

# **7th International Conference on Traffic and Transportation Studies 2010**

**Kunming, China  
3-5 August 2010**

**Volume 1 of 2**

**Editors:**

**Baohua Mao  
Zongzhong Tian**

**Haijun Huang  
Ziyou Gao**

**ISBN: 978-1-61738-879-8**

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© (2010) by the American Society of Civil Engineers  
All rights reserved.

Printed by Curran Associates, Inc. (2010)

For permission requests, please contact the American Society of Civil Engineers  
at the address below.

American Society of Civil Engineers  
1801 Alexander Bell Drive  
Reston, VA 20191

Phone: (800) 548-2723  
Fax: (703) 295-6333

[www.asce.org](http://www.asce.org)

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2634  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

# TABLE OF CONTENTS

## VOLUME 1

<b>Extracting Land Cover/Use from Remotely Sensed Imagery: Potentials for Urban Planning .....</b>	1
<i>Ming Zhong, Yun Zhang, Ahad Beykaei, Bahram Salehi, Mike Ircha, Yongdae Gweon, Sheng Gao</i>	
<b>Backcasting Assessment of Strategies for Efficiently Sustainable Urban Transport Developments of Developing Cities .....</b>	13
<i>Xuesong Feng, A. Fujiwara, J. Y. Zhang, X. J. Niu, Y. Hayashi</i>	
<b>Sustainable Mobility and Sustainable Transport for Medium-Size Cities in China .....</b>	27
<i>Reinhart Kühne, Martin Ruhé, Xiaoxu Bei</i>	
<b>A Sustainable Development Based Land Use Assessment for Freeway Construction .....</b>	37
<i>Yan Liu, Jianfeng Liu, Kerong Deng</i>	
<b>The Future of Interdisciplinary Policy Research in Africa: A Case Study of the Transport Sector .....</b>	47
<i>Fred Amonya</i>	
<b>Taxi Demand Modeling to Ensure Appropriate Taxi Supply: Do Both Open Access and Model Based Restrictions Fail? .....</b>	60
<i>James M. Cooper, Wim Faber</i>	
<b>Actions Taken on Green Transport: Experiences of Beijing .....</b>	73
<i>Xiaoming Liu, Jinchuan Chen, Zhili Liu, Haibo Chen, Yu Ge</i>	
<b>Shanghai Poly-Center Urban Planning and the Impact of Transport System .....</b>	85
<i>Haixiao Pan</i>	
<b>Guangzhou Comprehensive Transportation Development Strategy (2010-2020) .....</b>	97
<i>Xiaoyi Ma</i>	
<b>Development in Market Structure and Regulation of Urban Bus Services in Developing Countries and Countries in Transition .....</b>	110
<i>Brendan Finn, Corinne Mulley</i>	
<b>An Available International Freight Transport System with Rail Container and RORO/Ferry Ship .....</b>	122
<i>Guoquan Li</i>	
<b>Ports Spatial Structure Analytical Method and Case Study .....</b>	132
<i>Shilin Han, Tian Xu, Tao You, Liping Zhao</i>	
<b>A Study on the Development of Urban Environment Measure's Evaluation Model .....</b>	144
<i>Tetsuo Morita, Hiroshi Sugita, Shengchuan Zhao</i>	
<b>Cost Structure of Urban Bus Operations in Yangon, Myanmar .....</b>	156
<i>Hironori Kato, Nozomi Saito, Akihiro Inagi, Phyoe Thet Thet Htun</i>	
<b>Transport Infrastructure and Economic Development: An Empirical Study for China.....</b>	166
<i>Huang Qian, Harata Noboru</i>	
<b>Estimating Greenhouse Gases from Roadway Transportation—Methodology Overview .....</b>	174
<i>Delwar Murshed</i>	
<b>Adaptation Strategies for Low Carbon Transport by 2050 .....</b>	186
<i>Hector G. Lopez-Ruiz</i>	
<b>Emission Volume, Air Quality, and Health Effects in Japan: The Cases of Tokyo, Kawasaki, Osaka, Amagasaki, and Kita Kyusyu .....</b>	201
<i>Keiko Hirota, Shigeru Kashima</i>	
<b>Optimization of Mode Share for Low-Carbon-Oriented Urban Passenger Transportation System.....</b>	220
<i>Liang X. Pi, Yamamoto Toshiyuki, Morikawa Takayuki</i>	
<b>A Comparative Study on Chinese and Foreign Road Transport Energy Consumption Statistical Indicators.....</b>	228
<i>Qipeng Sun, Baohua Mao, Shuping Jia</i>	
<b>Comparison Analysis of Idle Emissions Measurement Program in JABODETABEK, Indonesia .....</b>	238
<i>S. B. Nugroho, A. Fujiwara, Junyi Zhang</i>	
<b>Estimation of CO<sub>2</sub> Mitigation Potential from Freight Transport Based on System Dynamics Model—A Case Study of Beijing, China .....</b>	256
<i>Yunjing Wang, Jinling Fei, Xuesong Feng, Hidefumi Imura, Yoshitsugu Hayashi</i>	
<b>An Analytical Method for Intersection Entering Traffic Flow Estimation.....</b>	269
<i>Rui Wang, Ryota Horiguchi, Shinji Tanaka, Masao Kuwahara</i>	
<b>Cycle Length Optimization at Isolated Signalized Intersections from the Viewpoint of Emission.....</b>	275
<i>Danpeng Ma, Hideki Nakamura</i>	
<b>Influence of the Number of Through Lane Groups on Saturation Flow Rates at Signalized Intersections .....</b>	285
<i>Wanchao Zhang, Yang Wang, Xiaokuan Yang</i>	

