>	<b>Modelling the various merging behaviors at expressway on-ramp bottlenecks using support vector machine models</b> E.G. Wang <sup>1*</sup> , J. Sun <sup>1</sup> , S. Jiang <sup>1</sup> , F. Li <sup>2</sup> , <sup>1</sup> <i>Tongji University, China</i> , <sup>2</sup> <i>Institute of Highway, Ministry of Transport, China</i>
C1-PO8 <sup>®</sup>	<b>Analysis on drivers' parking lot choice behaviors in expressway rest area</b> S. Tanaka <sup>1*</sup> , S. Ohno <sup>1</sup> , F. Nakamura <sup>1</sup> , <sup>1</sup> <i>Yokohama National University, Japan</i>
C1-PO9 <sup>®</sup>	<b>Modelling heteroscedastic traffic speed dispersion on urban expressways</b> J. Li <sup>1*</sup> , Y. Liu <sup>1</sup> , X. Chen <sup>1</sup> , <sup>1</sup> <i>Tongji University, China</i>
C1-P10 <sup>®</sup>	<b>A simulation-based multiclass, multimodal traffic assignment model with departure time for evaluating traffic control plans of planned special events</b> Y-Z. Lin <sup>1*</sup> , W-H. Chen <sup>1</sup> , <sup>1</sup> <i>Chung Yuan Christian University, Taiwan</i> , <sup>2</sup> <i>Chung Yuan Christian University, Taiwan</i>
C1-P11	<b>Developing acceleration models combining multiple data sources</b> S. Papadimitriou <sup>1*</sup> , C. Choudhury <sup>1</sup> , <sup>1</sup> <i>University of Leeds, UK</i>
C1-P12 <sup>®</sup>	<b>Critical infrastructure renewal: A framework for fuzzy logic based risk assessment and microscopic traffic simulation modelling</b> M.J. Alam <sup>1</sup> , M.A. Habib <sup>1*</sup> , K. Quigely <sup>1</sup> , <sup>1</sup> <i>Dalhousie University, Canada</i>
C1-P13	<b>Modelling acceleration decisions in heterogeneous traffic situations with weak lane discipline</b> C. Choudhury <sup>1,2*</sup> , M. Islam <sup>2</sup> , <sup>1</sup> <i>University of Leeds, UK</i> , <sup>2</sup> <i>Bangladesh University of Engineering and Technology, UK</i>
C1-P14 <sup>®</sup>	<b>Impact of a forward collision warning system on headway and reaction time during car following</b> M.X. Zhu <sup>1,2*</sup> , X.S. Wang <sup>1,2</sup> , <sup>1</sup> <i>Tongji University, China</i> , <sup>2</sup> <i>Road and Traffic Key Laboratory, Ministry of Education, China</i>
C1-P15 <sup>®</sup>	<b>Maritime vessel traffic modelling in the context of concept drift</b> E. Osekowska <sup>1*</sup> , H. Johnson <sup>1</sup> , B. Carlsson <sup>1</sup> , <sup>1</sup> <i>Blekinge Institute of Technology, Sweden</i>
C2-PO1 <sup>®</sup>	<b>An analysis of characteristics of heavy vehicle behavior at roundabouts in Japan</b> N. Kang <sup>1*</sup> , H. Nakamura <sup>2</sup> , <sup>1</sup> <i>Tokyo University of Science, Japan</i> , <sup>2</sup> <i>Nagoya University, Japan</i>
C2-PO2	<b>Geometric design consistency model for two-lane rural highways based on operating speed profiles</b> R.T. Almeida <sup>1</sup> , A.L. Vasconcelos <sup>1</sup> , A.M.C. Bastos Silva <sup>2*</sup> , <sup>1</sup> <i>Polytechnic Institute of Viseu, Portugal</i> , <sup>2</sup> <i>University of Coimbra, Portugal</i>
C2-PO3 <sup>®</sup>	<b>Research on driver physiological load at the lowest point of city river-crossing tunnels</b> D.S. Feng <sup>1*</sup> , F. Chen <sup>1</sup> , X.D. Pan <sup>1</sup> , <sup>1</sup> <i>Tongji University, China</i>
C2-PO4 <sup>®</sup>	<b>Study of rainfall impacts on freeway traffic flow characteristics</b> Y.Q. Wang <sup>1*</sup> , J. Luo <sup>1</sup> , <sup>1</sup> <i>Chang'an University, China</i> , <sup>2</sup> <i>CCCC First Highway Consultants Co.,Ltd, China</i>
C2-PO5	<b>New features in the 2015 German highway capacity manual (hbs2015)</b> N. Wu <sup>1*</sup> , <sup>1</sup> <i>Ruhr University Bochum, Germany</i>
C2-PO6 <sup>®</sup>	<b>Investigating large vehicle stability on curved expressway segment with vertical slope by simulation</b> G.X. Qu <sup>1*</sup> , Y.L. He <sup>1</sup> , X.D. Sun <sup>1</sup> , <sup>1</sup> <i>Beijing University of Technology, Beijing, China</i> , <sup>2</sup> <i>University of Louisiana at Lafayette, Louisiana, USA</i>
C2-PO7 <sup>®</sup>	<b>Variability of observed drivers' follow-the-leader behavior on expressway basic segment</b> Y. Yang <sup>1*</sup> , K. Wada <sup>1</sup> , T. Oguchi <sup>1</sup> , M. Iryo-Asano <sup>1</sup> , <sup>1</sup> <i>The University of Tokyo, Japan</i>

