

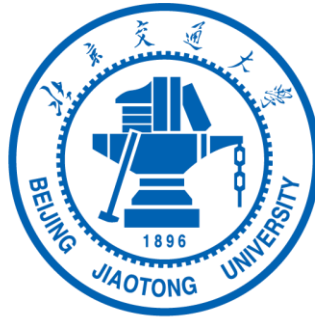


TSTE 2019

**The 7th International Conference on Transportation and
Space-time Economics (TSTE 2019)**

—Sustainable Development of City Transportation

Conference Programme



tste.bjtu.edu.cn

**Hosts: School of Economics and Management, Beijing Jiaotong University
BJTU Research Institute on Beijing Integrated Transportation Development
of Capital High-End Think Tank**

**Co-hosts: Beijing Transport Institute
Chinese Society of Technology Economics
China Railway Society
Chongqing Jiaotong University
Research Center for Beijing Transportation Development**

11-13 October, 2019 Beijing



中国技术经济学会
Chinese Society of Technology Economics



ELSEVIER



高德地图
amap.com





The 7th International Conference on Transportation and Space-time Economics (TSTE 2019) is organized by School of Economics and Management, Beijing Jiaotong University, and BJTU Research Institute on Beijing Integrated Transportation Development of Capital High-end Think Tank, co-organized by Beijing Transport Institute, Chinese Society of Technology Economics, China Railway Society, Chongqing Jiaotong University and Research Center for Beijing Transportation Development, and sponsored by Heju Investment, Elsevier, Amap and the Key Research Project of National Social Science Fund (17ZDA084).

For more information, please visit our website at tste.bjtu.edu.cn.

E-mail: tste@bjtu.edu.cn

Tel: +86-(0)10-51684066

Fax: +86-(0)10-51684925

Address: Room 603, Siyuan East Building, No. 3, ShangYuanCun, Haidian District, Beijing, China, 100044

Emergency call of TSTE Organization Committee:

Xiaojun Zhao, 15801410169 (mobile phone)

Hongchang Li, 18910836509 (mobile phone)



Table of Contents

Welcome Remarks	1
Conference Organization	3
Program Overview	10
Plenary Session.....	14
High-end Think Tank Forum.....	39
Editors-in-Chief Conference.....	57
Training School.....	60
Special Sessions	70
Parallel Sessions.....	94
Venue and Accommodation.....	97
Transportation	99



Welcome Remarks

On behalf of the organizing committee, we would like to extend the earnest welcome and gracious greeting to all of you, to attend the 7th International Conference on Transportation and Space-time Economics (TSTE 2019), organized by Beijing Jiaotong University.

The theme of TSTE 2019 is sustainable development of city transportation. Growing economies in cities often face increased traffic congestion, leading to longer trip times, increased pollution and fuel waste. Sustainable transport systems make a positive contribution to the environmental, social and economic sustainability of the communities they serve. The TSTE 2019 aims at bringing together researchers, practitioners and government regulators working in industry and academia to provide them with a platform to report on the latest developments, achievements, deployments, technology trends and research findings as well as initiatives related to sustainable development of city transportation, space-time economics, and their applications.

Distinguished transportation economists at home and abroad are invited to give keynote speeches at the plenary session. Besides, High-end Think Tank Forum for sustainable city transport policies will be organized and representatives from governmental bodies, influential transportation enterprises and prominent research institutions will give speeches and discuss on important urban transportation strategic, operational and policy issues. Editors-in-chief Conference will provide the participants with the introduction and comments on how to publish papers in journals by EICs. Training program of TSTE 2019 will be given by leading professors and editors-in-chief in the transportation field.

The leading researchers and editors-in-chief of first-class transportation journals worldwide will attend the conference. Selected papers reviewed through strict process will be recommended to publish in 5 SCI/SSCI journals (after a second round of review) and we have 9 SCI/SSCI supporting journals, and all the



papers are qualified to attend to Excellent Paper Contest held by Chinese Society of Technology Economics.

Your participation and presentation are indispensable parts of our conference. We are looking forward to seeing you in October in Beijing Jiaotong University. Finally, we would like to express our gratitude to our sponsors, organizer, and co-organizers, without the help of whom this great event would be impossible.

We wish you a pleasant experience at Beijing!



Professor Zhongliang Guan
Vice President, Beijing Jiaotong University



Professor Qiusheng Zhang
Dean of School of Economics and Management, Beijing Jiaotong University

October, 2019



Conference Organization

Honorary Chairs

Chaohe Rong, Beijing Jiaotong University, China

Jiaqiong Wang, Beijing Jiaotong University, China

Anthony May, Leeds University, UK

Guoquan Li, Railway Technical Research Institute, Japan

Anming Zhang, University of British Columbia, Canada

General Chairs

Zhongliang Guan, Vice President of Beijing Jiaotong University

Qiusheng Zhang, Dean of School of Economics and Management, Beijing Jiaotong University

Xiaoyan Lin, Leading Professor of Discipline of Applied Economics, Beijing Jiaotong University

Executive Chairs

Guowei Hua, Yongmei Cui & Yacan Wang, Beijing Jiaotong University

Academic Committee Chairs

Jian Zhao, Guoli Ou & Hua Feng, Beijing Jiaotong University

Erik Verhoef, VU University Amsterdam, the Netherlands

Program Chairs

Hongchang Li, Xiaojun Zhao, Beijing Jiaotong University



Special Session Chair

Meng Li, Beijing Jiaotong University

Conference Organization Committee

Publication Affairs Chairs: Lingling Xiao, Jingjuan Jiao, Tieying Liu, Beijing Jiaotong University

Local Affairs Chairs: Huiyu Zhou, Yan Fang, Beijing Jiaotong University

Financial Affairs Chairs: Lihua Guo, Weidong Li, Beijing Jiaotong University

Special Sessions Chairs: Yamei Hu, Tingting Fu, Beijing Jiaotong University

Industrial Contacts Chairs: Mao Jin, China Communication and Transportation Association; Wei Bu, Beijing Jiaotong University

International Affairs Chairs: Qun Zhao, Beijing Jiaotong University

Conference Promotion Chairs: Yu Luo, Jianhong Wu, Beijing Jiaotong University

Secretary Committee

Committee Chair: Yu Liu

Committee Members: Yu Wang, Yueqi Zong, Lingqiu Wang

International Steering Committee (Alphabetic Order)

Anming Zhang, University of British Columbia, Canada

Anthony May, Institute for Transport Studies (ITS) at University of Leeds, UK

Chandra Bhat, University of Texas at Austin, USA

Dick Ettema, Utrecht University, the Netherlands

Elisabetta Cherchi, Newcastle University, UK

Erik Verhoef, VU Amsterdam, the Netherlands

Frank Wilox, Ghent University, Belgium

Jason Cao, University of Minnesota, USA



Juan de Dios Ortúzar Sala, Pontifical Catholic University of Chile, Chile

Qiang Meng, National University of Singapore, Singapore

Robert Noland, Rutgers University, USA

Samuel Charlton, University Of Waikato, New Zealand

Stephen Ison, De Montfort University, UK

Tae Oum, University of British Columbia, Canada

Werner Rothengatter, Karlsruhe Institute of Technology, Germany

Yafeng Yin, University of Michigan, USA

International Program Committee (Alphabetic Order)

Achim Czerney, Hong Kong Polytechnic University, China

Anae Sobhani, Utrecht University, the Netherlands

Andrew Smith, University of Leeds, UK

Benjamin Hazen, University of applied sciences, upper Austria, USA

Binglei Xie, Harbin Institute of Technology at Shenzhen, China

Boyu Zhang, Beijing Normal University, China

Caroline Mullen, University of Leeds, UK

Charisma Choudhury, University of Leeds, UK

Chi Xie, Tongji University, China

Chuan Ding, Beihang University, China

Daniel Johnson, University of Leeds, UK

Daqing Li, Beihang University, China

Fangni Zhang, The University of New South Wales, Australia

Giuseppe Ioppolo, University of Messina, Italy

Guenter Emberger, Vienna University of Technology, Austria

Hangjun Yang, University of International Business and Economics, China

Haoran Yang, East China Normal University, China

Hongchang Li, Beijing Jiaotong University, China

Hongtai Yang, Southwest Jiaotong University, China



Huijun Sun, Beijing Jiaotong University, China

Huiyu Zhou, Beijing Jiaotong University, China

Jack Strauss, University of Denver, USA

Jianjun Wu, Beijing Jiaotong University, China

Jiaoe Wang, Institute Of Geographic Sciences and Natural Resources Research,
CAS

Jie Huang, Institute Of Geographic Sciences and Natural Resources Research,
CAS

Jie Zheng, Tsinghua University, China

Jingjuan Jiao, Beijing Jiaotong University, China

John Nellthorp, University of Leeds, UK

Kun Wang, University Of International Business and Economics, China

Lingling Xiao, Beijing Jiaotong University, China

Mattew Douglous, Baylor University, USA

Meng Xu, Beijing Jiaotong University, China

Natasha Merat, University of Leeds, UK

Olli-Pekka Hilmola, Lappeenranta University of Technology, Finland

Paul Koster, Vrije University Amsterdam, the Netherlands

Paul Timms, University of Leeds, UK

Robert E. Overstreet, Iowa State University, USA

Sebastián Raveau, Pontifical Catholic University of Chile, Chile

Shaopeng Zhong, Dalian University of Technology, China

Simon Shepherd, University of Leeds, UK

Thijs Dekker, University of Leeds, UK

Tieying Liu, Beijing Jiaotong University, China

Vincent Berg, Vrije University Amsterdam, the Netherlands

Wei Liu, University of New South Wales, Australia

Wencao Wei, Beijing Jiaotong University, China

Wenyue Yang, South China Agricultural University, China



Xiaowen Fu, Hong Kong Polytechnic University, China

Xiqun Chen, Zhejiang University, China

Xu Yang, Beijing Jiaotong University, China

Yue Bao, Vrije University Amsterdam, Netherlands

Yulai (Sarah) Wan, Hong Kong Polytechnic University, China

Zhigang Cao, Beijing Jiaotong University, China

Zhongxiang Feng, Hefei University of Technology, China

Zijia Wang, Beijing Jiaotong University, China

Special Session Chair (Session Order)

Kun Wang, University of International Business and Economics

Fangni Zhang, University of New South Wales

Shaopeng Zhong, Dalian University of Technology

Zhong Wang, Dalian University of Technology

Fei Ma, Chang'an University

Qipeng Sun, Chang'an University

Ying Lv, Beijing Jiaotong University

Huijun Sun, Beijing Jiaotong University

Jiaoe Wang, Institute of Geographic Sciences and Natural Resources Research,
CAS

Jie Huang, Institute of Geographic Sciences and Natural Resources Research,
CAS

Jianfeng Zheng, Dalian Maritime University

Hongtao Hu, Shanghai University

Dongchu Cui, Yanshan University

Zhongfei Chen, Jinan University

Ye Li, Nanjing University of Finance and Economics

Jiugeng Wang, Lanzhou Jiaotong University

Chi Xie, Tongji University



Xiqun (Michael) Chen, Zhejiang University
Chengfeng Huang, Chongqing Jiaotong University
Chaofeng Shi, Chongqing Jiaotong University
Hongtai Yang, Southwest Jiaotong University
Chuan Ding, Beihang University
Binglei Xie, Harbin Institute of Technology, Shenzhen
Daqing Li, Beihang University
Achimi. Czerny, Hong Kong Polytechnic University
Xiaowen Fu, Hong Kong Polytechnic University
Guang Cheng, Beijing Union University
Anthony May, University of Leeds
Simon Shepherd, University of Leeds
Erik Verhoef, Amsterdam VU University
Meng Xu, Beijing Jiaotong University

Cooperative Organization Chairs (Alphabetic Order)

Chengfeng Huang, Chongqing Jiaotong University
Feixiong Liao, Eindhoven University of Technology
Feng Chen, Changan University
Fuhai Ma, Secretary of China Railway Society
Guoqi Li, School of Transportation and Logistics, Southwest Jiaotong University
Haixiao Pan & Chi Xie, Tongji University
Jifu Guo, Beijing Transport Institute
Jiangping Zhou, University of Hong Kong
Jianliang Huang, Chinese Society of Technology Economics
Jianjun Wu, State Key Laboratory of Rail Traffic Control & Safety, Beijing Jiaotong University
Jiaoe Wang, Institute of Geographic Sciences and Natural Resources Research, CAS