<b>The Impact Analysis of Intersection Sight Distance on Vehicle Speed.....</b>	295
<i>Miaomiao Liu, Guangquan Lu, Yang Li</i>	
<b>Intersection Safety Evaluation Model .....</b>	305
<i>Shengxue Zhu, Jian Lu, Gu Wang</i>	
<b>Measuring the Saturation Flow, Lost Time, and Passenger Equivalent Values of Signalized Intersection.....</b>	312
<i>Henk J. van Zuylen, Jie Li</i>	
<b>One Approximate and Simple Method for Signal Timing of Overlap Phasing .....</b>	330
<i>Jingyuan Wang, Wencai Liu</i>	
<b>Arterial Signal Timing and Coordination: Sensitivity Analyses and Partition Techniques .....</b>	338
<i>Wei (David) Fan, Zong Z. Tian</i>	
<b>Green Wave Control of Traffic Signal of Inducible Pre-Formation at Section of Road.....</b>	351
<i>Shuqiao Chen, Jingyi Sun</i>	
<b>Optimizing Signalized Roundabout by Computer Simulation (Case Study: Pelem Gurih Roundabout, Yogyakarta).....</b>	357
<i>Ahmad Munawar, Sigit Haryanto</i>	
<b>Dynamic Traffic Flow Equilibrium and Coordinated Signal Control for Ramps and Adjacent Intersections .....</b>	365
<i>Lixia Bao, Xiang Gao, Weiquan Zhu, Hong Chen</i>	
<b>Design of Signal Timing Optimization Based on the Unsymmetrical Traffic Flow of Signalized Intersections .....</b>	374
<i>Zhongyi Zuo, Guangchuan Yang, Chunfu Shao</i>	
<b>A Study on the Improvement of T-Intersection Signal Timing.....</b>	386
<i>Rui Li, Wenquan Li</i>	
<b>Effects of the Spatial Distance between Two Adjacent Bus Stops on Traffic Flow .....</b>	394
<i>Tieqiao Tang, Haijun Huang, Yan Li, Xin Bai</i>	
<b>Traffic Stream Modeling under Heterogeneous Traffic Conditions .....</b>	401
<i>Ajitha Thankappan, Yamem Tamut, Lelitha Vanajakshi</i>	
<b>A Novel Method for Traffic Bottlenecks Identification in Urban Traffic Network .....</b>	412
<i>Yu Zhou, Jianming Hu, Yi Zhang, Huasheng Yang</i>	
<b>The Area Traffic Control System Evaluation Method Based on Travel Time Reliability.....</b>	423
<i>Zhiyong Guo, Wei Wang</i>	
<b>Evaluation on Vehicle Restriction Measure in Beijing .....</b>	433
<i>Shuling Wang, Chunfu Shao, Fang Wang, Jianping Sun</i>	
<b>Traffic Flow Characteristics of Urban Expressway in the Period of Ice and Snow of Cold Areas.....</b>	444
<i>Enhui Xing, Rui Wang</i>	
<b>Performance Evaluation Model for Traffic Networks.....</b>	451
<i>Yang Jiang, Jianjun Wu, Huijun Sun</i>	
<b>The Adjustment Factor of Road Section Crosswalk on Urban Road Capacity.....</b>	459
<i>Aizeng Li, Xinsheng Song, Binghua Wu, Lihua Liu</i>	
<b>Effects of Speed Difference on Capacity of Freeway .....</b>	469
<i>Hao Wang, Wei Wang</i>	
<b>Spatial Correlation Analysis of Congested Links in Urban Traffic Networks .....</b>	477
<i>Dan Ma, Huijun Sun, Linghui Han</i>	
<b>Improvement Project Choice Based on Efficiency Analysis.....</b>	486
<i>Gu Wang, Shengxue Zhu, Xiucheng Guo</i>	
<b>A Distributed Shortest-Path Routing Algorithm for Transportation Systems .....</b>	494
<i>Bin Zou, Jianming Hu, Qi Wang, Gangkai Ke</i>	
<b>Multi-Constrained Shortest Path Model and Solution with Improved Ant Colony Algorithm .....</b>	501
<i>Yaomin Hu, Yuyin Liu, Weiming Liu</i>	
<b>Congestion Pricing Model Based on Cumulative Prospect Theory .....</b>	511
<i>Yuyin Liu, Weiming Liu, Yaomin Hu, Jie Li</i>	
<b>Evaluation of Tools for Incorporating Road User Costs in Pavement Rehabilitation Decision Making on Rural Highways in Saskatchewan.....</b>	522
<i>Ningning Zheng, Guoxin Liu, Yee-Chuang Jin</i>	
<b>Comparison of Cordon and Optimal Toll Points Road Pricing Using Genetic Algorithm.....</b>	535
<i>Zhi Zuo, Ryo Kanamori, Tomio Miwa, Takayuki Morikawa</i>	
<b>Identifying Key Factors Affecting Students' Travel Modes Using the Multi-Perspectives Diagnosis Approach .....</b>	545
<i>Huaguo Zhou, Peter Hsu, Shaoqiang Chen</i>	