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C2-PO8 <sup>®</sup>	<b>Risk assessment model of bottlenecks for urban expressways using survival analysis approach</b> L.Y. Zheng <sup>1*</sup> , Y.T. Chang <sup>1</sup> , <sup>1</sup> Tongji University, China
C2-PO9 <sup>®</sup>	<b>Comparison of exhaust emissions at intersections under traffic signal vs. roundabout control using an instrumented vehicle</b> C. Meneguzzer <sup>1</sup> , M. Gastaldi <sup>1</sup> , R. Rossi <sup>1*</sup> , G. Gecchele <sup>1</sup> , M.V. Prati <sup>2</sup> , <sup>1</sup> University of Padova, Italy, <sup>2</sup> Istituto Motori CNR, Italy
C2-P10 <sup>®</sup>	<b>Traffic congestion management with high occupancy vehicle lanes and tradeable credits scheme: A bi-level programming approach</b> G.Z. Zang <sup>1</sup> , M. Xu <sup>1*</sup> , Z.Y. Gao <sup>1</sup> , <sup>1</sup> Beijing Jiaotong University, China
C2-P11 <sup>®</sup>	<b>Study on traffic strategy in metropolitan renewal area</b> X.Y. Lv <sup>1,2*</sup> , H.X. Pan <sup>1</sup> , <sup>1</sup> College of Architecture and Urban Planning Tongji University, China, <sup>2</sup> Shanghai Urban Planning and Design Research Institute, China
C2-P12	<b>Dynamic climbing lane control system using a radar detector</b> H. Ko <sup>3</sup> , J. Park <sup>2</sup> , J. Seo <sup>2</sup> , I. Yun <sup>1*</sup> , <sup>1</sup> Ajou University, Republic of Korea, <sup>2</sup> The Korea Transport Institute, Republic of Korea, <sup>3</sup> Korea Transportation Safety Authority, Republic of Korea
C2-P13 <sup>®</sup>	<b>Optimization of bus stops layout under the conditions of coordinated control</b> Z.P. Liu <sup>1,2*</sup> , K.P. Li <sup>1,2</sup> , Y. Ni <sup>2</sup> , <sup>1</sup> Wuhan University of Science and Technology, China, <sup>2</sup> Tongji University, China
C2-P14	<b>Simulation-based assessment of impact of large-scale retail store onto regional traffic and its management</b> H. Fujii <sup>1</sup> , T. Kanou <sup>1</sup> , H. Uchida <sup>1*</sup> , S. Yoshimura <sup>1</sup> , <sup>1</sup> The University of Tokyo, Japan
C2-P15 <sup>®</sup>	<b>The effectiveness of applying dynamic lane grouping strategy at all approaches of isolated signalized intersections</b> W.K. Alhajyaseen <sup>1*</sup> , M.M. Najjar <sup>1</sup> , N.T. Ratrou <sup>1</sup> , K.J. Assi <sup>1</sup> , <sup>1</sup> King Fahd University of Petroleum and Minerals, Department of Civil & Environmental Engineering, Saudi Arabia
C2-P16 <sup>®</sup>	<b>Existing operational and safety issues of signal control regarding tram systems in China</b> S. Wang <sup>1*</sup> , X.C. Yu <sup>2</sup> , K.P. Li <sup>1</sup> , <sup>1</sup> Tongji University, China, <sup>2</sup> Technical University Darmstadt, Germany
C2-P17 <sup>®</sup>	<b>Evaluation of the benefit-to-cost of freeway service patrol in advanced video surveillance system environment: A case study in China</b> Z. Sun <sup>1*</sup> , M. Yu <sup>1</sup> , H. Wang <sup>1</sup> , A. Haghani <sup>2</sup> , <sup>1</sup> Ministry of Transport, China, <sup>2</sup> University of Maryland, USA
C2-P18 <sup>®</sup>	<b>A methodology for evaluating evacuation capacity of urban underground road</b> Y. Yang <sup>1,2*</sup> , T-Z. Li <sup>1,2</sup> , T. Zhang <sup>1,2</sup> , Q. Yu <sup>1,2</sup> , <sup>1</sup> Jiangsu Key Laboratory of Urban ITS, China, <sup>2</sup> Jiangsu Province Collaborative Innovation Center of Modern Urban Traffic Technologies, China
C2-P19 <sup>®</sup>	<b>Traffic volume responsive incident detection</b> E.G. Nathanail <sup>1</sup> , P. Kouros <sup>1*</sup> , P. Kopelias <sup>1</sup> , <sup>1</sup> University of Thessaly, Greece
C2-P20 <sup>®</sup>	<b>Estimating net traffic congestion relief associated with public transport - preliminary results</b> P.Q.D. Nguyen <sup>1*</sup> , G. Currie <sup>1</sup> , B. Young <sup>1</sup> , <sup>1</sup> Monash University, Australia
C3-PO1 <sup>®</sup>	<b>Estimation of scaling factors for traffic counts based on stationary and mobile sources of data</b> F. Meng <sup>1*</sup> , S.C. Wong <sup>1</sup> , W. Wong <sup>1</sup> , Y.C. Li <sup>1</sup> , <sup>1</sup> The University of Hong Kong, Hong Kong
C3-PO2 <sup>®</sup>	<b>Pre-emptive goal programming based queue spillback control on oversaturated arterial</b> G. Liu <sup>1</sup> , T.Z. Qiu <sup>1*</sup> , <sup>1</sup> University of Alberta, Canada
C4-PO1 <sup>®</sup>	<b>Application of RISC for road safety program development</b> X.S. Tu <sup>1*</sup> , <sup>1</sup> Queensland Department of Transport and Main Roads, Australia

