

5th Advanced Forum on Transportation of China 2009 (AFTC 2009)

IET Conference Publications 560

**Beijing, China
17 October 2009**

ISBN: 978-1-61738-381-6

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© (2009) by the Institution of Engineering and Technology
All rights reserved.

Printed by Curran Associates, Inc. (2010)

For permission requests, please contact the Institution of Engineering and Technology
at the address below.

Institution of Engineering and Technology
P. O. Box 96
Stevenage, Hertfordshire
U.K. SG1 2SD

Phone: 01-441-438-767-328-328
Fax: 01-441-438-767-328-375

www.theiet.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
Web: www.proceedings.com

TABLE OF CONTENTS

The Growth Potential of Container Shipping on the Yangtze River	1
<i>A.W. Veenstra, Mo Zhang, M. Ludema</i>	
Development Strategy of Rail Freight Transportation Under Financial Crisis	10
<i>Bin Shuai, Haomin Yan</i>	
A Comparative Study on Port Hinterland Intermodal Container Transport: Shanghai and Rotterdam	15
<i>M. Zhang, B. Wiegman, L.A. Tavasszy</i>	
Long-distance Gas Medium Pipeline Transportation - Coal As an Example	26
<i>Yongsheng Qian, Xiaoting Yin, Peng Sun, Zhengzheng Ren, Zhidan Lv</i>	
Regulatory Mechanism of China's Highway-market	30
<i>Shan Liu</i>	
Supply and Demand Analysis on World Shipping Market with an Insight Into Dry Bulk Market	35
<i>Jianli Li, Hong Zhen, Kai Xu</i>	
Joint Hub System Management and Policy of Integrated Transport Network	41
<i>Xiuyuan Zhang, Tingyue Kong, Guowu Zhang, Yalan Hu</i>	
Expanding Capacity of Regional Freight Transportation Network in Financial Crisis	46
<i>Hongqi Li, Hongtao Gao</i>	
Reflections on Legislation About Construction of Integrated Transportation System	51
<i>Xiang Zheng, Xinhua Fu</i>	
Competitiveness of Inland Ports Based on F-AHP	57
<i>Fengyan Zhang, Zhi Li, Xiaojun Lu, Xiaolei Yao</i>	
Pricing Strategy of State-owned Expressway Company: From the Perspective of Social Responsibility	62
<i>Fei Yan, Jianwei Wang</i>	
Thoughts on China's Comprehensive Transportation System Under Financial Crisis	69
<i>Na Wang, Wenquan Li</i>	
Return Model of Integration Capital of Railway Industry with Financing and Return Prediction	75
<i>Hongwu Zhao, Jiaqiong Wang</i>	
Green Transport Practice in Beijing	80
<i>Zhili Liu, Xiaoming Liu, Yu Ge, Jinchuan Chen</i>	
Competitive Advantage of Chinese Passenger Dedicated Line Co. Based on Customer Value	85
<i>Huizhu Li, Yu Zhao</i>	
Freight Transport Demand Prediction Model of Freight Corridor	91
<i>Yun Bai, Yang Pei, Lingling Yang, Meiquan Xie, Zengyong Zhang</i>	
Modeling Discounted Fares for Passenger Dedicated Lines	96
<i>Lirong Liu, Jin Zeng, Lei Nie</i>	
Competitiveness Model of Freight Transport Corridor	100
<i>Mingjun Liu, Junjie Shao, Shaokuan Chen, Yun Bai, Baohua Mao</i>	
Pricing Mechanism in Waste Tires Based on Circular Economy	106
<i>Jiechen Wu, Li Lei, Qijian Li</i>	
Expression System of Passenger Train Plan in High-speed Railway	111
<i>Huaying Zhou, Jin Zeng, Lei Nie</i>	
Energy Consumption Calculation and Consumption Level of Passenger Commercial Vehicles	115
<i>Qipeng Sun, Qingyun Wang, Baohua Mao, Wuxuan Li</i>	
Analysis on Relationship Between Economic Growth and Freight Transport	120
<i>Junjie Shao, Xiao Liang, Liping Gao, Yuanzhou Yang, Hongqin Peng</i>	
Impact Analysis of Financial Crisis on China's Railway with Life Cycle Theory	125
<i>Penghao Yang, Huanghua Xu</i>	
Organization Mode of Suburban Railways in Urban Rail Transit System	129
<i>Rong Huang, Zhili Liu, Dongbo Wang, Lin Ma</i>	
Lessons of a Recession for Transport Demand Modelling	137
<i>L.G. Willumsen, A. Liu</i>	
The Parallel Flow Intersection: A New High Capacity Urban Intersection	143
<i>G.F. Parsons</i>	
A Model for Estimating the High Occupancy Toll (HOT) Lanes Parameters	151
<i>M. Mirzaei</i>	
Transfer Efficiency Evaluation Between Urban Metro and Buses with Grey Correlation Method	156
<i>Yongneng Xu, Shijun Yu, Yingshun Liu</i>	