Jiugeng Wang, Lanzhou Jiaotong University

Li Xie, Civil Aviation Management Institute of China

Meng Xu, Beijing Jiaotong University

Ming Zhong, Wuhan University of Technology

Qiong Tian, & Tianliang Liu, & Chuang Ding, Beihang University

Shaopeng Zhong, Dalian University of Technology

Xuegang Ban, University of Washington

Xuejie Liu, Beijing Transportation Research Center

Yadong Hu, China Communication and Transportation Association

Zongzhong Tian, University of Nevada



Program Overview

Date	Time		Event	Location
11th October, 2019 (Friday)	Noon & Afternoon	12:00–22:00	Registration	Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)
	Evening	17:30–18:30	Buffet	Dining room, 2 nd floor, Hongguoyuan Hotel (红果园 2 楼餐厅)
		18:30–22:35	Training School	Meeting room 306, Siyuan East Building (思源东楼 306)



Program Overview (Continued)

Date	Time		Event		Location
12th October, 2019 (Saturday)	Morning	8:00–12:00	Registration		Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)
		8:30–8:50	Opening Ceremony & Plenary Session	Opening Ceremony	Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)
		8:50–9:05		Photo Shot	In front of Mechanical Engineering Building (机械工程楼前)
		9:10–10:40		Keynote Speech	Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)
		10:40–11:00		Coffee Break	In front of conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室前)
		11:00–12:00		Keynote Speech	Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)



Program Overview (Continued)

Date	Time		Event		Location
12th October, 2019 (Saturday)	Afternoon	12:00–13:30	Buffet		Dining room, 2 nd floor, Hongguoyuan Hotel (红果园餐厅二楼)
		12:00–17:30	Registration		Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)
		13:30–18:15	High-end Think Tank Forum		Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)
	Evening	18:30–21:00	<ul style="list-style-type: none"> Best Papers and Special Session Chairs Certificates Awarding Ceremony Welcome Banquet 		Beipingshengshi Restaurant (北平盛世)
13th October, 2019 (Sunday)	Morning	8:30–10:00	Plenary Session	Keynote Speech	Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)
		10:00–10:20		Coffee Break	In front of conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室前)
		10:20 –12:20		Keynote Speech	Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)



Program Overview (Continued)

Date	Time		Event	Location	
13th October, 2019 (Sunday)	Afternoon	12:00–13:30		Buffet	Dining room, 2 nd floor, Hongguoyuan Hotel (红果园餐厅二楼)
		Editors-in-Chief Conference	13:30–15:30	Opening ceremony & EIC talk	Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)
			15:30–15:50	Coffee Break	In front of conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室前)
			15:50–18:30	Paper presentations	Conference room, 2 nd floor, Mechanical Engineering Building (机械工程楼 2 楼会议室)
		Special Session & Parallel Session	14:10–17:50	See the detailed schedule in the following contents (Coffee Break has 2 locations: one is in front of conference room, 2 nd floor, Mechanical Engineering Building; another is in front of meeting room 306, 3 rd floor, Siyuan East Building)	
	Evening	19:00–21:00		Farewell Dinner	Taishuxi Home Cooking (太熟悉家常菜)



Plenary Session

Time: 8:30 a.m.–12:00 a.m., 12th October, 2019

Location: Conference room, 2nd floor, Mechanical Engineering Building
(机械工程楼 2 楼会议室)

Event	Time	Activities	Chair
Opening Ceremony	8:30–8:35	Welcome speech, President, Beijing Jiaotong University	Guowei Hua, Vice Dean, Professor, School of Economics and Management, Beijing Jiaotong University
	8:35–8:40	Opening speech, government officials, Beijing Municipality	
	8:40–8:50	Adjunct professor awarding ceremony	
Group Photo	8:50–9:05	Group photo (In front of Mechanical Engineering Building) (机械工程楼前)	



Plenary Session (Continued)

Time: 8:30 a.m.–12:00 a.m., 12th October, 2019

Location: Conference room, 2nd floor, Mechanical Engineering Building
(机械工程楼 2 楼会议室)

Event	Time	Activities	Chair
Keynote Speeches	9:10–9:40	The Enlightenment of Japan National Railway Transformation Serving the Commuting of Tokyo Metropolis Area Chaohe Rong, Beijing Jiaotong University, China	Zongzhong Tian, University of Nevada, USA
	9:40–10:10	Using Tradable Permits to Manage Urban Traffic Congestion Erik Verhoef, VU University Amsterdam, the Netherlands	
	10:10–10:40	Impacts of High-speed Rail on Airports and Regional Economies: Managerial and Policy Implications for the Jing-Jin-Ji Area Development Anming Zhang, University of British Columbia, Canada	
Coffee Break	10:40–11:00	Coffee Break	
Keynote Speeches	11:00–11:30	On Urban Indicators for Monitoring Progress and Transformation towards Smart Cities Frank Witlox, Ghent University, Belgium	Werner Rothengatter, Karlsruhe Institute of Technology, Germany
	11:30–12:00	The Highlights of the Findings from the 2019 ATRS Global Airport Efficiency Performance Benchmarking Task Force Project, and Summary Implications on Policy and Management Strategies Tae Hoon Oum, University of British Columbia, Canada	
Buffet	12:00–13:30	Buffet (Dining room of the Hongguoyuan Hotel)	



Plenary Session (Continued)

Time: 8:30 a.m.–12:00 a.m., 13th October, 2019

Location: Conference room, 2nd floor, Mechanical Engineering Building
(机械工程楼 2 楼会议室)

Event	Time	Activities	Chair
Keynote Speeches	8:30–9:00	Habit and Latent Constructs in Bicycle Demand Modelling Juan de Dios Ortúzar, Pontificia Universidad Catolica de Chile, Chile	Jianhong Wu, School of Economics and Management, Beijing Jiaotong University
	9:00–9:30	On Emerging Methods and New Challenges in Choice Analysis Chandra Bhat, University of Texas at Austin, USA	
	9:30–10:00	Surviving Driving: Getting There, and Back Again Samuel G. Charlton, University of Waikato, New Zealand	
Coffee Break	10:00–10:20	Coffee Break	



Plenary Session (Continued)

Time: 8:30 a.m.–12:20 a.m., 13th October, 2019

Location: Conference room, 2nd floor, Mechanical Engineering Building
(机械工程楼 2 楼会议室)

Event	Time	Activities	Chair
Keynote Speeches	10:20–10:50	On the Supply Curve of Ride-sourcing Systems Yafeng Yin, University of Michigan, USA	Jian Zhao, School of Economics and Management, Beijing Jiaotong University
	10:50–11:20	Revenue Management for Container Liner Shipping Services: Critical Review and Future Research Directions Qiang Meng, National University of Singapore, Singapore	
	11:20–11:50	Non-linear and Threshold Effects in Land Use-transportation Research Xinyu (Jason) Cao, University of Minnesota, USA	
	11:50-12:20	Involving the Public in Developing Sustainable Urban Mobility Plans Anthony May, Leeds University, Fellow of the Royal Academy of Engineering, UK	
Buffet	12:30–13:30	Buffet (Dining room of the Hongguoyuan Hotel)	



Keynote Speakers (Alphabetic Order)

Anming Zhang



Introduction

Anming Zhang is a Full Professor of Operations and Logistics and holds Vancouver International Airport Authority Chair Professor in Air Transportation at Sauder School of Business, University of British Columbia (UBC). He served as the Chair of the Operations and Logistics Division, Sauder School of Business (2003-2005), and as the Director of UBC's Centre for Transport Studies (2003-2004). He was the Vice President (Academic & Program) for the World Air Transport Research Society (2006-2017). He is president-elect of the AEA's Transportation and Public Utilities (TPUG). He is the recipient of the "WCTR-Society Prize", awarded to the overall best paper of the 8th World Conference on Transportation Research in Antwerp, Belgium, in 1998. In June 2014, he won the "Best Overall Paper Prize" at the annual conference of International Transport Economics Association, Toulouse School of Economics, France. Professor Zhang has published papers and books in the areas of transportation, logistics, industrial organization, and Chinese economy.

Topic: Impacts of High-speed Rail on Airports and Regional Economies

In this speech, I will first review theoretical and empirical findings on the impacts of HSR on airports and regional economies. Here, the main insights include: First, HSR can have a traffic redistribution effect on airport traffic; in particular, some primary hub airports with good air connectivity may gain traffic while others may



lose traffic. Second, to mitigate congestion at hub airports, policy makers may consider diverting some traffic to nearby regional airports by promoting air-HSR intermodal services. Third, as HSR may stimulate long-haul / international air traffic, its overall impact on emissions reduction remains unclear and requires a case-by-case study. Finally, similar to the impacts on airport traffic, spatial disparity of economic activities may also rise after the introduction of HSR. In general, the disparity tends to rise between the cities with HSR and those without HSR, as the former gets better accessibility. However, among the cities with HSR services, the disparity between the large and small cities could increase or decrease depending on several factors. I will then discuss the managerial and policy implications of these findings for the Jing-Jin-Ji area development, considering in particular the opening of the new Daxing airport.



Anthony May



Introduction

Professor Anthony May has over 50 years' experience in urban transport planning. He has been a professor at Leeds since 1977, where his main research interests have focused on urban transport policy. He has had 15 years' experience in consultancy and 10 years' experience in city government. He has provided policy advice to the OECD, the European Conference of Ministers of Transport, the World Bank, the International Transport Forum, the US Transportation Research Board, the Singapore Land Transport Authority, the New Zealand Ministry of Transport and the Thailand Commission for Land Transport. His Decision-Makers' Guidebook for urban transport has been translated into ten languages, and his KonSULT knowledgebase now forms the basis of guidance to European cities. He was elected as a Fellow of the Royal Academy of Engineering in 1995, and awarded the OBE for services to transport engineering in 2004.

Topic: Involving the Public in Developing Sustainable Urban Mobility Plans

Sustainable Urban Mobility Plans (SUMPs) are recommended by the European Commission as an effective structure for long and short term planning of transport strategy in European cities. A key element in the recommendations is that stakeholders and the public should be involved throughout the planning process. This is supported by more detailed guidance on good practice in participation in the development of SUMPs.

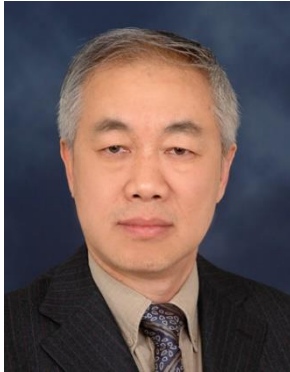
In this presentation we consider the key elements of that guidance, including the stages at which the public should be involved, the level of that involvement, the



tools available, ways of promoting involvement, particularly of “hard to reach” groups, and ways of managing the conflicts which inevitably arise. We offer evidence on the benefits of public involvement, present a case study of its application in the city of York, England, and discuss implications for transport policy development in Chinese cities.



Chaohe Rong



Introduction

Chaohe Rong is currently a full professor of school of economics and management, Beijing Jiaotong University, majoring in transport economic theory and policy and economic time-spatial analysis. He is the first doctor of transportation economics cultivated by China, published hundreds of papers, many books and textbooks. In addition, he was once the academic leader of the national key discipline of industrial economics and the professional construction team of economic characteristics. He taught the national excellent course transportation economics “Transportation Economics” and won the National Teaching Achievement Award.

Topic: The Enlightenment of Japan National Railway Transformation Serving the Commuting of Tokyo Metropolis Area

It's of great strategic importance for national railways to positively participate in the provision of rail commuting system (RCS) for mega or super cities and RCS plays a crucial role for the efficient implementation and sustainable development of metropolis such as Beijing. From 1960s, Japan National Railway (JNR) initiated double-track renovation projects along main urban traffic corridors which not only started the transition process for JNR getting involved in RCS, but also contributed to the formation of RCS with high operational efficiency and service quality for Tokyo metropolis region. The experience of JNR has valuable reference for Chinese railways and urbanization confronting similar transition tasks.



Chandra Bhat



Introduction

Dr. Chandra R. Bhat is a world-renowned expert in the area of transportation and urban policy design, with far reaching implications for public health, energy dependence, greenhouse gas emissions, and societal quality of life. Methodologically, he has been a pioneer in the formulation and use of statistical and econometric methods to analyze human choice behavior. His current research includes the social and environmental aspects of transportation, planning implications of connected and automated smart transportation systems (CASTS), and data science and predictive analytics. He is a recipient of many awards, including the 2017 Council of University Transportation Center (CUTC) Lifetime Achievement Award in Transportation Research and Education, the 2015 ASCE Frank Masters Award, and the 2013 German Humboldt Award. He was listed in 2017 as one of the top ten transportation thought leaders in academia by the Eno Foundation. He is also a top-cited transportation engineering researcher (web of science h-index of 53 and google scholar h-index of 86), and was listed in the most cited researchers in civil engineering by Shanghai Ranking's global ranking of academic subjects 2016 by Elsevier. He is the Editor-in-Chief of Transportation Research – Part B. The number of his citations in the Google Scholar database is over 23,500, with an h-index of 82.