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C4-PO2 <sup>®</sup>	<p><b>Effectiveness of consistency measures in crash prediction models for two-lane highways in Palestine</b></p> <p>K. Al-Sahili<sup>1</sup>, M. Dweikat<sup>1</sup>, S. Abu-Eisheh<sup>1</sup>, W. Alhajyaseen<sup>2*</sup>, <sup>1</sup>An-Najah National University, Occupied Palestinian Territory, <sup>2</sup>Qatar University, Qatar</p>
C4-PO3 <sup>®</sup>	<p><b>Spatial analysis of highway work zone crashes in India</b></p> <p>S. Gupta<sup>1</sup>, G. Tiwari<sup>1*</sup>, <sup>1</sup>Indian Institute of Technology (IIT) Delhi, India</p>
C4-PO4	<p><b>A study on exploration and assessment of safety effects of roadway features in school zone area</b></p> <p>J. Park<sup>1</sup>, J. Lee<sup>1</sup>, M.A. Abdel-Aty<sup>1*</sup>, <sup>1</sup>University of Central Florida, USA</p>
C4-PO5 <sup>®</sup>	<p><b>Empirical analysis on risky behaviors and pedestrian-vehicle conflicts at large-size signalized intersections</b></p> <p>K. Suzuki<sup>1*</sup>, H. Ito<sup>2</sup>, <sup>1</sup>Nagoya Institute of Technology, Japan, <sup>2</sup>Chodai Corporation Limited, Japan</p>
C4-PO6 <sup>®</sup>	<p><b>Viability of Traffic Analysis Districts (TADs) as a spatial unit for macroscopic crash analysis</b></p> <p>Q. Cai<sup>1*</sup>, J. Lee<sup>1</sup>, M. Aty<sup>1</sup>, <sup>1</sup>University of Central Florida, USA</p>
C4-PO7 <sup>®</sup>	<p><b>An analysis of the relationship between motorcycle behavior and width of the road shoulder on trunk roads in Japan</b></p> <p>K. Ogawa<sup>1*</sup>, <sup>1</sup>Ritsumeikan University, Japan</p>
C4-PO8 <sup>®</sup>	<p><b>A rare event logistic model of traffic injuries on tourist routes</b></p> <p>R. Tay<sup>1*</sup>, <sup>1</sup>RMIT University, Australia</p>
C4-PO9 <sup>®</sup>	<p><b>Effectiveness of a theory based road safety message in changing drivers' intention among different populations</b></p> <p>R. Tay<sup>1*</sup>, <sup>1</sup>RMIT University, Australia</p>
C4-P10 <sup>®</sup>	<p><b>A stochastic approach to the benefit cost ratio analysis of safety treatments</b></p> <p>S. Cafiso<sup>1*</sup>, C. D'Agostino<sup>1</sup>, <sup>1</sup>University of Catania, Italy</p>
C4-P11 <sup>®</sup>	<p><b>Identifying secondary crashes in geographic information systems: A case study of interstate highways in the state of Florida</b></p> <p>Y.T. Tian<sup>1</sup>, H.Y.C. Chen<sup>1*</sup>, <sup>1</sup>Embry-Riddle Aeronautical University, USA</p>
C4-P12 <sup>®</sup>	<p><b>Investigation of road accident severity per vehicle type</b></p> <p>G. Yannis<sup>1*</sup>, A. Theofilatos<sup>1</sup>, G. Pispiringos<sup>1</sup>, <sup>1</sup>National Technical University of Athens, Greece</p>
C4-P13 <sup>®</sup>	<p><b>Investigating factors affecting the occurrence and severity of rear-end crashes</b></p> <p>M. Shawky<sup>1,2</sup>, M. Kishta<sup>2</sup>, H. Al-Harthei<sup>2*</sup>, <sup>1</sup>Ain Shams University, Egypt, <sup>2</sup>Abu Dhabi Traffic Police, United Arab Emirates</p>
C4-P14 <sup>®</sup>	<p><b>An optimization model for locating speed cameras in rural roads (Case study of Iran)</b></p> <p>M. Saffarzadeh<sup>3,2</sup>, B. Mirbaha<sup>1*</sup>, M. Hosseini<sup>2,3</sup>, <sup>1</sup>Imam Khomeini International University, Iran, <sup>2</sup>Azad University of Zanjan, Iran, <sup>3</sup>Tarbiat Modares University, Iran</p>
C4-P15 <sup>®</sup>	<p><b>A field study of visual search in driving: Comparison of two buses</b></p> <p>T.A. Kuo<sup>1</sup>, C.J. Lin<sup>1</sup>, B.S. Liu<sup>2*</sup>, <sup>1</sup>National Taiwan University of Science and Technology, Taiwan, <sup>2</sup>St. John's University, Taiwan</p>
C4-P16 <sup>®</sup>	<p><b>Comparative study on e-bikes' decision-making behaviors under flashing green and green countdown</b></p> <p>C. Lyu<sup>1*</sup>, J. Zhou<sup>1</sup>, S. Dong<sup>1</sup>, K. Li<sup>2</sup>, S. Liu<sup>3</sup>, <sup>1</sup>Ningbo University of Technology, China, <sup>2</sup>Tongji University, China, <sup>3</sup>Fuzhou University, China</p>
C4-P17 <sup>®</sup>	<p><b>Factors affecting drivers' gap acceptance behaviour at uncontrolled intersection in India</b></p> <p>D.S. Pawar<sup>1</sup>, G.R. Patil<sup>1*</sup>, <sup>1</sup>IIT Bombay, India</p>
C5-PO1 <sup>®</sup>	<p><b>Performance-dependent humidity state division of subgrade in seasonal frozen region</b></p> <p>D.X. Li<sup>1*</sup>, Z.G. Chen<sup>1</sup>, J.M. Ling<sup>2</sup>, <sup>1</sup>Jilin Provincial Communication Scientific Research Institute, China, <sup>2</sup>Tongji University, China</p>

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C5-PO2 <sup>®</sup>	<b>Trusted measurement and evaluation for ITS products</b> C.Y. Lin <sup>1*</sup> , B.W. Gong <sup>1</sup> , X. Qu <sup>1</sup> , <sup>1</sup> Jilin University, China, <sup>2</sup> State Key Laboratory of Automotive Simulation and Control, China
C5-PO3 <sup>®</sup>	<b>A rational strategy for resource allocation for rural road maintenance</b> P.K. Agarwal <sup>1*</sup> , A.B. Khan <sup>1</sup> , S. Choudhary <sup>1</sup> , <sup>1</sup> Maulana Azad National Institute of Technology, India
C5-PO4	<b>A bottom-up solution for the system-level joint optimization of pavement maintenance and rehabilitation planning</b> L. Zhang <sup>1*</sup> , W. Gu <sup>1</sup> , <sup>1</sup> Hong Kong Polytechnic University, Hong Kong
C5-PO5 <sup>®</sup>	<b>The impact of systematic retro-reflection testing of road markings on their visibility</b> A. Scukanec <sup>1</sup> , D. Babic <sup>1*</sup> , D. Babic <sup>1</sup> , <sup>1</sup> Faculty of Transport and Traffic Sciences, Croatia

## TOPIC D: ACTIVITY AND TRANSPORT DEMAND

**3B - Tuesday, 12 July: 10:30-12:10**

**Session Chair: Doina Olaru**

D1-PO1 <sup>®</sup>	<b>Are travel behaviours stable in space and time?</b> M. Siska <sup>1*</sup> , <sup>1</sup> KTI Institute for Transport Sciences Non-profit Ltd., Hungary
D1-PO2 <sup>®</sup>	<b>Pedestrian travel behavior in large Chinese cities, a case study of the Shanghai central city</b> Y. Chen <sup>1</sup> , J. Jiao <sup>2*</sup> , J. Mao <sup>1</sup> , H. Wu <sup>1</sup> , <sup>1</sup> Tong Ji University, China, <sup>2</sup> The University of Texas at Austin, USA
D1-PO3	<b>Exploring the nexus between e-commerce and urban land use planning - e-commerce impacts on mobility and location strategies</b> F. Pettersson <sup>1*</sup> , W. Hiselius <sup>1</sup> , T. Koglin <sup>1</sup> , <sup>1</sup> Lund University, Sweden
D1-PO4	<b>Differences of travellers' preferences between air and rail transport in an area with new competitive high-speed railway</b> Y. Kobashikawa <sup>1,2*</sup> , M. Fujiu <sup>2</sup> , J. Takayama <sup>2</sup> , S. Nakayama <sup>2</sup> , <sup>1</sup> Dentsu Inc., Japan, <sup>2</sup> Kanazawa University, Japan
D1-PO5 <sup>®</sup>	<b>Research on the evaluation method and characteristics of expressway travel time reliability</b> J.N. Chen <sup>1*</sup> , S.R. Zhang <sup>1</sup> , Y.L. Jin <sup>1</sup> , <sup>1</sup> Chang'an University, China
D1-PO6 <sup>®</sup>	<b>Effective factors in walking mode choice of different age groups for school trips</b> Y. Hatamzadeh <sup>1*</sup> , M. Habibian <sup>1</sup> , A. Khodaii <sup>1</sup> , <sup>1</sup> Amirkabir University of Technology, Iran
D1-PO7	<b>Travel behavior in central and Eastern Europe: A Bratislava case study</b> V. Gabrhel <sup>1*</sup> , P. Senk <sup>1</sup> , M. Lazor <sup>1</sup> , J. Ondrackova <sup>1</sup> , <sup>1</sup> Transport Research Centre (CDV), Czech Republic
D1-PO8 <sup>®</sup>	<b>A genetic algorithm based population synthesizer</b> C. Zhuge <sup>1,2*</sup> , C. Shao <sup>1</sup> , X. Li <sup>3</sup> , J. Gao <sup>1</sup> , H. Zhang <sup>1</sup> , <sup>1</sup> Beijing Jiaotong University, China, <sup>2</sup> University of Cambridge, UK, <sup>3</sup> Beijing Institute of Technology, China
D1-PO9 <sup>®</sup>	<b>How long to get to my workplace? Commuting trends and gender differences in travel time</b> D.D.A. Dissanayake <sup>1*</sup> , <sup>1</sup> Newcastle University, UK
D1-P10	<b>Variational bayes method for estimating transit route OD flows using boarding and alighting data in the presence of multiple latent flow patterns: Methodology, evaluation, and validation</b> A.J. Landgraf <sup>1,2</sup> , R.G. Mishalani <sup>1*</sup> , M.R. McCord <sup>1</sup> , P.K. Goel <sup>1</sup> , <sup>1</sup> The Ohio State University, USA, <sup>2</sup> Battelle, USA