<b>Modeling Destination Choice for the Intermediate Stop Trips Included in the Commute Activity Patterns.....</b>	557
<i>Min Yang, Wei Wang, Xuewu Chen, Yingxiang Yang</i>	
<b>Analysis on Effective Information and Travel Activity Returning Home by Car under Downpour .....</b>	566
<i>Jun Sakamoto, Motohiro Fujita</i>	
<b>Behavioral Characteristics of Self-Driving Tourists: A Case Study in Kunming.....</b>	577
<i>Baohong He, Jun Chen, Wei Wang</i>	
<b>Route Choice Analysis of Bus-Use Commuters in Yangon, Myanmar.....</b>	587
<i>Hironori Kato, Akihiro Inagi, Phyto Thet Thet Htun</i>	
<b>An Inhabitant Travel Time Distribution Model.....</b>	598
<i>Junjuan Liu, Fenyi Dong, Bingjun Li</i>	
<b>Traffic Cognitions, Behaviors, and Education of Child Pedestrians: A Case Study in Kunming, China .....</b>	605
<i>Yaqin Qin, Jian Xiong, Fengxiang Guo, Huasen Wan, Xianguang Jia</i>	
<b>Comparison of Urban Link Travel Time Estimation Models Based on Probe Vehicle Data .....</b>	615
<i>Fangfang Zheng, Henk van Zuylen</i>	
<b>Research Review about Moped Accidents and the Necessity of Time Dimensional Management in University Campus Traffic .....</b>	627
<i>Carlos Nava Fonseca, Makoto Okumura</i>	
<b>Future Forecast of Chinese Trade Amount and International Cargo Flow.....</b>	638
<i>Ryuichi Shibasaki, Tomihiro Watanabe</i>	
<b>Influencing Trip Departure Decisions: The Role of Institutions .....</b>	656
<i>Anthony T. H. Chin</i>	
<b>Traffic Modal Splitting Model Based on Game Theory with Incomplete Information .....</b>	667
<i>Chunjiao Dong, Chunfu Shao, Yuewen Gao, Yinhong Liu, Dan Zhao</i>	
<b>Inductive-Based Machine Learning and the Application in Assessment of Ship Handling.....</b>	678
<i>Xinjie Han, Xianyao Meng, Song Meng</i>	
<b>Travel Mode Choice Modeling Based on Improved Probabilistic Neural Network.....</b>	685
<i>Dan Zhao, Chunfu Shao, Juan Li, Chunjiao Dong, Yinhong Liu</i>	
<b>Complex Networks Model for Urban Passenger Transport Systems: A Case Study of Harbin Taxi.....</b>	696
<i>Jian Wang, Xiaowei Hu, Chong Wei</i>	
<b>Performance Evaluation of Bus Transit Routes Based on the BCC Model .....</b>	705
<i>Yadan Yan, Xiucheng Guo, Chaoping Liu</i>	
<b>Creating Multi-Routes Combination Bus Timetable .....</b>	712
<i>Bingqiang Situ, Wenzhou Jin, Ming Wei</i>	
<b>Ant Colony System for Multi-Depot Bus Scheduling Problem with Budget and Pollutant Emission Control.....</b>	723
<i>Ming Wei, Wenzhou Jin, Bo Sun, Xiaoni Hao</i>	