Optimal Transit Fare Structure and Departure Frequency Under Monopoly Market Regime	162
<i>Ding Liu, Qiong Tian, Jianxun Ding</i>	
Economic Analysis of Financial Subsidy in Urban Public Transit	167
<i>Yifan Zhang, Laifang Sheng</i>	
Travel Mode Choice Behavior of Taxi Passengers	172
<i>Dexin Zhang, Lijing Song</i>	
Architecture for Structural Optimization of Urban Road Networks - Case Study of Beijing City	176
<i>Xinhua Liu, Zhuangzhi Sun</i>	
Urban Public Transportation Modes Coupling Study Based on Residents Travelling	181
<i>Wei Yan, Xuemei Li, Ting Ding</i>	
Dynamic Adaptability of Urban Rail Transit Network	187
<i>Xiaoli Zheng, Feng Chen, Zhigang Yang, Tao Xin</i>	
A Delay Model of Pedestrian-vehicle System on Two Crossings	192
<i>Liping Gao, Zhili Liu, Qi Xu, Xuji Feng</i>	
Safety Analysis of Taxi Lane Changing Behavior	199
<i>Lingling Yang, Quanxin Sun, Shaokuan Chen, Yu Huang</i>	
Determination of Traffic Impact Scope: Beijing's Experience	204
<i>Kai Qi, Xingchen Zhang, Baohua Mao</i>	
Driving Decision Support Environment of Information for Intelligent Vehicles	209
<i>Lan Liu</i>	
Modeling and Analyzing Departure Time Slots Allocation to Optimize Dynamic Network Capacity - The Case of A15-motorway to Rotterdam Port	214
<i>Yinyi Ma, H.J. van Zuylen, Yusen Chen, J. van Dalen</i>	
Mountain Asphalt Pavement in High Temperature and Rainy Area	223
<i>Wuyi Feng, Naixing Liang, Yuanwen Cao, Yu Wang</i>	
Numerical Simulation of Cyclist Injuries in Vehicle to Electric-bicycle Collision	227
<i>Qingfeng Lin, Qingchun Wang, Jianrong Fu, Jiao Shang, Yong Lu</i>	
Lane-to-lane Urban Traffic Behaviors Under Different Time Scales	233
<i>Meng Xu, Jin Yang, Fang Fang, Keping Li, Ziyou Gao</i>	
Mechanical Analysis of Cable-stayed Bridge with Low Towers and Its Advancement	239
<i>Xiongwei Shi, Wei Feng</i>	
EV Market Expansion Based on BASS Model	243
<i>Zhenlin Wei, Yue Wu, Ailing Huang</i>	
Comprehensive Approaches for Road Traffic Safety Evaluation	248
<i>Qiao Lan, Yibing Li</i>	
Evaluation of Transverse Shoving Deformation in Asphalt Pavement: Impact of Tire Pressure	252
<i>Yinghao Miao, Jinxi Zhang</i>	
Urban Expressway Capacity Model of Expressway On-ramp Junction	257
<i>Yun Qiu, Wenquan Li</i>	
Application of Access Management Techniques in China Under Global Financial Crisis	261
<i>Guoqiang Zhang, Jian Lu, Qiaojun Xiang</i>	
A Correction Model of Loaded Train's Grade Resistance Calculation	267
<i>Yong Ding, Fangming Zhou, Yun Bai, Ruijie Li</i>	
Study on Graded Gravel Basement in Tibet	272
<i>Naixing Liang, Wuyi Feng, Yuanwen Cao, Yi Zhao</i>	
To Solve Train-set Scheduling Problem with Considering the Inspection Capacities of Multi-depots	276
<i>Caichun Zhang, Wei Hua, Jianhua Chen, Liang Zhu</i>	
Author Index	