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D2-PO1 <sup>®</sup>	<p><b>Constrained multinomial probit route choice modelling for passengers in large-scaled metro networks in China</b>  Y.S. Zhang<sup>1*</sup>, E.J. Yao<sup>1</sup>, H. Wei<sup>2</sup>, T. Zuo<sup>2</sup>, S.S. Liu<sup>1</sup>, <sup>1</sup>Beijing Jiaotong University, China, <sup>2</sup>University of Cincinnati, USA</p>
D2-PO2 <sup>®</sup>	<p><b>A combined activity nodes choice and trip-chain based user equilibrium traffic assignment model for urban transportation planning</b>  C-Y. Wang<sup>1*</sup>, S-R. Hu<sup>2</sup>, C-P. Chu<sup>3</sup>, <sup>1</sup>National Defense University, Taiwan, <sup>2</sup>National Cheng Kung University, Taiwan, <sup>3</sup>National Dong Hwa University, Taiwan</p>
D2-PO3	<p><b>Psychological profiles of commuters in Cagliari</b>  E. Sottile<sup>1</sup>, I. Meloni<sup>1*</sup>, E. Cherchi<sup>2</sup>, <sup>1</sup>University of Cagliari, Italy, <sup>2</sup>Technical University of Denmark, Denmark</p>
D3-PO1 <sup>®</sup>	<p><b>Exploring the benefits of a traveller clustering approach based on multimodality attitudes and behaviours</b>  J.D. Rodriguez Cote<sup>1</sup>, M. Diana<sup>1*</sup>, <sup>1</sup>Politecnico di Torino, Italy</p>
D3-PO2 <sup>®</sup>	<p><b>The effects of the integration of metro station and mega-multi-mall on consumers' activities: A case study of Shanghai</b>  H.X. Pan<sup>1</sup>, X.R. Lin<sup>1*</sup>, <sup>1</sup>Tongji University, China</p>
D3-PO3	<p><b>Secondary airport network connectivity: Gravity modelling air transport demand within multi-airport systems</b>  D.W. Alexander<sup>1*</sup>, R. Merkert<sup>1</sup>, <sup>1</sup>University of Sydney, Australia</p>
D3-PO4 <sup>®</sup>	<p><b>Evaluating the impact of new lines on entrance/exit passenger flow of adjacent existing stations in urban rail transit system</b>  S. Liu<sup>1*</sup>, E. Yao<sup>1</sup>, X. Cheng<sup>1</sup>, Y. Zhang<sup>1</sup>, <sup>1</sup>Beijing Jiaotong University, China</p>
D3-PO5 <sup>®</sup>	<p><b>Travel demand forecasting for the Mesopotamia line in Argentina</b>  J.W. Kim<sup>1*</sup>, <sup>1</sup>Korail Research Institute, Republic of Korea</p>
D3-PO6	<p><b>Modelling the propensity to cycle. An experimental analysis</b>  I. Meloni<sup>1</sup>, B. Sanjust di Teulada<sup>1*</sup>, E. Sottile<sup>1</sup>, <sup>1</sup>University of Cagliari, Italy</p>
D3-PO7 <sup>®</sup>	<p><b>AgBM-DTALite: An integrated modelling system of agent-based travel behavior and transportation network dynamics</b>  C. Xiong<sup>1*</sup>, L. Zhang<sup>1</sup>, X. Zhou<sup>2</sup>, S. Mahapatra<sup>3</sup>, C. Baber<sup>4</sup>, <sup>1</sup>University of Maryland, USA, <sup>2</sup>Arizona State University, USA, <sup>3</sup>Maryland State Highway Administration, USA, <sup>4</sup>Baltimore Metropolitan Council, USA</p>
D3-PO8 <sup>®</sup>	<p><b>Improving estimation of inter-regional passenger flows model by zero-observation treatment and model performance</b>  X.C. Do<sup>1,2*</sup>, M. Tsukai<sup>1</sup>, <sup>1</sup>Hiroshima University, Japan, <sup>2</sup>University of Transport and Communications, Vietnam</p>
D3-PO9 <sup>®</sup>	<p><b>Preference heterogeneity towards the importance of transfer facilities at metro stations in Kolkata</b>  S. Sadhukhan<sup>1</sup>, U.K. Banerjee<sup>1</sup>, B. Maitra<sup>1*</sup>, <sup>1</sup>Indian Institute of Technology Kharagpur, India</p>
D3-P10	<p><b>Investigating temporal transferability of vehicle ownership models: A case study of The Dhaka Metropolitan Area, Bangladesh</b>  F. Anyiko<sup>1*</sup>, C. Choudhury<sup>1</sup>, <sup>1</sup>University of Leeds, UK</p>
D3-P11 <sup>®</sup>	<p><b>Transit route-level passenger alighting probability, probability OD flow and expected OD flow matrices: Estimates from boarding and alighting counts and relationships among the representations</b>  Y. Ji<sup>1*</sup>, R.G. Mishalani<sup>2</sup>, M.R. McCord<sup>2</sup>, <sup>1</sup>Tongji University, China, <sup>2</sup>The Ohio State University, USA</p>