## VOLUME 2

<b>A Corridor-Based Earthquake Evacuation Model .....</b>	733
<i>Fei Song, Yang Wang, Xiaokuan Yang</i>	
<b>Designing and Implementing a Service Oriented Traveler Information System .....</b>	741
<i>Jun Liu, Dongmei Lin, Chunyan Li</i>	
<b>Mobile Sensors as Traffic Probes: Addressing Transportation Modeling and Privacy Protection in an Integrated Framework .....</b>	750
<i>Xuegang (Jeff) Ban, Marco Gruteser</i>	
<b>Deriving Rules for Trip Purpose Identification from GPS Travel Survey Data and Land Use Data: A Machine Learning Approach.....</b>	768
<i>Zhongwei Deng, Minhe Ji</i>	
<b>Prediction of Freeway Travel Time in Incident Management Evaluation Based on Genetic Neural Network .....</b>	778
<i>Ding He, Fujian Ni, Shunxin Yang</i>	
<b>A Preliminary Test on the Interactions between Land Use and Travel Models.....</b>	787
<i>Shengyi Gao, Eric Lehmer, Yang Wang, Michael McCoy, Robert A. Johnston, Dimantha De Silva, John Abraham, John Dougalas Hunt</i>	
<b>Assessment of the Congestion Impacts of Fatal Accidents Using SCOOT Data.....</b>	800
<i>Leighton M. O. Cardwell, Haibo Chen, Margaret C. Bell</i>	
<b>Radar Velocity-Measuring System Design and Computation Algorithm Based on ARM Processor .....</b>	813
<i>Yi Zeng, Jianmin Xu, Deng Peng</i>	