Topic: On Emerging Methods and New Challenges in Choice Analysis

The past decade has witnessed important and exciting developments in the data sources, theory, specification, estimation, and application of consumer choice models. In this presentation, the author will discuss the multi-disciplinary evolution of choice models from being based on single source data to being based on



multiple source data, from continuous choices to single discrete choice to multiple discrete-continuous choices, from single endogenous variable type to multiple endogenous variable types, from individual agent-based to social interaction-based, and from simulation methods for estimation to also considering analytic approximation methods for estimation, to name just a few. At the same time, it is critical that we do not lose sight of the need for choice modeling to continue to be grounded on fundamental behavior theories. The presentation will illustrate these emerging trends with examples, and identify specific challenges that arise in the new landscape of heterogeneous and voluminous data availability.



Erik Verhoef



Introduction

Erik Verhoef (1966) graduated in Economics at the University of Groningen (1991), and obtained a PhD in Economics at VU Amsterdam on a thesis entitled “The regulation of road transport externalities”. He is now affiliated as a full professor in Spatial Economics at this same university, and as a research fellow at the Tinbergen Institute. He has been Vice (Research) Dean of the School of Business and Economics, and is currently Head of Department of Spatial Economics, both at VU Amsterdam.

His research focuses on efficiency and equity aspects of spatial externalities and their economic regulation, in particular in transport, urban and spatial systems. Important research themes include second-best regulation, network- and spatial analysis and methodological development, efficiency aspects versus equity and social acceptability, industrial organization in network markets, valuation and behavioral modelling, and policy evaluation. He has been involved in various national and international research consortia. His research is at the interface of welfare-, micro-, transport-, urban-, spatial- and environmental economics. He has published various books and numerous articles on these topics.

At present, he is the Co-EIC of Economics of Transportation, former (Research) Dean of the School of Business and Economics, Head of Department of Spatial Economics at VU Amsterdam, and research fellow at the Tinbergen Institute. Research focuses on efficiency and equity aspects of spatial externalities and their economic regulation, in particular in transport, urban and spatial systems. More than 125 publications in SCOPUS in Journal of Urban Economics, Journal of Public Economics, International Economic Review, A, B, C, etc., with a Google Scholar H Index of 52, and ranking in the top 3% of REPEC's global economists.



Topic: Using Tradable Permits to Manage Urban Traffic Congestion

Congestion, safety and emissions from automobile traffic are and remain among the key challenges that urban governments face. The classic economic solution of applying road pricing, as first advocated in the 1920's by Pigou, is widely considered to be efficient, effective, but extremely hard to implement due to limited acceptability. This has spurred interest in more acceptable price instruments to manage traffic externalities. Tradable permits is one of these. In this key-note, the main economics aspects of this instrument will be assessed, including the key design issues and the determinants of the main impacts, and experimental results will be presented.



Frank Witlox



Introduction

Frank Witlox, EIC of Journal of Transport Geography, Professor of Economic Geography, Department of Geography, Ghent University (Belgium); Visiting Professor University of Tartu (Estonia); Visiting Professor/High-end Foreign Expert at the Nanjing University of Aeronautics and Astronautics, and since September 2018 a 100 Talents Program laureate of Jiangsu Province; Visiting Professor at the Gran Sasso Science Institute (GSSI) – School of Advanced Studies in Social Sciences (L'Aquila, Italy). Associate Director of the Globalization and World Cities (GaWC) Research Network and Director of the Doctoral School of Natural Sciences (Ghent University). He published more than 450 publications in international journals.

Topic: On Urban Indicators for Monitoring Progress and Transformation towards Smart Cities

All cities in the world want to be recognized as “smart”. A smart city uses information and communication technologies to increase operational efficiency, shares that information with the public, and improves both the quality of government services and citizen welfare. A smart city also wants to become less car-dependent and, by extension, less oil-dependent; and wants to tackle such principal issues like air pollution, noise, deterioration of the livability of residential areas, local environmental and safety problems caused by transport and mobility. To be able to measure progress towards creating smart cities, a set of urban policy indicators are necessary. And moreover we need to think about what transformations are needed in which fields so that the future of urban mobility can fulfil the mobilities of the future.



Juan de Dios Ortúzar



Introduction

Juan de Dios Ortúzar, Co-EIC of Transportation Research Part A: Policy and Practice, Emeritus Professor, Pontificia Universidad Católica de Chile. Lifetime Achievement Award winner of International Traffic Behavior Research Society, 170 publications in international peer-reviewed journals, 10 books, among which “Modeling Transport” just released fourth edition, printed more than 20,000 copies.

Topic: Habit and Latent Constructs in Bicycle Demand Modelling

We study the willingness of citizens to change from their habitual mode of transport to using a bicycle, in the case of routine trips to work or study during the morning peak in Santiago, Chile. To achieve this, we designed a relatively complex survey, including information on the preferences expressed by respondents, indicators of perception, habits and a question on their willingness to change mode. With a sample of 805 individuals, we estimated a hybrid ordinal logit model, including individuals' socio-demographic variables, characteristics of the built environment and of the trip, as well as three latent variables: spontaneity towards changing mode of transport; perception of safety regarding using a bicycle; and availability of cycling-inclusive infrastructure when using bikes. The model confirmed previous expectations; for example, the willingness to change to bicycle diminishes with the length of the trip considered and with the age of the individual; also, people more accustomed to their current modes are less willing to change. In terms of public policy, the model provides several insights regarding incentives for using bicycles, including the need for significant structural changes to diminish the latent perception of insecurity held by less experienced cyclists.



Qiang Meng



Introduction

Dr. Qiang Meng is currently a Professor in the Department of Civil and Environmental Engineering (CEE) at National University of Singapore (NUS), the co-director of NUS-LTA Transportation Centre as well as the director of Centre for Transportation Research (CTR) of CEE. His research mainly focuses on urban mobility modeling and optimization, shipping and intermodal freight transportation analysis, and quantitative risk assessment of transport operations. He has published more than 180 articles in the leading transportation and logistics journals, with the SCI H-index rate of 40 and the total SCI citations of 4962. He is the Co-Editor-in-Chief of Transportation Research Part E and an Associate Editor of Transportation Research Part B. He has clinched a number of research awards and prizes, including OCDI Takeuchi Yoshio Special Award for the EASTS best paper in the field of logistics research in 2019; Engineering Researcher Award 2018 of Faculty of Engineering at NUS, Changjiang Scholar Chair Professorship awarded by the Ministry of Education of PR China in 2017, Outstanding Alumni Award of the Department of Civil and Environmental Engineering at The Hong Kong University of Science and Technology in 2016, Dean's Chair in Faculty of Engineering at NUS in 2015, the 13th World Conference on Transportation Research (WCTR) Society Prize for the best paper (2013), Best Paper Award for Methodological Development in the 9th EASTS (East Asia Society for Transportation Studies) International Conference (2011), Best Paper Award of AHB40 - Highway Capacity and Quality of Service Committee - in the 90th TRB Annual Meeting (2011) and Singapore MOT (Ministry of Transportation) Minister's Innovation Award 2009.



Topic: Revenue Management for Container Liner Shipping Services: Critical Review and Future Research Directions

The purpose of revenue management (RM) is to maximize revenue growth for a company by optimizing product/service availability and prices based on micro-level forecasting of customer behavior. Seat/cargo capacity control and air ticket/cargo pricing are two primary RM research topics that have yielded fruitful models and solution methods for air transportation, which have been used by airlines for around 50 years. However, the RM studies for container liner shipping services and their application are scant although the operations of airlines and container shipping lines are quite similar. We therefore introduce the fundamental RM models developed for air transportation, namely, capacity control and pricing models. Based on these models, we proceed to critically review the RM studies for container liner shipping services. Finally, we identify valuable future research directions in container shipping RM.



Samuel G. Charlton



Introduction

Samuel George Charlton, EIC of Transportation Research Part F: Traffic Psychology and Behavior, Full Professor, University of Waikato, New Zealand. He got Doctor degree in Psychology, New Mexico University. Research interests include cognitive psychology and human behavior. He has more than 160 publications in international journals. He focuses on driving behavior and its policy implications in recent years.

Topic: Surviving Driving: Getting There, and Back Again

Driving a car is a complex skill to learn. With practice, however, it becomes so easy that we don't give it a second thought. For most of us driving is an everyday activity that we accomplish with very little effort or deliberation. The drive to work or home becomes all about getting there, with very little attention given to the journey itself.

In his presentation, Professor Charlton describes his research into the mental processes that allow us to carry out familiar, everyday activities successfully, and why we then have little or no memory for the details of what happened. We are able to perform everyday skills such as driving, cycling, or walking at a "preconscious" level, and if we focus our attention on how we are performing, it can interfere with our ability to continue doing them.

Our research on "self-explaining roads" has investigated how the visual appearance of roads affects drivers' perceptions of risk and speed and can be used to manage vehicle speeds and traffic volumes. This work has continued linking different road markings to drivers' perceptions of risk, how drivers' expectations are informed by roadside infrastructure, and how we can use road markings to indicate speed limits and high-risk rural roads.

Tae Hoon Oum



Introduction

Newly elected President of WCTR Society (2019-22) (see website www.wctrs-society.com), EIC of Transport Policy, UPS chair professor emeritus in Transportation, University of British Columbia, Canada. Founding chairman of the Air Transport Research Society (ATRS). World No.2 “Google Scholar Citations – Aviation”.

Research interests include Global Strategic Airline Alliances, International Air Transport, Transport and Telecom Infrastructure and so on. He has published 36 books, and more than 250 papers and reports on economics, regulatory and globalization strategies for air transport and other networking industries; since 1990, he gave more than 400 keynote speeches and invited seminars.

He presented numerous reports for international organizations including World Bank, OECD, International Transport Forum, APEC, ICAO, and for many government agencies, regulatory commissions and major corporations (Canada, United States, UK, Netherlands, Japan, Korea, Australia, New Zealand, Singapore, Turkey). The honors and distinctions he received include Air Transport News (ATN) Distinguished Career Awards (2013); the Distinguished Career Research Achievement Award from the (US) Transportation Research Forum (TRF, 2006); Overall Best Paper Prize from the US TRF (2009); The Overall Best Paper Prize from The World Conference on Transport Research Society (1998); Killam Research Prize of Canada-Senior Science Category (2002); Killam Research Fellowship (1988); A Distinguished Fellow of the US–Transportation & Public Utilities Group (TPUG) since 2004. He was identified as the most frequently cited author of articles in J. of Transport Economics & Policy in 1975-2006 period. He has



been decorated with a Medal of National Order of Merit by the President of Korea (South) in 2005.

He delivered 390+ keynote addresses and invited speeches/seminars, executive classes including at major airports around the world, Dutch Ministries of Transport and of Economic Affairs, UK Competition Commission, UK Civil Aviation Authority, UK Rail Regulator, AT&T, Australian Consumer and Competition Commission, Air Canada, United Airlines, Northwest Airlines, Japan Airlines, All Nippon Airways, Koreanair, Qantas, Virgin Blue, Turkish Airways, etc.

Topic: The Highlights of the Findings from the 2019 ATRS Global Airport Efficiency Performance Benchmarking Task Force Project, and Summary Implications on Policy and Management Strategies

The Air Transport Research Society (ATRS) formed the Global Airport Efficiency Performance Benchmarking Task Force in year 2000 as their academic society's contribution to the world. Since the world-wide Task Force of 15 members published its first report in 2002, they continued to produce three volume 500-700 pages annual reports every year since then. As the founding chair of the Task Force, I will first present the highlights of the findings reported in the 2019 Task Force Report which includes the detailed data from 250 major airports and airport groups in the world, followed by my summary implications on airport management strategies and policies.

(Note: the ATRS was formed as a Special Interest Group of the WCTR Society during the 1995 WCTR Society's Sydney Conference, and still contributes to the WCTRS as SIG-A1).



Xinyu (Jason) Cao



Introduction

Jason Cao, Co-EIC of Transportation Research Part D: Transport and Environment, Full Professor, University of Minnesota. Participate in over 30 scientific projects, more than 100 publications in peer-reviewed journals, 200 presentations in international conferences. Former Chair of International Association for China Planning. Editor or associate editor in more than 10 international journals.