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D3-P12 <sup>®</sup>	<b>Effects of cost adjustment on travel mode choice: Analysis and comparison of different logit models</b> T. Bai <sup>1,2*</sup> , X. Li <sup>1</sup> , Z. Sun <sup>3</sup> , <sup>1</sup> Beijing Jiaotong University, China, <sup>2</sup> Beijing Transportation Research Center, China, <sup>3</sup> Tsinghua University, China
D3-P13 <sup>®</sup>	<b>Inferring weekly primary activity patterns using public transport smart card data and a household travel survey</b> S.A. Ordóñez Medina <sup>1,2*</sup> , <sup>1</sup> Singapore ETH Centre, Singapore, <sup>2</sup> ETH Zurich, Switzerland
D4-PO1 <sup>®</sup>	<b>Do Information and Communications Technologies influence transport demand? An exploratory study in the European Union</b> A. Urbanek <sup>1*</sup> , J. Kos-Labedowicz <sup>1</sup> , <sup>1</sup> University of Economics in Katowice, Poland
D4-PO2	<b>An analysis of urban activities considering concentration of life-related facilities and out-home activities</b> R.S. Shimizu <sup>1*</sup> , M.K. Kuwano <sup>1</sup> , M.T. Tsukai <sup>1,2</sup> , <sup>1</sup> Tottori University, Japan, <sup>2</sup> Hiroshima University, Japan

## TOPIC E: TRANSPORT ECONOMICS AND FINANCE

3D - Tuesday, 12 July: 15:30-17:10

Session Chair: Charles Raux

E1-PO1 <sup>®</sup>	<b>Measurement of value of time for freight trips and its benefit by market information</b> H. Morisugi <sup>1*</sup> , <sup>1</sup> Nihon University, Japan
E1-PO2 <sup>®</sup>	<b>Road charging in multi-level-systems - National decisions under consideration of the EU-level from a political economic view</b> S. Krause <sup>1*</sup> , M. Nofz <sup>1</sup> , T. Peters <sup>1</sup> , <sup>1</sup> University Bremen, Germany
E1-PO3	<b>ICT port-related innovations: An effective strategic decision</b> V. Carlan <sup>1*</sup> , C. Sys <sup>1</sup> , T. Vanelslander <sup>1</sup> , <sup>1</sup> University of Antwerp, Belgium
E1-PO4	<b>Transport integration in a privatised bus market: The role of quality contract schemes</b> C.R. Rivasplata <sup>1*</sup> , <sup>1</sup> San Jose State University, USA
E1-PO5	<b>A strategic assessment tool for evaluating European transport policies - The HIGH-TOOL approach</b> E. Szimba <sup>1*</sup> , J. Ihrig <sup>1</sup> , M. Kraft <sup>1</sup> , J. Kiel <sup>2</sup> , R. van Grol <sup>3</sup> , A. Ulled <sup>4</sup> , M. Chen <sup>5</sup> , J. Purwanto <sup>6</sup> , R. Corthout <sup>6</sup> , O. Ivanova <sup>5</sup> , <sup>1</sup> Karlsruhe Institute of Technology (KIT), Germany, <sup>2</sup> Panteia, The Netherlands, <sup>3</sup> Significance, The Netherlands, <sup>4</sup> Mcrit, Spain, <sup>5</sup> TNO, The Netherlands, <sup>6</sup> TML, Belgium, <sup>7</sup> MKmetric Gesellschaft für Systemplanung mbH, Germany
E1-PO6 <sup>®</sup>	<b>Shipping enterprise performance evaluation under uncertainty base on multiple-criteria evidential reasoning approach</b> T.T.B. Bao <sup>1*</sup> , X.L.X. Xie <sup>1</sup> , P.Y.L. Long <sup>1</sup> , <sup>1</sup> Dalian Maritime University, China
E1-PO7	<b>The measurement of China's Rail Transport Efficiency</b> T. Zhang <sup>1*</sup> , C.H. Rong <sup>1</sup> , <sup>1</sup> School of Economics and Management, Beijing Jiaotong University, China
E2-PO1 <sup>®</sup>	<b>Using micro simulation of city traffic to determine a cordon charge based on marginal network social cost</b> Y. Sun <sup>1</sup> , J. Taplin <sup>1*</sup> , <sup>1</sup> The University of Western Australia, Australia
E2-PO2 <sup>®</sup>	<b>Studying of parking charges at park and ride facilities in Izmir, Turkey</b> Y. Alver <sup>1*</sup> , I. Balgabayeva <sup>1</sup> , <sup>1</sup> Ege University, Turkey
E2-PO4	<b>Pricing strategies for a taxi-hailing platform</b> X.L. Wang <sup>1*</sup> , <sup>1</sup> Shanghai Jiao Tong University, China