<b>Critical Speed Prediction at Unsignalized Intersection under Mixed Traffic Condition.....</b>	823
<i>Joevono Prasetijo, Molla Mohammad Ali, Ning Wu</i>	
<b>First Order Phase Transition in a New Cellular Automaton Model within the Framework of Kerner's Three-Phase Traffic Theory .....</b>	838
<i>Junfang Tian, Bin Jia, Xingang Li, Fangfei Zhang</i>	
<b>Traffic Prediction in Metropolitan Freeways.....</b>	846
<i>Carlo Liberto, Roberto Ragona, Gaetano Valenti</i>	
<b>Urban Short-Term Traffic Flow Forecasting Based on the Semi-Variable Cell Transmission Model.....</b>	861
<i>Xiaojian Hu, Wei Wang, Jian Lu</i>	
<b>Spatial and Temporal Aggregation Analysis for Space-Mean Speed Estimates Using Autoscope Video Detection Data.....</b>	872
<i>Zhongyi Wu, William H. K. Lam, Mei Lam Tam</i>	
<b>The Application of Support Vector Machines (SVM) for Traffic Condition Prediction Using ITS Data .....</b>	882
<i>Dazhi Sun, Qixing Wang, Xinguo Jiang</i>	
<b>Applying Locally Linear Embedding on Feature Extraction of Traffic Flow Data .....</b>	891
<i>Yenan Chen, Jianming Hu, Yi Zhang, Di Li</i>	
<b>Study on the Evaluation System and Prediction Approach on Traffic Congestion Index of RTMS Data .....</b>	903
<i>Zhenjun Wang, Lijuan Que, Jing Liu, Jizhen Guan</i>	
<b>Hardware-in-the-Loop Simulation: Challenges and Solutions .....</b>	915
<i>Isaac K. Isukapati, Alixandra Demers, George F. List</i>	
<b>Network-Wide Road Travel Time Estimation with Inconsistent Sensor Data .....</b>	927
<i>Shao Hu, William H. K. Lam, Agachai Sumalee, Anthony Chen</i>	
<b>A Robust Kalman Filter Based Data Fusion Method for Traffic Speed Estimation .....</b>	937
<i>Depin Peng, Jianping Wu, Chunlu Wang, Xingquan Zuo</i>	
<b>A New Concept of Level of Service for Freeway Weaving, Merge and Diverge Segments and Its Applications.....</b>	948
<i>Ning Wu</i>	
<b>A Simulation Study of Environmental Impact of Automated Truck Lanes on Intercity Expressways.....</b>	959
<i>Xun Sun, Tomio Miwa, Toshiyuki Yamamoto, Takayuki Morikawa</i>	
<b>Determining Design Speed of Truck Escape Ramp Based on Back Analysis Method .....</b>	969
<i>Hongqi Liu, Tao Shen, Fang Wang, Weihan Zhang</i>	
<b>Study of the Effectiveness of Nighttime and Truck Speed Limits .....</b>	977
<i>Dazhi Sun</i>	
<b>Study on Unsignalized Access Points Using Microscopic Traffic Simulation .....</b>	990
<i>Guoqiang Zhang, Jian Lu</i>	
<b>Effects of Freeway Exit Ramp Types on Traffic Operations .....</b>	999
<i>Yongfeng Ma, Junping Xie, Jian Lu, Chuan Lu</i>	
<b>Capacity Analysis of Type-A Weaving Section by Using Cellular Automata Model .....</b>	1010
<i>Xingang Li, Ziyou Gao, Bin Jia</i>	
<b>Length of Acceleration and Deceleration Lane on Urban Expressway .....</b>	1019
<i>Xinsheng Song, Aizeng Li, Binghua Wu, Lihua Liu</i>	
<b>Self-Motion Speed Perception on Visual Information in Driving: Modeling and Validation.....</b>	1029
<i>Hirofumi Yotsutsuji, Hideyuki Kita</i>	
<b>Car Routing and Distribution Model Based on Kirchhoff's Electric Current Law .....</b>	1046
<i>Yajing Zheng, Xingchen Zhang</i>	
<b>Three Dilemma Zone Strategies for High-Speed Rural Intersections: Comparison of Field Results.....</b>	1056
<i>Alixandra Demers, George F. List, Isaac K. Isukapati</i>	
<b>The Method of Survey and Statistics of Passenger Transport Volume in County Highway Networks.....</b>	1067
<i>Liqiang Wang, Xiansheng Li, Yuanyuan Ren</i>	
<b>Estimating Dynamic Transport Population for Official Statistics Based on GPS/GSM.....</b>	1076
<i>Yinyi Ma, Jan van Dalen, Chris de Blois, Jo van Nuen</i>	
<b>Time Contours: Using IC Toll Information to Describe Public Transport Networks Accessibility .....</b>	1089
<i>Lianxiang Gao, Jianping Wu, Rui Liu</i>	
<b>Research and Development of Public Transit Route Inquiry System Based on GIS .....</b>	1098
<i>Mingming Chen, Xi Chen, Huimin Niu</i>	
<b>Conceptual Framework and Mathematical Model for Optimizing Train Blocking and Scheduling Synchronization .....</b>	1106
<i>Haiying Li, Lingyun Meng, Jianrui Miao, Xi Jiang, Zhenhuan He</i>	
<b>An Energy-Efficient Control Algorithm and Simulation of Urban Rail Transit Systems.....</b>	1116
<i>Haidong Liu , Yun Bai, Jing Yang, Fangming Zhou, Baoshan Wang, Peng Du, Baohua Mao</i>	
<b>A Method to Correct the Mileage Error in Railway Track Geometry Data and Its Usage.....</b>	1130
<i>Haifeng Li, Yude Xu</i>	