Topic: Non-linear and Threshold Effects in Land Use-transportation Research

In the field of land use and transportation, there are two central questions: How do transportation investments influence land use? How does land use affect travel behavior? When addressing these questions, scholars often assume that the variables follow a pre-defined (mostly linear) relationship. However, the actual relationships are complicated: an independent variable may have a non-linear or threshold effect on the response variable and the non-linearity pattern may vary by independent variable. This talk first elaborates various types of non-linearity and common approaches used to address the non-linearity. Then case studies are presented to illustrate the implications of the non-linearity on transportation planning and policies.



Yafeng Yin



Introduction

Yafeng Yin, Editor-in-Chief of Transportation Research Part C: Emerging Technologies; Associate Editor of Transportation Science, and Department Editor of Service Science; Professor, Department of Civil and Environmental Engineering; Department of Industrial and Systems Engineering, University of Michigan, Ann Arbor. He works in the area of transportations systems analysis and modeling and has published over 100 refereed papers in leading academic journals and conferences.

Topic: On the Supply Curve of Ride-sourcing Systems

Ride-sourcing companies such as Uber, Lyft and Didi Chuxing are transforming the way people travel in cities. The companies provide ride-hailing applications that intelligently match riders to drivers; drivers are private car owners who drive their own vehicles to provide ride-for-hire services for profit. In this talk, we examine the supply curve of a ride-sourcing system. By viewing it as an input/output system, we show that the output rate of a ride-system system (i.e., the number of riders arriving at their destinations per unit of time) can decline with accumulation (i.e., the number of riders in the system). We explain why the decline can happen and then discuss how control can mitigate or prevent it.

Special Invited Moderator

Werner Rothengatter



Introduction

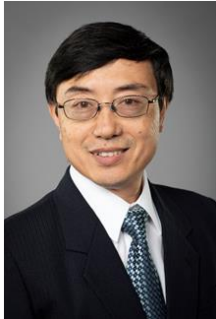
Werner Rothengatter graduated from Business Engineering at Universität Karlsruhe in 1969. While as a Researcher and Research Assistant at the Institute for Economic Policy Research 1970-1978, he earned the PhD in 1972 and the Habilitation in 1978, both in Economics. He worked as a Professor for Economic Theory at Universität Kiel (1979), Professor for Economic Theory and Policy at Universität Ulm (1979-1986), as a Visiting Professor at Vanderbilt University, Nashville, Tennessee (1982), as Head of the Transport Division at the German Institute for Economic Research (DIW), Berlin (1986-1989), and received a call to the Universität Münster, Institute for Transportation Science (1989). Since 1990, he worked as Professor at Universität Karlsruhe (now the Karlsruhe Institute of Technology (KIT)), Dean of the Faculty of Economics (2003-2004) and Head of the Institute of Economic Policy Research and its Unit of Transport and Communication. Since April 2009 he has retired from University obligations. He retired as well from the Scientific Advisory Committee of the German Ministry of Transport, Construction and Urban Development, which he had chaired from 2001 to 2002. In 2010 he was honored with the Francqui-Chair for Logistics at the University of Antwerp and in 2013 with the Jules Dupuit Prize of the WCTRS. He was member of the Advisory Committee of Deutsche Bahn AG and a member of the Reform Commission for Large Projects of the German Ministry of Transport, Construction and Urban Development. He is involved in a number of projects of the European Commission and the European Parliament and works as



an author, advisor, rapporteur and reviewer. He was President of the World Conference on Transport Research Society (2001-2007) and is still a member of its Steering Committee. He is a member of the Editorial Advisory Boards of the Transport Policy and Case Studies on Transport Policy Journals (published by Elsevier) and Editor of the Springer Series on Transport Economics and Policy (together with David Gillen).



Zongzhong Tian



Introduction

Dr. Zongzhong Tian joined the University of Nevada Reno in 2004 and is currently a professor and director of the Center for Advanced Transportation Education and Research (CATER) at UNR. He is also the director of a USDOT University Transportation Center consortium that includes five universities in Nevada, Arizona, and New Mexico. He obtained his Ph.D. degree from Texas A&M University. He held a position of associate research scientist at the Texas Transportation Institute between 2000 and 2004. He was employed at Kittelson and Associates, Inc. in Portland, Oregon between 1995 and 1999.

Tian is active in various professional organizations. Tian is a member of the Traffic Signal Systems Committee of TRB and has served as a member of Highway Capacity and Quality of Service Committee for 9 years. He serves as the Topic Area Manager (TAM) for Area C of the World Conference for Transport Research Society (WCTRS), overseeing four Special Interest Groups. He served as the paper review chair for the Highway Capacity and Quality of Service Committee of TRB. He is an associate editor of the journal of Case Studies on Transport Policy. His specialty area is in traffic signal systems and operations, highway capacity, and integrated freeway and arterial operations. Tian received the Young Consultant Award from ITE in 1997.



High-end Think Tank Forum

Under the background of vigorously developing metropolitan area and urban public transport system in China, cities in China are facing the development opportunities of new urbanization, new industrialization and new transportization. They are also facing many problems and challenges such as the rapid increase of urban population, private car, and severe environmental pollution. To deeply analyze the traffic management policy problems for Beijing and beyond, draw lessons from the experience of urban traffic development at home and abroad, and discuss the countermeasures for sustainable urban traffic development, it is necessary to organize stakeholders including the government, industry and academic researchers at home and abroad to discuss the sustainable urban traffic development issues, form operable think tanks and to promote the sustainable development of modernization for cities in China.

“Sustainable Development for Urban Transport” High-end Think Tank Forum will be organized at the 7th International Conference on “Transportation and Space-time Economics” held at Beijing Jiaotong University on October 12 (Saturday), 2019. The forum is sponsored by Beijing Jiaotong University and co-sponsored by Beijing Transport Institute, China Rail Society and supported by the Key Research Project of National Social Science Fund (17ZDA084). The forum invites governments and associations, enterprises, national think tanks, academic institutions and universities, famous academician in the world, editors-in-chief of international journals of transportation research, famous transport economists at home and abroad, and news media to have deep discussions and communications, focus on the theme of **“Sustainable Development for Urban Transport”**, and build an integrated think tank platform for government, industry, institutes and universities. The aim of the forum is to provide suggestions for the economic social and environmental inclusive development of Beijing, the transportation in Beijing-Tianjin-Hebei metropolitan area, and the urbanization of China and the sustainable development of transportation in large urban areas. Participants from all walks of life are welcome to participate in the forum.

Problems Addressed on the Think Forum

The forum includes but not limited to the following bullet points:

- What problems do our cities face now and in the future?



- What is the vision for the city?
- What objectives should be set for its transport policy?
- What strategy or strategies might we pursue?

- What can business do to improve the way the current system works?
- What new technologies and business models are available?
- How can new technologies and business models be implemented?

- What should the city now consider including in its transport strategy?
- How might transport strategy best implement it?
- How can cities learn from the experiences of doing so from lessons at home and abroad?

List of participating units

Government and Associations:

Ministry of Transport of the People's Republic of China

National Railway Administration of People's Republic of China

Beijing Municipality

Beijing Municipal Commission of Transport

Beijing Traffic Management Bureau

China Highway & Transportation Society

China Railway Society

China Society of Technology Economics

Famous Scholars in the World

Anthony May, Academician of The Royal Academy of Engineering

Jifu Guo, Professor, Dean of Beijing Transport Institute

Erik Verhoef, Professor, VU Amsterdam, The Netherlands

Simon Shepherd, Professor, Leeds University

Chaohe Rong, Professor, Beijing Jiaotong University

Jian Zhao, Professor, Beijing Jiaotong University

Anming Zhang, Professor, University of British Columbia, Canada

Werner Rothengatter, Vienna University of Technology



Enterprises

Gaode Navigation (Amap)
Baidu Map
DiDi
Mobike
Guanzi Network
Manbang
CAR Inc.
Shouqi Limoshine & Chauffeur
Yinjian Taxi
Didachuxing
China State Railway Group Co., Ltd.
Beijing Subway
Jingtou Corporation
Beijing MTR
Beijing Public Transportation Group
China Air Express

National Think Tanks

Development Research Center of the State Council
Beijing Philosophy and Social Science Planning Office
Beijing Institute of Integrated Transport Development of Beijing Jiaotong University

Institutions and Universities

Institute of Comprehensive Transportation of National Development and Reform Commission
Beijing Transport Institute
Beijing Urban Engineering Design & Research Institute Co., Ltd
China Academy of Transportation Science, Ministry of Transport
Transport Planning and Research Institute, Ministry of Transport
China Waterborne Transport Research Institute
Tsinghua University
Peking University
Beihang University



Beijing Jiaotong University
Chongqing Jiaotong University
Southwest Jiaotong University
Lanzhou Jiaotong University
Chang'an University
Beijing Union University

EICs of International Journal of Transportation Research (Journal Alphabetic Order)

Frank Witlox, EIC of Journal of Transport Geography, Ghent University (Belgium)
Tae Oum, EIC of Transport Policy, University of British Columbia
Juan de Dios Ortúzar, Co-EIC of Transportation Research Part A: Policy and Practice, Pontificia Universidad Catolica de Chile
Chandra Bhat, EIC of Transportation Research Part B: Methodological, University of Texas
Yafeng Yin, Editor-in-Chief of Transportation Research Part C: Emerging Technologies, University of Michigan, Ann Arbor
Jason Cao, Editor-in-Chief of Transportation Research Part D: Transport and Environment, University of Minnesota
Qiang Meng, Co-Editor-in-Chief of Transportation Research Part E: Logistics and Transportation, National University of Singapore
Samuel George Charlton, EIC of Transportation Research Part F: Traffic Psychology and Behaviour, University of Waikato

News Media

Beijing Communication Radio
China Daily
Economic Information Daily
QQedu
China MBA Education Network
Hezhao News
China Education Press Agency
China Science Daily
China Communications News
China Radio International Online
Youthzqw



Think Tank Forum Scheme

Time: October 12 (Saturday), 2019, afternoon, 13:30 to 18:15

Location: Conference Room, 2nd Floor, Mechanical Engineering Building, Beijing Jiaotong University

Time		Event
Opening Ceremony	13:30-13:40	Welcome remarks, Director of Humanities and Social Sciences, Beijing Jiaotong University
	13:40-13:50	Speech Delivered by officials from Beijing and National Government Agencies
	13:50-14:00	Group photo
International Experts (Session co-chairs: Anthony May, Jifu Guo)	14:00-14:40	Guiding speech: An Introductory Presentation for the TSTE 2019 Think Tank Forum Anthony May, Professor, Academician of the Royal College of Engineering, UK
	14:40-15:05	Smart Pricing for Urban Transport Erik Verhoef, Professor, VU University Amsterdam, Editor-in-Chief of Economics of Transportation
	15:05-15:30	Use of Models in Urban Transport Policy Design: Case Studies Using MARS Simon Shepherd, Professor, ITS, Leeds University, UK



Time		Event
Tea Break	15:30-16:00	Tea Break
Domestic Experts (Session co-chairs: Anthony May, Jifu Guo)	16:00-16:30	Guiding speech: Transport Reservation System: a Trend of Future Urban Mobility Jifu Guo, Professor, Director of Beijing Institute of Transport Development
	16:30-16:55	Exploration of “Smart + Travel” Socio-economic Value Zhenning Dong, CEO, Gaode Navigation Map
	16:55-17:20	New Industrial Revolution Needs Public Transit Jian Zhao, Transport Economist, School of Economics and Management, Beijing Jiaotong University
Round Table (Session co-chairs: Anthony May, Jifu Guo)	17:20-18:15	Round Table (With audience input) There will be around 10 chairs in the front stage, the invited distinguished officials, academician and researchers will be seated and answer questions and comments proposed by Anthony May and Jifu Guo. Comments or speech given by government, enterprise and academic representatives



High-end Think Tank Forum Presenters (Alphabetic Order)

Anthony May



Introduction

Professor Anthony May has over 50 years' experience in urban transport planning. He has been a professor at Leeds since 1977, where his main research interests have focused on urban transport policy. He has had 15 years' experience in consultancy and 10 years' experience in city government. He has provided policy advice to the OECD, the European Conference of Ministers of Transport, the World Bank, the International Transport Forum, the US Transportation Research Board, the Singapore Land Transport Authority, the New Zealand Ministry of Transport and the Thailand Commission for Land Transport. His Decision-Makers' Guidebook for urban transport has been translated into ten languages, and his KonSULT knowledgebase now forms the basis of guidance to European cities. He was elected as a Fellow of the Royal Academy of Engineering in 1995, and awarded the OBE for services to transport engineering in 2004.