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E2-PO6®	<p><b>Effects of the change of toll system on social surplus : A case study of distance-based toll in Tokyo Metropolitan Expressway</b></p> <p>I. Otaki<sup>1*</sup>, Y. Imanishi<sup>1</sup>, K. Miyatake<sup>2</sup>, T. Nemoto<sup>2</sup>, N. Uchiyama<sup>1</sup>, <sup>1</sup><i>Public Planning &amp; Policy Studies, Inc., Japan</i>, <sup>2</sup><i>Hitotsubashi University, Japan</i></p>
E2-PO7®	<p><b>Evaluating toll revenue uncertainty using neural network models</b></p> <p>Y. Zhao<sup>1*</sup>, H. Zhao<sup>1</sup>, <sup>1</sup><i>Jacobs, USA</i>, <sup>2</sup><i>AECOM, USA</i></p>
E2-PO8®	<p><b>Tariff analysis of trans metro banding (TMB) under ATP, WTP, and society travel behaviour</b></p> <p>A. Hayati<sup>1*</sup>, P. Pradono<sup>1</sup>, H. Purboyo<sup>1</sup>, <sup>1</sup><i>Bandung Institute of Technology, Indonesia</i>, <sup>2</sup><i>Padjadjaran University, Indonesia</i></p>
E2-PO9	<p><b>Dynamic pricing: Case study on Indian railways</b></p> <p>A. Kumar<sup>1*</sup>, S. Das<sup>1</sup>, <sup>1</sup><i>Ministry of Railways, Government of India, India</i></p>
E2-P10	<p><b>Welfare effectiveness of public transport subsidy in Seoul Metro Region</b></p> <p>J.I. Kim<sup>1</sup>, G.W. Ahn<sup>1*</sup>, Y.J. Kim<sup>1</sup>, S.I. Kim<sup>1</sup>, <sup>1</sup><i>The Korea Transport Institute, Republic of Korea</i></p>
E2-P11	<p><b>Has London's congestion charge zone affected firm location choices?</b></p> <p>A. Broaddus<sup>1*</sup>, <sup>1</sup><i>UC Berkeley, USA</i></p>
E2-P12®	<p><b>Tradeable credits scheme on urban travel demand: A linear expenditure system approach and simulation in Beijing</b></p> <p>M. Xu<sup>1*</sup>, S. Grant-Muller<sup>2</sup>, <sup>1</sup><i>Beijing Jiaotong University, China</i>, <sup>2</sup><i>University of Leeds, UK</i></p>
E2-P13®	<p><b>Reforming tax system for sustainable transport infrastructure funding in Korea</b></p> <p>J.Y. Kim<sup>1*</sup>, J.H. Kang<sup>1</sup>, <sup>1</sup><i>The Korea Transport Institute, Republic of Korea</i></p>
E2-P14®	<p><b>Application of E-Tag in pricing road tolls and parking fees for traffic congestion mitigation</b></p> <p>C.P. Chu<sup>1*</sup>, C.Y. Wang<sup>2</sup>, S.R. Hu<sup>3</sup>, <sup>1</sup><i>National Dong Hwa University, Taiwan</i>, <sup>2</sup><i>National Defense University, Taiwan</i>, <sup>3</sup><i>National Cheng Kung University, Taiwan</i></p>
E2-P15	<p><b>Equitable and progressive distance-based user charges: Design and evaluation of income-based mileage fees in Maryland</b></p> <p>D.Y. Yang<sup>1</sup>, E.K. Kastrouni<sup>1*</sup>, L.Z. Zhang<sup>1</sup>, <sup>1</sup><i>University of Maryland, USA</i></p>
E2-P16	<p><b>Congestion pricing and revenue refunding: What is the optimal share distributed towards mass transit system?</b></p> <p>F. Mirabel<sup>1</sup>, M. Reymond<sup>1*</sup>, <sup>1</sup><i>LAMETA, France</i></p>
E2-P17®	<p><b>Stochastic tolling to achieve long-run system optimum under tolerance-based probabilistic user equilibrium</b></p> <p>B.K. Bhavathrathan<sup>1</sup>, G.R. Patil<sup>1*</sup>, <sup>1</sup><i>Indian Institute of Technology Bombay, India</i></p>
E2-P18®	<p><b>Fare estimation for demand responsive transport based on a stated preference survey</b></p> <p>W.C. Kim<sup>1</sup>, M. Nangung<sup>2</sup>, J.W. Kim<sup>3</sup>, <sup>1</sup><i>Chungnam Institute, Republic of Korea</i>, <sup>2</sup><i>Wonkwang University, Republic of Korea</i>, <sup>3</sup><i>Korail Research Institute, Republic of Korea</i></p>
E3-PO1®	<p><b>A theoretical study on yardstick competition and franchise bidding based on a dynamic model</b></p> <p>S. Harada<sup>1*</sup>, H. Yamauchi<sup>2</sup>, <sup>1</sup><i>Gifu University, Japan</i>, <sup>2</sup><i>Hitotsubashi University, Japan</i></p>
E3-PO2®	<p><b>The discussion of system optimism and user equilibrium in traffic assignment with the perspective of game theory</b></p> <p>C. Wang<sup>1</sup>, Y.Q. Tang<sup>1*</sup>, <sup>1</sup><i>Tongji University, China</i></p>
E3-PO3	<p><b>Optimal concession contracts for landlord port authorities under price competition of terminal operators</b></p> <p>H.C. Chen<sup>1*</sup>, Y.H. Lin<sup>1</sup>, S.M. Liu<sup>1</sup>, <sup>1</sup><i>National Taipei University, Taiwan</i></p>
E3-PO4®	<p><b>The governance of surface transportation in the 21<sup>st</sup> Century: VDOT institutional responses to environmental changes</b></p> <p>J.L. Gifford<sup>1*</sup>, L. Bolanõs<sup>1</sup>, M. Transue<sup>1</sup>, J.Y. Kweun<sup>1</sup>, N. Daito<sup>2</sup>, <sup>1</sup><i>George Mason University, USA</i>, <sup>2</sup><i>Northern Virginia Transportation Commission, USA</i></p>

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E3-PO5®	<b>Evaluating highway public-private partnerships: Evidence from U.S. value for money studies</b> J.Y. Kweun <sup>1</sup> , P.K. Wheeler <sup>1</sup> , J.L. Gifford <sup>1*</sup> , <sup>1</sup> <i>George Mason University, USA</i>
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## TOPIC F: TRANSPORT, LAND USE AND SUSTAINABILITY

### 4A - Wednesday, 13 July: 08:30-10:10

#### Session Chair: Ruth Steiner

F1-PO1®	<b>A new at-grade transportation network without signalized intersection, roundabout, or stop sign for land use and transportation planning</b> S. Pravinvongvuth <sup>1*</sup> , I.C. Matarage <sup>1</sup> , <sup>1</sup> <i>Asian Institute of Technology, Thailand</i>
F1-PO2®	<b>Research on phenomenon of urban regeneration and optimization of land-use around light rail transit in Nanhai district of Foshan city</b> J.W. Huang <sup>1</sup> , Y. Xu <sup>2</sup> , C.F. Wang <sup>2</sup> , L. Xiong <sup>2</sup> , J. Hai <sup>1</sup> , <sup>1</sup> <i>Guangdong University of Technology, China</i> , <sup>2</sup> <i>South China University of Technology, China</i>
F2a-PO1®	<b>A theoretical overview of road hump effects on traffic noise in improving residential well-being</b> K.S.R. Bachok <sup>1*</sup> , A.A. Kadar Hamsa <sup>1</sup> , M.Z. Mohamed <sup>1</sup> , M. Ibrahim <sup>1</sup> , <sup>1</sup> <i>International Islamic University Malaysia, Malaysia</i>
F2b-PO1®	<b>Urban spatial structure and transport energy consumption: New evidence from 51 cities in China</b> J. Diao <sup>1*</sup> , P. Zhao <sup>1</sup> , <sup>1</sup> <i>Peking University, China</i>
F2b-PO2®	<b>Research on individual carbon dioxide emissions of commuting in peri-urban area of metropolitan cities--an empirical study in Shanghai</b> P.W. Wei <sup>1*</sup> , H.X.P. Pan <sup>1</sup> , <sup>1</sup> <i>Wuhan Land Use and Urban Spatial Planning Research Center, China</i> , <sup>2</sup> <i>Tongji University, China</i>
F2b-PO3®	<b>Calculation and scenario analyses of urban passenger transportation energy consumption in China</b> P. Li <sup>1*</sup> , P. Zhao <sup>1</sup> , <sup>1</sup> <i>Peking University, China</i>
F2b-PO4®	<b>Achieving energy savings by intelligent transportation systems investments in the context of smart cities</b> Y. Chen <sup>1</sup> , A. Ardila Gomez <sup>1*</sup> , G. Frame <sup>1</sup> , J.P. Velez <sup>1</sup> , A. Hoyos-Guerrero <sup>1</sup> , F. Arroyo-Arroyo <sup>1</sup> , Y. Zong <sup>1</sup> , N. Beschorner <sup>1</sup> , A. Shrestha <sup>1</sup> , <sup>1</sup> <i>World Bank, USA</i>
F2c-PO1®	<b>Urban mobility indexes: A brief review of the literature</b> P.B. Costa <sup>1</sup> , G.C. De Morais Neto <sup>1*</sup> , A.I. Bertolde <sup>1</sup> , <sup>1</sup> <i>Universidade Federal do Espírito Santo-UFES, Brazil</i>