<b>Train Departure Mode and Line Capacity in Inter-City Railway</b>	1136
<i>Peng Du, Baohua Mao, Hui Zhao, Baoshan Wang, Liu Haidong</i>	
<b>Wagon Flow Organization Modeling Based on Distributed Autonomous Decision-Making</b>	1147
<i>Xuesheng Ji, Xi Jiang, Wei Wang</i>	
<b>Petri Net Modeling of Spatial and Temporal Constraints in Track Allocation Problem at Railway Stations</b>	1158
<i>Wenzheng Jia, Tinkin Ho, Zhengji Chen, Baohua Mao</i>	
<b>A Rolling Optimization Approach of Train Scheduling of Passenger Dedicated Lines</b>	1166
<i>Ying Wang, Jianrui Miao, Fang Lei, Jun Liu</i>	
<b>Improvement of CFG Pile Corrosion Resistance Capability in the Application of Wu-Guang Passenger Transport Special Railway</b>	1175
<i>Kunlin Ma, Youjun Xie, Guangcheng Long, Fei Feng</i>	
<b>Multistage Linear Prediction Model of Track Quality Index</b>	1183
<i>Huan Chang, Rengkui Liu, Wei Wang</i>	
<b>Relation between Railway Track Alignment Irregularity and Gross Passing Tonnage</b>	1193
<i>Ran Guo, Baoming Han, Futian Wang</i>	
<b>A Short-Range Prediction Model for Track Irregularity of a Shorter Section of Track</b>	1203
<i>Peng Xu, Quanxin Sun, Qing Li, Rengkui Liu, Futian Wang</i>	
<b>A Method for Organizing Long-Distance Passengers on Railway Passenger Dedicated Lines</b>	1217
<i>Rong Hua, Jun Liu, Yun Bao</i>	
<b>The Operating Conditions of Long-Distance Passenger Trains on Railway Passenger Dedicated Lines</b>	1228
<i>Yun Bao, Rong Hua, Jun Liu</i>	
<b>Safety Management System in Civil Aviation: Our Perspective</b>	1238
<i>Leping Yuan, Ruishan Sun, Dongbin Li</i>	
<b>A Slot Allocation Algorithm for the Flights</b>	1244
<i>Tiangang Zhang, Ronglu Sun, Xiaoyun Hou, Rentian Yue</i>	
<b>GNSS Evolutionary Architecture for Civil Aviation Utilization</b>	1254
<i>Qian Sun, Jun Zhang, Yanbo Zhu</i>	
<b>Application of Jute Geo-Textile in the Moorum-Sand Mixed Layer as Granular Subbase of Flexible Pavement</b>	1269
<i>Tapash Kumar Roy</i>	
<b>Recent Development of Pavement Engineering Research in Hong Kong</b>	1276
<i>L. W. Cheung, W. G. Wong, Gordon L. M. Leung</i>	
<b>A Nonlinear Viscoelastic Constitutive Model of Aged Asphalt Mixture</b>	1286
<i>Xiaoge Tian</i>	
<b>Influence Factors and Anti-Rutting Agent of High-Temperature Stability of Asphalt Mixture</b>	1293
<i>Ping Li, Xiuli Wang, Huishan Li, Yu Qian</i>	