Topic: An introductory presentation for the TSTE 2019 Think Tank Forum

The Think Tank Forum is designed to provide suggestions for the economic, social and environmental development of transport in Beijing and other Chinese cities. In this introductory presentation, we review policy and practice as developed in Europe, and use that structure to pose a series of questions for discussion in the context of Chinese cities.

We start by offering the European Commission's definition of sustainable transport,



and outline its recommended approach to the development of Sustainable Urban Mobility Plans (SUMP). We consider the barriers to the development of effective SUMP, and discuss the more detailed guidance on the selection of suitable policy measures. Following that guidance (which has recently been translated into Chinese by BJTU) we consider in turn the specification of vision, objectives, strategy, individual policy measures and preferred packages. We also outline the constraints which cities face in adopting such packages.

These in turn lead to our set of key questions for discussion in the Forum.

Erik Verhoef



Introduction

Erik Verhoef (1966) graduated in Economics at the University of Groningen (1991), and obtained a PhD in Economics at VU Amsterdam on a thesis entitled “The regulation of road transport externalities”. He is now affiliated as a full professor in Spatial Economics at this same university, and as a research

fellow at the Tinbergen Institute. He has been Vice (Research) Dean of the School of Business and Economics, and is currently Head of Department of Spatial Economics, both at VU Amsterdam.

His research focuses on efficiency and equity aspects of spatial externalities and their economic regulation, in particular in transport, urban and spatial systems. Important research themes include second-best regulation, network- and spatial analysis and methodological development, efficiency aspects versus equity and social acceptability, industrial organization in network markets, valuation and behavioral modelling, and policy evaluation. He has been involved in various national and international research consortia. His research is at the interface of welfare-, micro-, transport-, urban-, spatial- and environmental economics. He has published various books and numerous articles on these topics.

At present, he is the Co-EIC of Economics of Transportation, former (Research) Dean of the School of Business and Economics, Head of Department of Spatial Economics at VU Amsterdam, and research fellow at the Tinbergen Institute. Research focuses on efficiency and equity aspects of spatial externalities and their economic regulation, in particular in transport, urban and spatial systems. More than 125 publications in SCOPUS in Journal of Urban Economics, Journal of Public Economics, International Economic Review, A, B, C, etc., with a Google Scholar H Index of 52, and ranking in the top 3% of REPEC's global



economists.

Topic: Smart Pricing for Urban Transport

Pricing is widely regarded as a potentially effective and efficient way of dealing with undesired side effects from urban road transport, including congestion, emissions, traffic unsafety and noise. Yet, implementation of road pricing is difficult because of limited societal and political acceptability. New technologies allow governments to design and implement more acceptable types of financial incentives that combine the desirable aspects of classic pricing in terms of effective demand management with an expectedly higher acceptability. This presentation reports on recent experiences with two such instruments in The Netherlands: rewarding schemes, and tradable permits. The presentation considers design, economic pros and cons, behavioral impacts, and acceptability.



Jian Zhao



Introduction

Jian Zhao, Professor at School of Economics and Management, Beijing Jiaotong University. He is the director of Beijing Economics General Association, and director of China Industrial Economics Association.

The research of Professor Jian Zhao on transportation is from economics perspective. He mainly focuses on transportation and economic growth and urbanization.

From 2006 he has published many articles related to high speed railways. He published important articles at home and abroad such as Transportation Research Part A in English and China Industrial Economics in Chinese. In recent years, he devoted to the research of public transit and new industrial revolution or co-urbanization.

Topic: New Industrial Revolution Needs Public Transit

The New Industrial Revolution is characterized by using machines with information and smart technology to liberate and strengthen human intelligence. The matching, sharing, and knowledge spillover mechanisms of agglomeration economies can explain why knowledge-intensive companies and producer service companies are more likely to gather in large cities. Since the beginning of this century, the three typical world cities of London, New York and Tokyo are carrying out high-intensity development in their central urban areas, which is the urban space resource re-allocation driven by the market mechanism in the new industrial revolution. The high-density development of large cities must be supported by public transportation, while high density provides a sustainable



living environment for public transportation. However, China's urban development concepts and policies do not recognize the importance of high-density population agglomeration for New Industrial Revolution, and do not recognize that the “big city disease” of traffic congestion is an opportunity to develop public transportation. It is recommended that Beijing should build a second double line along the No. 10 rail transit line, and carry out high density development around some hub stations to form Central Activity Zones.



Jifu Guo

Introduction



Jifu Guo is the Director of Beijing Transport Institute, Professor, a member of National Committee of the Chinese People's Political Consultative Conference (CPPCC), a member of the Standing Committee of the Beijing Municipal People's Congress (BMPC). He serves as a member of the Consultative Committee on

Coordinated Development of Beijing, Tianjin and Hebei and Deputy leader of the Panel Expert on National Urban Smooth Traffic Action Plan. His research focuses on urban transportation planning and intelligent transportation systems.

Topic: Reservation Transport System: a Trend of Future Urban Mobility

Transportation is a complex, integrated and open system. The recurring causes of traffic congestion include "insufficient capacity, unrestrained demand, and ineffective management of capacity." Unrestrained demand and insufficient capacity are interrelated because there are too many vehicles that pile up on the same roads at the same time, but there isn't enough space on these roads for everyone. In the future, with the development of information and communication technologies, the asymmetric and disordered situation of urban transportation system will be changed. The future urban transport will become reservable, responsive and adaptable, and congestion will be relieved as a consequence. This presentation introduces the concept of reservation in urban transportation system, including the principle and expected effect, and introduces some efforts have been made in the practice and promotion of reservation in Beijing.

Simon Shepherd



Introduction

Professor Simon Shepherd, at the Institute for Transport Studies since 1989, he has worked on various EC and EPSRC funded projects. He gained his doctorate in 1994 applying state-space methods to the problem of traffic responsive signal control in over-saturated conditions. His expertise lies in modelling and policy optimisation ranging from detailed simulation models through assignment to strategic land use transport models. He has worked with colleagues in the Technical University of Vienna in developing the dynamic LUTI model MARS providing a system dynamics approach to strategic modelling. This model was used recently in the STEPS project (for which Dr. Shepherd was grant holder) which looked at policies under scarcity of oil supply. Dr. Shepherd was PI for a recent EU project GHG -TransPORD where scenarios were developed to reduce CO₂ emissions taking into account the interaction between policy and R&D strategy of both Governments and other stakeholders including car manufacturers. He was PI on a £0.5m EPSRC funded project investigating competition between cities and on an EU funded project (Origami) which look developed a system dynamics model for long distance travel in Europe. He has recently developed a model for Jakarta and is now looking at the uptake of E-Scooters in Bandung building on his system dynamics work and leads the ITS input on the UPASS project where he will work with partners in Beijing to develop innovative transport policies and a MARS model of Beijing. He also founded and leads the International special interest group for transportation and system dynamics as part of the international society for system dynamics.



Topic: Use of Models in Urban Transport Policy Design: Case Studies Using MARS

Models are often used in the development of urban transport schemes to identify the potential benefits of a preferred option or set of options. In this presentation I outline the use of a strategic land use transport model MARS illustrating how it can be used in two cases. The first case study of Edinburgh in the UK shows the relative contribution of different policy instruments and how they can then be packaged together. The second is an application to Jakarta in Indonesia where a more planned approach to infrastructure development is taken and the model is used to inform the potential outcomes and to revise targets. I conclude with plans for the MARS Beijing model to be used in the project UPASS.



Zhenning Dong



Introduction

Zhenning Dong is Special-Term Professor of Beijing Jiaotong University and Tongji University. He currently serves as Vice President of Amap, one of the subsidiaries of Alibaba Group. He served as the director of Mobility Service and Intelligent Transport Business of Amap (also known as AutoNavi or Gaode) since 2004, he was also responsible for the on-board information service and shared mobility and other related business development business. He has led Amap to build the foundation of the online navigation system, which is served for transport industry management, enterprise logistics, and public traveling with more than hundreds of million users and provides precise location service which has response speed in seconds. His achievements have been applied into more than 200 national, provincial and municipal enterprises and national science and technology projects, which covers more than 700 million users. He has also held certain pilot projects lead by NDRC and national-level research and development projects lead by MOST. During the past years, he has obtained Special Award of provincial and ministry level of Science and Technology Development and Progress Awards, and dozens of patents for invention.

Topic: Exploration of “Smart + Travel” Socio-economic Value

Transport system plays an essential role in the integration development of modern cities. In each stage of urbanization, transport system promotes social and economic development, supports urban evolution. However, under this fast pace of evolvement, congestion has become even more serious. Although, transport system itself has transformed and achieved fruitful results, e.g., more adaptive signal control system, advanced traffic management system, new energy vehicles,



etc., there still room for improvement. Traffic Management and decision-making were restricted by limited information integrity, timeliness, and response validity of command response. “Smart + Travel” herein could provide solutions for the transport issue and lay the foundation of a smart transport system through policy and technology dual promoting tactics. Amap’s “Smart + Travel” product offers comprehensive solutions on transport infrastructure, operation service, and different travel scenarios, in order to achieve convenient, safe and green transport.



High-end Think Tank Forum Roundtable Discussion Experts

Beijing Municipal Commission of Transport: Tian Zhou, Transport Comprehensive Management Department, Vice Director (1)

Shijiazhuang Metro: Chunsu Han, General Manager (2)

China Academy of Transportation Science, Ministry of Transport: Xianjin Wang, Vice Dean (3)

China Communications and Transportation Association: Mao Jin, Engineer (4)

Beijing Public Transport:

Lanchao Ji, General Law Consultant, CEO Assistant, Senior Economic Engineer (5)

Ying Zhao, Strategy and Reform Development Department, Intermediate Economic Engineer (6)

Beijing Institute of City Planning: He Wei, Senior Transport Planning Engineer and Professional Transport Model & Data Analyst (7)

University of British Columbia: Tae Hoon Oum, newly elected President of WCTR Society (2019-22), www.wctrs-society.com, EIC of Transport Policy, UPS chair professor emeritus in Transportation, University of British Columbia, Canada (8)

Beijing Jiaotong University: Chaohe Rong, Professor, Leading Transportation Economist (9)

China Highway & Transportation Society: Wenjie Liu, Secretary General (10)

Didi Chuxing: Tao Wang, Local Affairs Department, Industrial Research Expert (11)

Dida Company: Jun Luo, Secretary of Expert Committee, UTDT, Director of Government Affairs (12)

Manbang Group: Qingfeng Kong, Public Policy Research Center, Director (13)



Editor-in-Chief Conference

Hosted by School of Economics and Management,
Beijing Jiaotong University

13:30-18:30, 13th October, 2019

Conference room, 2nd floor, Mechanical Engineering Building

Time	Speaker	Affiliation	Topic
13:30-13:45	Guowei Hua, Vice Dean	School of Economics and Management, Beijing Jiaotong University	Opening Remarks
13:45-13:50	Photo shot		
EIC talk: Journal introduction and publication tips			
13:50-14:00	Erik T Verhoef	VU Amsterdam, the Netherlands	Co-editor-in-Chief of Economics of Transportation
14:00-14:10	Frank Witlox	Ghent University, Belgium	Editor-in-Chief of Transport Geography
14:10-14:20	Tae Oum	University of British Columbia, Canada	Editor-in-Chief of Transport Policy
14:20-14:30	Juan de Dios Ortúzar	Pontificia Universidad Catolica de Chile	Co-Editor-in-Chief of Transportation Research Part A: Policy and Practice
14:30-14:40	Chandra Bhat	University of Texas at Austin, the United States	Editor-in-Chief of Transportation Research Part B: Methodological
14:40-14:50	Yafeng Yin	University of Michigan, the United States	Editor-in-Chief of Transportation Research Part C: Emerging Technologies
14:50-15:00	Xinyu(Jason) Cao	University of Minnesota, the United States	Co-Editor-in-Chief of Transportation Research Part D: Transport and Environment
15:00-15:10	Qiang Meng	National University of Singapore	Co-Editor-in-Chief of Transportation Research Part E: Logistics and Transportation Review