## TOPIC G: TRANSPORT PLANNING AND POLICY

### 4B - Wednesday, 13 July: 10:30-12:10

#### Session Chair: Stephen Ison

G2-PO1	<b>The different dimensions of job accessibility - A case study in Belgium</b> L. Bakelants <sup>1*</sup> , A. Verhetsel <sup>1</sup> , <sup>1</sup> <i>University of Antwerp, Belgium</i>
G2-PO2®	<b>Strategy for China intercity-railway operation management model based on varied investors</b> L.X. Zhou <sup>1*</sup> , F.L. Wang <sup>1</sup> , <sup>1</sup> <i>Tongji University Zhejiang College, China</i>
G2-PO3®	<b>A study on appropriate road spacing for the functionally hierarchical network planning</b> A. Goto <sup>1*</sup> , H. Nakamura <sup>1</sup> , <sup>1</sup> <i>Nagoya University, Japan</i>

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G2-PO4 <sup>®</sup>	<b>An emergency vehicles allocation model for major industrial disasters</b> G. Fancello <sup>1</sup> , S. Mancini <sup>2</sup> , C. Pani <sup>3*</sup> , P. Fadda <sup>1</sup> , <sup>1</sup> University of Cagliari, Italy, <sup>2</sup> Polytechnic of Turin, Italy, <sup>3</sup> CIREM, Italy
G2-PO5 <sup>®</sup>	<b>Evaluation of location estimation method for bus location system based on wireless sensor networks</b> W. Nishio <sup>1*</sup> , H. Suzuki <sup>1</sup> , Y. Matsumoto <sup>1</sup> , <sup>1</sup> Meijo University, Japan
G2-PO6 <sup>®</sup>	<b>Estimation of GHG emission reduction by Inter-City bus transfer service at Expressway rest areas using user characteristics data</b> S.K. Wu <sup>1,2</sup> , S. Lee <sup>1*</sup> , <sup>1</sup> Korea Transport Institute, Republic of Korea, <sup>2</sup> International Transport Forum, France
G2-PO7	<b>State of the art of multimodal macroscopic transport modelling</b> J. Schlaich <sup>1</sup> , U. Heidl <sup>1</sup> , H. Li <sup>1*</sup> , <sup>1</sup> PTV Group, Germany
G2-PO8	<b>Rail station squares in Wuhan, China and London, UK: incorporating node-place and user perspectives</b> N. Li <sup>1*</sup> , <sup>1</sup> University College London, UK
G2-PO9 <sup>®</sup>	<b>Newly established airlines developing process and changing patterns of its air route in China</b> C.T.W. Wu <sup>1*</sup> , P. Lei <sup>1</sup> , <sup>1</sup> Sichuan University, China
G2-P10 <sup>®</sup>	<b>How to measure the level of activity opportunities secured by rural public transport service: The capability approach</b> H. Kita <sup>1</sup> , H. Yotsutsuji <sup>1*</sup> , M. Ikemiya <sup>2</sup> , Y. Suga <sup>3</sup> , <sup>1</sup> Kobe University, Japan, <sup>2</sup> TIS Inc., Japan, <sup>3</sup> Japan Airlines Co., Ltd., Japan
G2-P11 <sup>®</sup>	<b>Delivering sustainable mobility targets: Which individuals are more likely to switch from private to greener transport options?</b> F. Ali <sup>1*</sup> , D. Dissanayake <sup>1</sup> , <sup>1</sup> Newcastle University, UK
G2-P12 <sup>®</sup>	<b>Is reducing car use a utopian vision?</b> A.H. Hayden <sup>1*</sup> , M.T. Tight <sup>1</sup> , M.B. Burrow <sup>1</sup> , <sup>1</sup> University of Birmingham, UK
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G3-P13 <sup>®</sup>	<b>A quantitative model to analyse the impact of flooding and congestion on cities: Case study for the city of Rotterdam</b> R. Pennings <sup>1*</sup> , B. Wiegman <sup>1</sup> , R. Verhaeghe <sup>1</sup> , F. Sanders <sup>1</sup> , <sup>1</sup> <i>TU Delft, The Netherlands</i>
G3-P14	<b>Modeling mass transit nets and urban development issues: "The right to the city" as a new framework to rethink systems</b> D.P.P. Ferreira <sup>*1,2</sup> , L.F. Hagemann <sup>3,4</sup> , <sup>1</sup> <i>Università IUAV di Venezia, Italy</i> , <sup>2</sup> <i>Federal University of Rio de Janeiro, Brazil</i> , <sup>3</sup> <i>Fundação Instituto de Pesquisa e Planejamento Urbano de Joinville, Brazil</i> , <sup>4</sup> <i>Universidade Federal de Santa Catarina, Brazil</i>
G3-P15	<b>Efficiency evaluation in public transport operators in France: A stochastic frontier analysis</b> S. Jarboui <sup>1,2</sup> , L. Bouzouina <sup>*1</sup> , <sup>1</sup> <i>University of Lyon, France</i> , <sup>2</sup> <i>University of Sfax, Tunisia</i>
G4-PO1 <sup>®</sup>	<b>Relation between public transportation service based on awareness and migration in Japan</b> A. Kondo <sup>1*</sup> , A. Kondo <sup>2</sup> , <sup>1</sup> <i>Shikoku University, Japan</i> , <sup>2</sup> <i>Tokushima University, Japan</i>
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G4-PO5	<b>Analysing the effect of social networks, built environment, and personality traits on out-of-home leisure activity generation: A case study of Fukuoka, Japan</b> G. Troncoso Parady <sup>1</sup> , G. Katayama <sup>1*</sup> , H. Yamazaki <sup>1</sup> , T. Yamanami <sup>1</sup> , K. Takami <sup>1</sup> , N. Harata <sup>1</sup> , <sup>1</sup> <i>The University of Tokyo, Japan</i>
G4-PO6 <sup>®</sup>	<b>Transport accessibility and gender inequalities, the case of Bogota</b> M.C. Lecompte <sup>1*</sup> , J.P. Bocarejo <sup>1</sup> , <sup>1</sup> <i>Universidad de los Andes, Colombia</i>
G4-PO7	<b>Car sharing in the Netherlands: User characteristics and mobility effects</b> P. Jorritsma <sup>1</sup> , L. Harms <sup>1*</sup> , J. Baveling <sup>1</sup> , H. Nijland <sup>1</sup> , J. van Meerkerk <sup>1</sup> , <sup>1</sup> <i>KIM Netherlands Institute for Transport Policy Analysis, The Netherlands</i>