<b>Effect of Activators on Mechanical Properties of Steam-Cured Fly Ash Concrete</b>	1303
<i>Zhimin He, Junzhe Liu</i>	
<b>Effect of Sisal Fiber on Anti-Slide Performance for Asphalt Pavement Surface</b>	1310
<i>Xiaowen Lei, Xiaoming He, Peng Guan, Pengfei Deng</i>	
<b>Optimization of Steel Fiber Used for Induction Heating in Porous Asphalt Concrete</b>	1320
<i>Quantao Liu, Erik Schlangen, Martin van de Ven, Marco Poot</i>	
<b>Effect of Alternative Materials on Engineering Properties of Alluvial Soil for Construction of Road Subgrade</b>	1331
<i>Tapash Kumar Roy, B. C. Chattopadhyay, S. K. Roy</i>	
<b>Effects of Contaminants on Skid Resistance of Asphalt Pavements</b>	1341
<i>Ping Cao, Xinping Yan, Xiuqin Bai, Chengqing Yuan</i>	
<b>Using Mineral Fibers to Improve Asphalt and Asphalt Mixture Behavior</b>	1352
<i>Lihua Zhao, Jingyun Chen, Shengwu Wang</i>	
<b>Dynamic Analysis of Damage Behavior of Vibration Compaction on Concrete Bridges</b>	1361
<i>Xin Yu, Yuhua Fu</i>	
<b>Creep Tests and Viscoelastic Analysis of Rubber Asphalt Concrete</b>	1371
<i>Yuliang Chen</i>	
<b>Shrinkage Performance of Cement-Treated Macadam Base Materials</b>	1378
<i>Yan Wang, Xiang Ma, Zhilin Sun</i>	
<b>Vertical Load-Carrying Natural Frequency of Railway Continuous Steel Truss Bridges</b>	1387
<i>Jianying Ren, Mubiao Su, Qingyuan Zeng</i>	
<b>Anti-Cracking Ability of Asphalt Mixture Added with Polyester Fiber</b>	1399
<i>Xin Yu, Lijun Sun</i>	
<b>Centrifuge Model Tests on Settlement Controlling of Piled Embankment in High Speed Railway</b>	1407
<i>Changdan Wang, Binglong Wang, Xu Wang, Shunhua Zhou</i>	

<b>Determining the Rational Completion Cable Forces Based on Influence Matrix Method United with Minimum Bending Energy Method .....</b>	1417
<i>Jun Yang</i>	
<b>Light Polymer Cement Mortar Overlay for Bridge Decks.....</b>	1425
<i>Xuelian Li, Yuliang Chen, Zhigang Zhou</i>	
<b>Numerical Simulation and Experimental Research of Bridge Damage Identification.....</b>	1432
<i>Alan Jiang</i>	
<b>Estimation of Average Vehicle Time Headway for Light Traffic .....</b>	1439
<i>Baibing Li</i>	
<b>Trading Facilitation in the Black Sea Area .....</b>	1447
<i>Radu Hanzu-Pazara, Paulica Arsenie, Anastasia Varsami, Corina Popescu, Georgiana Sivriu, Ramona Bejan</i>	
<b>Determination of Crash Surrogates Using Tire Skid Marks.....</b>	1457
<i>Hongyan Gao, Zong Z. Tian</i>	
<b>Author Index</b>	