TSTE 2019

Time	Speaker	Affiliation	Topic
15:10-15:20	Samuel G. Charlton	University of Waikato, New Zealand	Editor-in-Chief of Transportation Research Part F: Traffic Psychology and Behaviour
15:20-15:30	Xuedong Yan	Beijing Jiaotong University	Co-Editor-in-Chief of Journal of Transportation Safety & Security
15:30-15:50	Coffee break		
Time	Speaker	Affiliation	Topic
Paper Presentations			
15:50-16:15	Zhiwei Yin	Shanghai Jiaotong University, China	Taxi-hailing Choice and Emission Reduction Analysis Based on Floating Car Data — A Case Study of Shanghai
	<i>10mins invited comments from EIC, Target: TP, TR:D, Economics of Transportation</i>		
16:15-16:40	Naqun Huang	Nanjing Audit University, China	Publicization, Market Structure, and Transportation Pricing
	<i>10mins invited comments from EIC, Target: TR:A, TR:B</i>		
16:40-17:05	Ximing Chang	Beijing Jiaotong University, China	Understanding User's Travel Behavior and City Region Functions from Station-free Sharing Bike Usage Data
	<i>10mins invited comments from EIC, Target: TR:F, Journal of Transport Geography</i>		
17:05-17:30	Boyu Zhang	Beijing Normal University, China	A Decision Support System for Irregular Flight Recovery
	<i>10mins invited comments from EIC, Target: TR:B, TR:C, TR:E</i>		
17:30-17:55	Xiaowen Fu	The Hong Kong Polytechnic University, China	An Empirical Analysis of Airport Activities – Economic Development Relationship – The Case of New Zealand
	<i>10mins invited comments from EIC, Target: TP, Journal of Transport Geography, TR:A</i>		



TSTE 2019

Time	Speaker	Affiliation	Topic
17:55-18:20	Yue Bao	VU Amsterdam, the Netherlands	Effectiveness Investigation of Travel Demand Management Measures in Beijing: Existing Measures and a Potential Measure—Tradable Driving Credit
<i>10mins invited comments from EIC, Target: TR:F</i>			
18:20-18:30	Guowei Hua, Vice Dean	School of Economics and Management, Beijing Jiaotong University	Closing Speech



Training School

Time: 18:30 –22:35, 11th October, 2019

Location: Meeting room 306, Siyuan East Building (思源东楼 306)

Time	Training Topics	Lecturer	Moderator (18:30-18:35)
18:35–19:35	Airport Market Power and Regulation	Achim Czerny Hong Kong Polytechnic University, Hong Kong	Yaodong Zhou, Vice Dean, Professor, School of Economics and Management, Beijing Jiaotong University
19:35–20:35	The Impact of China's Railway Reform on International Trade	Hangjun Yang University of International Business and Economics, China	
20:35–21:35	The Evolution of Aviation Network: Global Airport Connectivity Index 2006 – 2016	Anming Zhang University of British Columbia University, Canada	
21:35–22:35	Second-best and Private Road Pricing	Erik Verhoef VU University Amsterdam, the Netherlands	



Training School Lecturers (Alphabetic Order)

Achim I. Czerny



Introduction

Dr. Achim I. Czerny is Associate Professor at the Department of Logistics and Maritime Studies (LMS), Hong Kong Polytechnic University, and Director of a new academic program in Aviation Management and Logistics. Previously he was employed as a researcher at the VU University of Amsterdam, Department of Spatial Economics, and an Assistant Professor of Regulatory Economics at the WHU – Otto Beisheim School of Management. He studied Economics at the TU Berlin and holds a doctoral degree in Economics from the TU Berlin. Czerny's research interests cover the full range of topics in transportation economics. He was the head of the local organizing committee of the International Transportation Economics Association (ITEA) school and conference hosted by LMS in 2018, a member of the Scientific Advisory Board of the European Aviation Conference, and board member of the German Aviation Research Society (GARS). He has published numerous research papers in transportation journals and economics journals. He was awarded with the Best Overall Paper Prize of the ITEA Conference on Transportation Economics (Kuhmo Nectar) 2014 (with Anming Zhang) and the Certificate of Excellence in Reviewing from Transportation Research Part B for the year 2013.

Lecture Topic: Airport Market Power and Regulation

The summary of the main contents is: The market power part covers the pricing of



aeronautical and non-aeronautical airport supplies. A main issue to discuss is whether passengers are foresighted or myopic, that is, whether passengers consider prices for non-aeronautical airport supplies in their in their travel decision making process or rather abstract away from transactions in the non-aeronautical business area, respectively. The regulatory part considers the single-till and dual-till regulation of airports, where single-till basically implies that profits from non-aeronautical airport businesses are used to lower airport infrastructure charges, which is not the case with dual-till regulation.



Anming Zhang



Introduction

Anming Zhang is a Full Professor of Operations and Logistics and holds Vancouver International Airport Authority Chair Professor in Air Transportation at Sauder School of Business, University of British Columbia (UBC). He served as the Chair of the Operations and Logistics Division, Sauder School of Business (2003-2005), and as the Director of UBC's Centre for Transport Studies (2003-2004). He was the Vice President (Academic & Program) for the World Air Transport Research Society (2006-2017). He is president-elect of the AEA's Transportation and Public Utilities (TPUG). He is the recipient of the "WCTR-Society Prize", awarded to the overall best paper of the 8th World Conference on Transportation Research in Antwerp, Belgium, in 1998. In June 2014, he won the "Best Overall Paper Prize" at the annual conference of International Transport Economics Association, Toulouse School of Economics, France. Professor Zhang has published papers and books in the areas of transportation, logistics, industrial organization, and Chinese economy.

Topic: The Evolution of Aviation Network: Global Airport Connectivity Index 2006 – 2016

Airport connectivity is seen as a driving force to the economic growth of a country, particularly in major passenger markets around the world. It is imperative to understand the topology and identify the relative importance of individual airports from a global air transport network perspective over time. This paper conducts an in-depth study on how the global air transport network has evolved, and the relative importance of airports over an eleven-year period (2006-2016). Emergent



phenomena such as the rise of middle-eastern air carriers and the burgeoning markets of Asia, are examined by looking at patterns of airport connectivity in a quantitative framework, where passenger flows, direct and indirect linkages between airports, and airports' regional importance are explicitly taken into consideration. A Global Airport Connectivity Index (GACI) is proposed - combining the degree, closeness and eigenvector topological indicators, and two new volumetric indicators: intensity flow betweenness and regional importance. Analysis of the airports' GACI changes over time reveals insights into global airport connectivity development. The findings in this paper shed some lights for policy makers and industry leaders in planning their aviation strategies.



Erik Verhoef



Introduction

Erik Verhoef (1966) graduated in Economics at the University of Groningen (1991), and obtained a PhD in Economics at VU Amsterdam on a thesis entitled “The regulation of road transport externalities”. He is now affiliated as a full professor in Spatial Economics at this same university, and as a research fellow at the

Tinbergen Institute. He has been Vice (Research) Dean of the School of Business and Economics, and is currently Head of Department of Spatial Economics, both at VU Amsterdam.

His research focuses on efficiency and equity aspects of spatial externalities and their economic regulation, in particular in transport, urban and spatial systems. Important research themes include second-best regulation, network- and spatial analysis and methodological development, efficiency aspects versus equity and social acceptability, industrial organization in network markets, valuation and behavioural modelling, and policy evaluation. He has been involved in various national and international research consortia. His research is at the interface of welfare-, micro-, transport-, urban-, spatial- and environmental economics. He has published various books and numerous articles on these topics.

At present, he is the Co-EIC of Economics of Transportation, former (Research) Dean of the School of Business and Economics, Head of Department of Spatial Economics at VU Amsterdam, and research fellow at the Tinbergen Institute. Research focuses on efficiency and equity aspects of spatial externalities and their economic regulation, in particular in transport, urban and spatial systems. More than 125 publications in SCOPUS in Journal of Urban Economics, Journal of Public Economics, International Economic Review, A, B, C, etc., with a Google Scholar H Index of 52, and ranking in the top 3% of REPEC's global economists.



Topic: Second-best and Private Road Pricing

Road pricing has for long been known to offer an efficient and effective way of dealing with transport externalities such as congestion and pollution. Classic economic theory prescribes that transport prices should reflect the marginal external cost of driving, like cost stemming from time losses imposed on other drivers, or the cost of pollution. However, classic economic theory derives this insight in the context of so-called first-best analysis, assuming that a perfect tax instrument is available, and assuming that there are no further distortions in the entire economy than the market failure(s) that the road tax seeks to address. This type of analysis is useful for identifying the main economic principles of market failures and government response, but the framework needs to be broadened if the objective of the analysis is to analyze actual applications of transport pricing. For public schemes, the first-best framework is no longer applicable if instruments become imperfect, or when other market failures exist in reality. Both will be the case in reality. Further questions arise when the agency setting the transport price is not a public authority concerned with the maximization of welfare, but a private operator who maximizes profits. In this lecture, we will demonstrate how economic analysis can be designed to study such situations, and we will discuss how this affects policy advice.



Hangjun Yang



Introduction

Hangjun Yang is a Professor in Transport Economics and Logistics at the University of International Business and Economics (UIBE) in Beijing, China. He obtained his PhD degree from the Sauder School of Business, University of British Columbia (UBC) in Vancouver, Canada. His main research interests are air transport and rail transport. He has published more than 20 SSCI indexed papers in leading transportation journals, including *Transportation Research Part B*, *Journal of Transport Economics and Policy*, and *Transportation Research Part A*.

Prof. Yang was selected in the National Youth Top Talents Program of China. He is the principle investigator of the Major Program of National Social Science Foundation of China (Grant No. 18ZDA071). He has received various awards, e.g., the Academy Award for Young Teachers by the Fok Ying Tung Education Foundation, the Third Prize Award for Outstanding Achievements in Social Sciences by the Ministry of Education of China, and the Second Prize Award for Outstanding Achievements in Social Sciences by the Beijing government.

Lecture Topic: The Impact of China's Railway Reform on International Trade

An efficient and cost-effective rail sector is very important to facilitate international trade, especially for the landlocked countries or the ones with long land boundaries (Bonfatti and Poelhekke, 2017; Donaldson, 2018). In China, the rail transport industry was overseen and operated by the now-defunct Ministry of Railways (MOR). In March 2005, the MOR underwent a major reform to address its institutional problems. Before the reform, China's railway system adopted a



four-level management model, which comprised the MOR, rail bureaus, branch bureaus, and railway stations. After the reform, it changed to a three-level management model, which comprised the MOR, rail bureaus, and railway stations. This provides a rare natural experiment to investigate the impact of railway reform on international trade.

We used monthly datasets over the 2004–2006 period collected from the General Administration of Customs of China to analyze the influence of reform on both export and import trade. The difference-in-differences (DID) approach was applied and we obtained the following main results. First, within a short period after the reform, China's export by rail declined by 10.94%. Second, the reform caused marked decreases in the number of export firms and the price of export goods by rail. Third, the mechanisms underlying the influence of the reform followed on from the monopolistic nature of the industry and the extra market transaction costs associated with stringent government-pricing regulations. Fourth, the reform centralized the rail dispatch office from branch bureaus to rail bureaus and downgraded the dispatch operational efficiency. Fifth, private and foreign-owned firms were more negatively affected by the reform than state-owned enterprises.

Main references

- [1] Wang, C., Yang, H., Yuan, H. (2018). The impact of railway reform on corporate export: The case of China. *Transportation Research Part A: Policy and Practice*, 118, 627-647.
- [2] Yuan, H., Wang, K., Yang, H., Wang, C. (2019). The impact of rail dispatch system reform on import by rail --- Empirical evidence from a natural experiment in China. *Transport Policy*, 79, 165-176.
- [3] Li, H., Yu, K., Wang, K., Zhang, A. (2019). Market power and its determinants in the Chinese railway industry. *Transportation Research Part A: Policy and Practice*, 120, 261-276.
- [4] Li, H., Rong, C., Song, D. (2008). *Applicability and Methods of Lean Production*



in Railway Transportation Organization: A Case Study of Urumqi Railway Bureau in China. *International Journal of Railway*, 1(2), 45-58.

[5] Oum, T. H., Waters, W. G., Yu, C. (1999). A survey of productivity and efficiency measurement in rail transport. *Journal of Transport Economics and Policy*, 9-42.

[6] Zhao, J. (2016). A study on railway reorganization and high-speed rail in China. Beijing, China Economic Publishing Housing. (in Chinese)

[7] Yuan, H., Wang, K., Yang, H. (2019). State-owned rail sector reform and implication on firm's export by rail --- Empirical evidence from China's separation of affiliated business from rail operator. Working paper, University of International Business and Economics.