## TOPIC H: TRANSPORT IN DEVELOPING AND EMERGING COUNTRIES

4C - Wednesday, 13 July: 13:30-15:10

Session Chair: Binyam Reja

H1-PO1 <sup>®</sup>	<b>Influence of personal banking behaviour on the usage of the electronic card for toll road payment</b> T.B. Joewono <sup>1*</sup> , B.A. Effendi <sup>1</sup> , H.S.A. Gultom <sup>1</sup> , R.P. Rajagukguk <sup>2</sup> , <sup>1</sup> <i>Parahyangan Catholic University, Indonesia</i> , <sup>2</sup> <i>Ministry of Public Work, Indonesia</i>
H1-PO2 <sup>®</sup>	<b>Urban form and spatial urban equity in Bogota, Colombia</b> L.A. Guzman <sup>1*</sup> , J.P. Bocarejo <sup>1</sup> , <sup>1</sup> <i>Universidad de los Andes, Colombia</i>

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H2-PO1 <sup>®</sup>	<b>The construction of complex railway stations in Megalopolises - Based on Shanghai railway station</b> Y. Kai <sup>1*</sup> , H. Gangyu <sup>1</sup> , <sup>1</sup> College of Urban Planning of Tongji University, China
H2-PO2 <sup>®</sup>	<b>Planning of LNG filling stations for road freight: A case study of Shenzhen</b> Y. Li <sup>1,2</sup> , W. Li <sup>1,2*</sup> , Y. Yu <sup>1,2</sup> , L. Bao <sup>1,2</sup> , <sup>1</sup> The Key Laboratory of Road and Traffic Engineering, Ministry of Education, China, <sup>2</sup> Tongji University, China
H2-PO3 <sup>®</sup>	<b>Behavior patterns of long-term car-sharing users in China</b> Y. Hui <sup>1*</sup> , W. Wang <sup>1</sup> , M. Ding <sup>1</sup> , Y. Liu <sup>1</sup> , <sup>1</sup> Tongji University, China, <sup>2</sup> Chelizi Intelligent Technology Company, China
H2-PO4 <sup>®</sup>	<b>Evaluation of socio-economic impact of city bus services in developing countries</b> P.K. Agarwal <sup>1*</sup> , J. Gurjar <sup>1</sup> , V. Gupta <sup>1</sup> , <sup>1</sup> Maulana Azad National Institute of Technology, India
H2-PO5 <sup>®</sup>	<b>A prediction model of bus arrival time at stops with multi-routes</b> T. Yin <sup>1*</sup> , G. Zhong <sup>1</sup> , J. Zhang <sup>1</sup> , S. He <sup>1</sup> , B. Ran <sup>1</sup> , <sup>1</sup> Southeast University, China
H2-PO6 <sup>®</sup>	<b>Road safety analysis using multi criteria approach: A case study in India</b> K. Shalini <sup>1*</sup> , R.A. Ruchika Agarwala <sup>1</sup> , D. Bhupali Dutta <sup>1</sup> , N. Pooja N.Bhanegaonkar <sup>1</sup> , A.P. Ajit Pratap Singh <sup>1</sup> , A.K. Sarkar <sup>1</sup> , <sup>1</sup> Birla Institute of Technology and Science Pilani, India
H3-PO1 <sup>®</sup>	<b>Unbalanced lane usage and driver's lane preference at multiple left-turn lanes</b> L. Li <sup>1*</sup> , Z.R. Peng <sup>2</sup> , Y.T. Chang <sup>1</sup> , L.Y. Zheng <sup>1</sup> , <sup>1</sup> Ministry of Education, China, <sup>2</sup> University of Florida, USA
H4-PO1	<b>Optimal transit routing algorithm for large scale road networks</b> N. Goel <sup>1*</sup> , N.R. Velaga <sup>1</sup> , P. Vedagiri <sup>1</sup> , T.V. Mathew <sup>1</sup> , <sup>1</sup> IIT Bombay, India
H4-PO2	<b>Achievement of the harmonization of vehicle overloading control in the East African Community</b> Y. Nakagawa <sup>1*</sup> , <sup>1</sup> PADECO, Japan
H5-PO1	<b>Transport-based social exclusion in developing societies: A case of study in Bangladesh</b> D.P.B. Perez Barbosa <sup>1*</sup> , J.Z. Zhang <sup>1</sup> , <sup>1</sup> Hiroshima University, Japan
H5-PO2	<b>Evidence from the evaluation of several bus rapid transit systems around the world</b> J.M. Velasquez <sup>1*</sup> , P. Guarda <sup>3</sup> , C. Albuquerque <sup>5</sup> , X. Chen <sup>4</sup> , G. Zhong <sup>1</sup> , <sup>1</sup> World Resources Institute, USA, <sup>2</sup> World Resources Institute, Colombia, <sup>3</sup> Pontificia Universidad Catolica, Chile, <sup>4</sup> CUSTReC/CATS, China, <sup>5</sup> WRI Cities, Brazil
H5-PO3	<b>Qualitative analysis for selection of bus priority techniques and operational strategies in the context of emerging countries</b> K. Bhattacharyya <sup>1*</sup> , B. Maitra <sup>1</sup> , M. Boltze <sup>2</sup> , <sup>1</sup> Indian Institute of Technology Kharagpur, India, <sup>2</sup> Technische Universität Darmstadt, Germany
H5-PO4	<b>Analysis of illegal parking behaviour in Hanoi city</b> V. Vu Anh Tuan <sup>1*</sup> , <sup>1</sup> Vietnamese-German University, Vietnam
H5-PO5 <sup>®</sup>	<b>Analysing behavioural intentions in new residential developments of motorcycle dependent cities: A case of Ho Chi Minh City, Vietnam</b> L.Q. Hoang <sup>1*</sup> , T. Okamura <sup>1</sup> , <sup>1</sup> Toyo University, Japan
H5-PO6 <sup>®</sup>	<b>Improving legibility of urban center area by an integrated pedestrian signage system : A case study of Shanghai</b> Y. Li <sup>1</sup> , L. Bao <sup>1</sup> , W. Li <sup>1</sup> , H. Deng <sup>1</sup> , <sup>1</sup> Tongji University, China

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