Special Sessions

Special Session A: High-speed Rail and Air Transport

Session Chair: Werner Rothengatter, Kun Wang & Fangni Zhang

Time: Sunday, 13th October, 2019 (14:10–16:50)

Location1: Room 101, Mechanical Engineering Building (机械工程楼 101)

Chair: Werner Rothengatter, Kun Wang & Dezhi Zhang		
Time	Paper No.	Topics
14:10–14:30	1	Prospects of High-speed Cargo Transport and Issues for Urban Last Mile Logistics Werner Rothengatter* Karlsruhe Institute of Technology
14:30–14:50	4	Safety Evaluation of Beijing-Shanghai High-speed Railway Zhuo Wang* and Xiaorong Deng Beijing Jiaotong University
14:50–15:10	13	Integrated Optimization Problem of Location-inventory-routing of the Maintenance Components Distribution for High-Speed Railway Operation Dezhi Zhang* and Shuxin Yang Central South University
15:10-15:30	17	Environmental and Social Welfare Impacts of Air-Rail Cooperation Changmin Jiang* University of Manitoba
15:30–15:50	Coffee Break	
15:50–16:10	33	Does China's High-Speed Rail Development Leads to Regional Disparities? A Network Perspective Shuli Liu, Yulai Wan and Anming Zhang* The University of British Columbia
16:10–16:30	53	Competition between High-speed Trains and Air Travel in China: from Spatial to Spatial-temporal Perspective Jiaoe Wang, Jie Huang* and Yue Jing Institute of Geographic Sciences and Natural Resources Research, CAS
16:30–16:50	88	Effects of High-speed Rail on Economic Growth and Equity in China Zhiwei Yang, Jingjuan Jiao, Wei Liu and Fangni Zhang* The University of New South Wales



Special Session A: High-speed Rail and Air Transport

Session Chair: Kun Wang & Fangni Zhang

Time: Sunday, 13th October, 2019 (14:10–16:50)

Location2: Room 104, Mechanical Engineering Building (机械工程楼 104)

Chair: Fangni Zhang & Hangjun Yang		
Time	Paper No.	Topics
14:10–14:30	126	State-owned Rail Sector Reform and Implication on Firm’s Export by Rail --- Empirical Evidence from China’s Separation of Affiliated Business from Rail Operator Hang Yuan, Kun Wang and Hangjun Yang* School of International Trade and Economics, University of International Business and Economics
14:30–14:50	132	Assessing the Dynamic Competition between Domestic Airline and High Speed Rail: the Case of Beijing-Shanghai Line in China Da Li* Beijing Jiaotong University
14:50–15:10	154	Number of Base Travel Patterns for Understanding the Effect of New High Speed Rail Service Hiromichi Yamaguchi* and Shoichiro Nakayama Kanazawa University
15:10-15:30	191	Influence of Travel Time Reliability on Interactions between High Speed Rail and Airports Yue Huai, Ka Fai Ng* and Hong K. Lo The Hong Kong University of Science and Technology
15:30–15:50	Coffee Break	
15:50–16:10	199	The Regional and Economic Impacts of High-Speed Rail: a Review Huihui Su, Peihong Chen and Jingjuan Jiao* Beijing Jiaotong University
16:10–16:30	262	The Reconfiguration Effect of China’s High-Speed Railway on Intercity Connection — A Study Based on Media Attention Index Xiaolan Yang, Dongmei Guo, Rui Wang and Weizeng Sun* Central University of Finance and Economics
16:30–16:50	263	High-speed Rail and Air Transport Competition with Heterogeneous Users Xue Yun and Lingling Xiao* Beijing Jiaotong University



Special Session B: Sustainable development of shared autonomous vehicles

Session Chair: Shaopeng Zhong & Zhong Wang

Time: Sunday, 13th October, 2019 (14:10–16:30)

Location: Room 105, Mechanical Engineering Building (机械工程楼 105)

Session Chair: Shaopeng Zhong & Zhong Wang		
Time	Paper No.	Topics
14:10–14:30	39	To Own or Not to Own? That Is the Question Zia Wadud* and Giulio Matioli Univeristy of Leeds
14:30–14:50	63	Exploring the Relationship between Urban Built Environment and the Land Use Effects of Shared Autonomous Vehicles Shaopeng Zhong*, Xufeng Li, Yunhai Gong and Zhong Wang Dalian University of Technology
14:50–15:10	82	Research on Shared Autonomous Vehicles Scheduling Based on Information Sharing Zhong Wang*, Rui Wang and Shaopeng Zhong Dalian University of Technology
15:10-15:30	83	Public Opinion and Preferences towards Shared Autonomous Vehicles in Developing Countries: A Survey from Lahore City Pakistan Zhong Wang, Muhammad Safdar and Shaopeng Zhong* Dalian University of Technology
15:30–15:50	Coffee Break	
15:50–16:10	113	A Strategic Study on the Transformation of Traditional Manufacturers into Service Providers -- Taking the Travel Market as an Example Xuehong Ji and Liuxingxiang Xu* North China University of Technology
16:10–16:30	242	Mixed Logit Model Based on Improved Nonlinear Utility Functions: A Share ratio Solution Method of Different Railway Traffic Modes Bing Han and Shuang Ren* Beijing Jiaotong University



Special Session C: Future Transportation and Regional Development

Session Chair: Fei Ma & Qipeng Sun

Time: Sunday, 13th October, 2019 (14:10–17:50)

Location: Room 106, Mechanical Engineering Building (机械工程楼 106)

Chair: Fei Ma & Qipeng Sun		
Time	Paper No.	Topics
14:10–14:30	8	Evaluating the Spatial-economic Impacts of the Missing Link Accessibility on Economic Development: Evidence from the Chinese National Highway Network Fang Bian* and Anthony Yeh Department of Urban Planning and Design, the University of Hong Kong
14:30–14:50	41	Research on Train Scheduling Mode of Metro Freight Transportation System Xinwei Pan* and Jianjun Dong School of Economics and Management, Nanjing Tech University
14:50–15:10	78	Robust Modeling and Simulation of Urban Public Transportation System: Bilayer Complex Network Perspective Fei Ma, Wenjing Shi*, Yinan Liu, Kum Fai Yuen, Qipeng Sun and Chengyong Zhao Chang'an University
15:10-15:30	80	Assessing the Vulnerability of Logistics Service Supply Chain Based on Complex Network Huifeng Xue*, Shumei Zhao, Yanxia Zhang, Chengyong Zhao and Yujie Zhu School of Economics and Management, Chang'an University
15:30–15:50	Coffee Break	
15:50–16:10	98	Impact of High-speed Rail on the Evolution of Urban Spatial Structure in China Qipeng Sun and Sijie Wang* Chang'an University
16:10–16:30	101	Research on Dynamic Evolution of Ride-sharing Travel Safety Supervision under the Public Media Participation Qipeng Sun, Tingzhen Li* and Yongjie Wang School of Management and Economics, Chang'an University
16:30–16:50	108	Study on the Influencing Factors and Volume Forecast of Feijing-Tianjin-Hebei Railway Passenger Transport Based on the Panel VAR-NN Combination Model



		Zhu Ruiqi and Zhou Huiyu* Beijing Jiaotong University
16:50-17:10	110	The Influence of Continuous Improvement Capability of Car-sharing Platform on Passenger's Loyalty: Mediating Role of Perceived Value, Passenger Trust and Transaction Costs Fei Ma*, Dan Guo, Feiyan Guo, Qianqian Wang and Yujie Zhu Chang'an University
17:10-17:30	186	Quantitative Study on the Space Use around Subway Stations: A Case Study on the Central City of Xi'an, China Chao Gao* and Jianwei Wang Chang'an University
17:30-17:50	266	Robust Modeling and Simulation of Urban Public Transportation Based on Double-layered Network Fei Ma, Wenjing Shi*, Kum Fai Yuen and Qipeng Sun Chang'an University

**Special Session D: Big Data and Shared Transport****Session Chair: Ying Lv & Huijun Sun****Time:** Sunday, 13th October, 2019 (14:10–18:30)**Location:** Room 107, Mechanical Engineering Building (机械工程楼 107)

Chair: Ying Lv & Huijun Sun		
Time	Paper No.	Topics
14:10–14:30	18	Tensor Decomposition based Mobility Pattern Recognition and Demand Prediction of Station-Free Shared Bikes in Subway Station Zhi and Lv* Beijing Jiaotong University
14:30–14:50	27	Ride-sharing or Not: Predicting Travelers' Mode Choices in on-demand Tide-sourcing Platforms Yaqian Zhou, Zhengfei Zheng, Jintao Ke* and Hai Yang The Hong Kong University of Science and Technology
14:50–15:10	28	Optimizing Station Locations for One-way Carsharing Systems: Modeling and Empirical Testing Jing-Jing Tian, Dong-Fan Xie*, Xiao-Mei Zhao and Jun Bi Beijing Jiaotong University
15:10-15:30	62	Spatial Network of Traffic Flow in Mobike Sharing System Zhiguo Zheng, Daqing Li*, Huijun Sun and Jianjun Wu Beihang University
15:30–15:50	Coffee Break	
15:50–16:10	75	Understanding the Factors Affecting Vehicle Usage and Efficiency in Carsharing Networks Feng Xiaoyan* and Sun Huijun Beijing Jiaotong University
16:10–16:30	97	Research on Reliability of Bus Transportation Network Based on Double-layer Network Model Guojuan Wang, Wenhong Lv*, Jiali Ge and Shouyan Fu Shandong University of Science and Technology
16:30–16:50	102	Extracting Influencing Factors of One-way Carsharing Usage: A Case Study in LanZhou Chengdong Zhou*, Xiaomei Zhao, Dongfang Xie and Jun Bi School of Traffic and Transportation, Beijing Jiaotong University



16:50-17:10	119	Day-to-day Dynamic Stochastic Ridesharing User Equilibrium Model Tongfei Li* Beijing University of Technology
17:10-17:30	124	Study on Market Competitiveness and Operation Strategy of Car-sharing Beibei Hu, Yue Sun, Huijun Sun and Xianlei Dong* School of Business, Shandong Normal University
17:30-17:50	164	Understanding Spatial-temporal Distribution Characteristics and Operational Efficiency of Sharing Bicycle —Take Nanjing for Example Xianlei Dong, Jiechen Yan, Huijun Sun and Beibei Hu* School of Business, Shandong Normal University
17:50-18:10	246	Exploring Passengers' Responses to Pre-peak Discount Fares and Optimizing Fare Schemes Peng Zhao, Xiangming Yao*, Zijia Wang, Qingru Zou and Taoyuan Yang Beijing Jiaotong University
18:10-18:30	224	Promoting Parking Behavior of Shared Bicycles with Social Norm Information: a Field Experiment Duan Su*, Yacan Wang, Jaimie Lien, Jiaping Wang and Tingting Fu Beijing Jiaotong University

**Special Session E: Travel Behavior and Urban Planning****Session Chair: Jiaoe Wang & Jie Huang****Time:** Sunday, 13th October, 2019 (14:10–18:30)**Location:** Room 108, Mechanical Engineering Building (机械工程楼 108)

Chair: Jiaoe Wang & Jie Huang		
Time	Paper No.	Topics
14:10–14:30	11	Divergence in Spatial Mismatch and Long-distance Commuting between Different Social Economic Groups in Xiamen Yongling Li, Pieter Hooimeijer, Stan Geertman, Yanliu Lin and Haoran Yang* East China Normal University
14:30–14:50	19	The Influence of Information Servervie on Transit Behavior of Urban and Rural Residents Xuemei Zhou*, Jiahui Liang and Xiangfeng Ji College of Transportation Engineering, Tongji University
14:50–15:10	54	A Tale of Two Cities: Jobs-housing Balance and Urban Spatial Structures from the Perspective of Transit Commuters Jie Huang, Yujie Hu, Jiaoe Wang*, Fengjun Jin and Xiang Li Institute of Geographic Sciences and Natural Resources Research, CAS
15:10-15:30	55	Impact of Travel Congestion on Subjective Well-being: Evidence from Beijing, China Fenglong Wang* East China Normal University
15:30–15:50	Coffee Break	
15:50–16:10	59	Urban Functional Area Dynamics in Beijing: Insights from Multiyear AFC Data Zijia Wang* and Haixu Liu Beijing Jiaotong University
16:10–16:30	84	Impact of High-speed Rail on Shrinking Cities in Different Stages — New Measurement of Global Network Connectivity Liangkai Deng* and Dan Wan Faculty of Architecture and Urban Planning, Chongqing University
16:30–16:50	89	Spatial Coupling Mechanism of High-tech Manufacturing Industry and Transportation network in Beijing Junbiao Chen*, Yingfeng Wang and Suifu Xiong School of Economic and Management, Beijing Jiaotong University



16:50-17:10	94	Cognitive Map of the Perceived Quality of Service on Urban Sidewalks: A Structural Equation Modeling Approach Jose Agustin Vallejo-Borda*, Alvaro Rodriguez-Valencia and Victor Cantillo Universidad de los Andes
17:10-17:30	146	Relationship between Tourism Traffic and Tourism Land Use——A Case Study of Xiamen Island Yueer Gao*, Yanqing Liao, Donggen Wang and Yongguang Zou School of Architecture, Huaqiao University
17:30-17:50	220	Evaluating Safety of the Evacuation Routes in Mountainous Historic District Based on Grey Correlation Analysis: A Case of Ciqikou Town Ruihang Xie* and Tiejun Zhou Faculty of Architecture and Urban Planning, Chongqing University
17:50-18:10	228	Multi-objective Optimization of Crude Distillation System Based on Evolutionary Algorithm Jia Wang*, Qibing Jin and Ziming Li Control Science and Engineering, Beijing University of Chemical Technology
18:10-18:30	250	Analysis of Short Commuting Trips and Factors Influencing the Modal Share in Shanghai Haixiao Pan* and Yuming Zheng Tongji University



Special Session F: New Governance Model and Strategy in Urban Transportation

Session Chair: Anthony May, Simon Shepherd, Erik Verhoef & Meng Xu

Time: Sunday, 13th October, 2019 (14:10–17:10)

Location: Room 109, Mechanical Engineering Building (机械工程楼 109)

Chair: Anthony May, Simon Shepherd, Erik Verhoef & Meng Xu		
Time	Paper No.	Topics
14:10–14:30	118	Tradable Permits to Manage Morning Peak Travel Behavior Kexin Geng, Yacan Wang*, Erik Verhoef and Devi Brands Beijing Jiaotong University
14:30–14:50	149	Evaluating Passengers' Heterogeneous Behavioral Response to Beijing Peak-avoidance Policy Using Smart Card Data Yu Wang, Yacan Wang*, Charisma Choudhury, Jingjuan Jiao, Zijia Wang and Yilin Ma Beijing Jiaotong University
14:50–15:10	169	Governance and Regulation of Autonomous Mobility for Sustainable Mobility? Caroline Mullen*, Simon Shepherd, Meng Xu and Qiuju Xue University of Leeds Beijing Jiaotong University
15:10-15:30	227	The Choice of Beijing Commuters' Travel Modes under Different Congestion Charging Scenarios Yacan Wang, Lu Yang*, Kexin Geng, Mengzhu Liu and Jingjuan Jiao Beijing Jiaotong University
15:30–15:50	Coffee Break	
15:50–16:10	219	Land Value and Transport: Understanding the Property Market Impact of Major Rail Investments and Other Policies Using Cross-sectional and Time Series Data John Nellthorp*, Daniel Johnson, Like Jiang, Manuel Ojeda Cabral and Christopher Leahy University of Leeds
16:10–16:30	223	Risks and Risk Governance for Autonomous Driving: A Tentative Analysis in China Qiuju Xue, Meng Xu* and Caroline Mullen Beijing Jiaotong University
16:30-16:50	229	Estimating the Value of Travel Time and Reliability of Beijing's Commuters – Based on Survey and Large-scale GPS Data Zilin Zhan, Yacan Wang* and Charisma Choudhury Beijing Jiaotong University
16:50–17:10	230	International Transferability of Measures Paul Timms* University of Leeds

**Special Session G: Low-carbon Traffic and Transportation Economy****Session Chair: Dongchu Cui****Special Session H: Airline and Airport Operations & Aviation Carbon Emission Policy****Session Chair: Qiang Cui, Zhong-fei Chen & Ye Li****Time:** Sunday, 13th October, 2019 (14:10–16:30)**Location:** Room 201, Mechanical Engineering Building (机械工程楼 201)

Chair: Dongchu Cui		
Time	Paper No.	Topics
14:10–14:30	103	Analysis of the Vehicle Mix and the Carbon Co-benefits in Passenger-car Sector in Beijing: from Air Pollution Control Perspective Jianxin Guo*, Yuan Zeng and Xianchun Tan Institutes of Science and Development, Chinese Academy of Sciences
14:30–14:50	122	The Effect of Restriction Policy on EV Adoption, a Case Study of Beijing Tianwei Lu*, Enjian Yao and Fanglei Jin Beijing Jiaotong University
14:50–15:10	123	Optimization Model and Algorithm of Metro Timetable Considering Energy Efficiency and Timeliness Huanhuan Lv and Yuzhao Zhang* Lanzhou Jiaotong University
15:10-15:30	156	Study on the Comprehensive Efficiency of Beijing-Tianjin-Hebei Regional Tourism Industry under the Background of High-speed Railway Zhang Xin* the Yanshan University
15:30–15:50		Coffee Break
Chair: Qiang Cui, Zhong-fei Chen & Ye Li		
Time	Paper No.	Topics
15:50–16:10	14	Factors Influencing Carriers' Entry Decisions in an Overlapping Transatlantic Air Market Shengrun Zhang*, Kurt Fuellhart, Wendong Yang, Xiaowei Tang and Frank Witlox Nanjing University of Aeronautics and Astronautics
16:10–16:30	193	Forecasting Airline Segment Entry and Network Evolution Reed Harder* and Vikrant Vaze Dartmouth College



Special Session I: High-speed Rail (HSR) Economics of Geography

Session Chair: Jiugeng Wang & Weidong Li

Time: Sunday, 13th October, 2019 (14:10–18:10)

Location1 : Room 204, Mechanical Engineering Building (机械工程楼 204)

Chair: Jiugeng Wang & Weidong Li		
Time	Paper No.	Topics
14:10–14:30	36	Research on the Influence of Zheng-Xi High-Speed Railway on the Agglomeration of Tertiary Industry in Cities along the Line Heng Li* and Yan Han School of Economics and Management, Lanzhou Jiaotong University
14:30–14:50	37	Evaluation on High-Speed Rail New Town along the Line of Beijing-Shanghai High-Speed Railway Based on Node-Place Model Yuan Zhang*, Yan Han, Jiugeng Wang and Jia Li School of Economics and Management, Lanzhou Jiaotong University
14:50–15:10	38	Impact of High-speed Railway on Chinese Cities' Accessibility and the Empirical Study on the Impact of High-speed Railway on Productivity Distribution Along the Line Yanping Jiang, Zhang Yuting*, Wang Jiugeng and Han Yan Department of Economics and Management Lanzhou Jiaotong University, Lanzhou, Gansu, China.
15:10-15:30	57	Research on the Influence of High-speed Rail Economic Effect on the Coordinated Development of Regional Economy ——Taking Central China's Henan Province as an Example Xin Hu* Lanzhou Jiaotong University
15:30–15:50	Coffee Break	
15:50–16:10	67	The Impact of Improved Spatial Accessibility on Development of Less Developed Regions: a Case of Lanzhou-Xinjiang High Speed Rail Lili Ma* Lanzhou Jiaotong University
16:10–16:30	68	Impact of High speed Railway on Accessibility and Economic Linkage of Cities along the Railway :A Case of Zhengzhou-Xi'an High-Speed railway Meiling Deng*, Jiugeng Wang and Yan Han School of Economics and Management, Lanzhou Jiaotong University
16:30-16:50	74	Study on the Influence of High-speed Railway on the Industrial Distribution of Urban Agglomeration Qijun Yang* and Jiugeng Wang Lanzhou Jiaotong University
16:50-17:10	76	Study on the Differentiation of Regional Economic Effect of Shanghai-Nanjing High-speed Railway Corridor Yanwei Zhang* and Jiugeng Wang Lanzhou Jiaotong University
17:10-17:30	77	Exploring the Relationship between High-speed Railway Accessibility Improvement and Housing Prices——A National scale of China Xueli Liu, Liangkai Deng, Feng Wang*, Yuxiang Wang and Songyue Xue Economics and Business Administration, Chongqing University at Shazheng Road, Chongqing



TSTE 2019

17:30-17:50	90	Research on the Impact of High-speed Railway Construction on Urban Land Space Development ——Taking Gansu Province as an Example Peng Gao and Jiugeng Wang* Lanzhou Jiaotong University
17:50-18:10	100	An Empirical Analysis of the Impact of Beijing-Shanghai High-speed Railway Opening on the Tourism Economy of Cities Along Its Line Weidong Li and Pei Feng* Beijing Jiaotong University



Special Session I: High-speed Rail (HSR) Economics of Geography

Session Chair: Jiugeng Wang

Time: Sunday, 13th October, 2019 (14:10–17:50)

Location 2: Room 207, Mechanical Engineering Building (机械工程楼 207)

Chair: Xu Yang & Zili Wang		
Time	Paper No.	Topics
14:10–14:30	194	Research on the Impact of High Speed Railway on Spillover Effects of County Economic Growth: A Case Study of Shaanxi Province Yan Han, Yuan Zhang*, Jiugeng Wang and Yuting Zhang Lanzhou JiaoTong University
14:30–14:50	221	Empirical Study on High-speed Railway Construction and Regional Economic Growth for Medium-Sized Cities Based on Synthetic Control Method Yao Yao and Xu Yang* School of Economic and Management, Beijing Jiaotong University
14:50–15:10	254	Research on the Influence of High-speed Railway on the Industrial Pattern of Urban Agglomeration Qijun Yang* and Jiugeng Wang Gansu Logistics and Information Technology Research Institute, Lanzhou Jiaotong University
15:10-15:30	255	Research on Impact of High-speed Railway on the Economic Development of Underdeveloped Areas: a Case of Lanzhou-Xinjiang High-speed Railway Lili Ma*, Yajun Zhu and Miao Gong School of Economics& Management, Lanzhou Jiaotong University
15:30–15:50	Coffee Break	
15:50–16:10	256	Impact of High speed Railway on Accessibility and Economic Linkage of Cities along the Railway :A Case of ZhengXi High-Speed railway Meiling Deng*, Yan Han and Jiugeng Wang School of Economics and Management, LanZhou JiaoTong University
16:10–16:30	257	High-speed Railway Network and Coordinated Development of Regional Economy — An Empirical Study Based on PSM-DID Method Xin Hu* and Jiugeng Wang Gansu logistics and information technology research institute of Lanzhou Jiaotong University
16:30-16:50	258	High-speed Railway Construction and Urban Land Space Development Peng Gao* and Jiugeng Wang Gansu Logistics and Information Technology Research Institute
16:50-17:10	261	The Effect Of High-speed Rail On The Economic Effects Of Cities Along The Roeut — Taking Shanghai-Nanjing and Shanghai-Hangzhou High-speed Rail Corridors as Examples Yanwei Zhang and Jiugeng Wang* Lanzhou Jiaotong university
17:10-17:30	269	The Impact of Transportation Infrastructure on Financial Agglomeration: A Spatial Econometric Analysis Based on Provincial Panel Data in China Zili Wang* and Xiaoyan Lin Beijing Jiaotong University
17:30-17:50	270	Supply of High Speed Rail: Economic Development, Social Equality and Sustainable Environment, Which Matters Zili Wang* and Xiaoyan Lin Beijing Jiaotong University

**Special Session J: Shared Transportation Systems****Session Chair: Chi Xie & Xiqun (Michael) Chen****Time:** Sunday, 13th October, 2019 (14:10–17:30)**Location:** Room B-2, Mechanical Engineering Building (机械工程楼 B-2)

Chair: Chi Xie & Xiqun (Michael) Chen		
Time	Paper No.	Topics
14:10–14:30	15	Online Assignment for Sharing Parking Slots Zhenpeng Tang* and Yanping Jiang Northeastern University
14:30–14:50	25	Modelling aRide-sharing Market with Congestion Externality Hai Yang, Jintao Ke* and Zhengfei Zheng The Hong Kong University of Science and Technology
14:50–15:10	45	A Matching Model between Idle Parking Slots and Demanders for Parking Slot Sharing Yanping Jiang, Xinran Shao* and Xinchao Song Northeastern University, Shenyang, China
15:10–15:30	49	A Many-to-many Matching Method Considering Priority for Sharing Idle Parking Spaces and Demanders Yanping Jiang, Xinchao Song and Xinran Shao* Northeastern University, Shenyang, P.R. China
15:30–15:50		Coffee Break
15:50–16:10	79	Travelers' Ridesharing Acceptance and Behavior Reactions: A case Study in Beijing Zhou Zhitian* Beijing Jiaotong University
16:10–16:30	174	Enabling Mobility-as-a-Service: Optimal Subsidy Allocation and Pricing Strategies for Bundled Mobility Services Sisi Jian*, Wenwei Wang and Qi Qi The Hong Kong University of Science and Technology
16:30–16:50	188	Optimizing Free Cancellation Window and Penalty Cost in Ride-sourcing Markets Xinwei Li, Jintao Ke*, Hai Yang, Xiaolei Wang and Junlin Zhang The Hong Kong University of Science and Technology
16:50–17:10	202	Research on Customer Satisfaction with ride-hailing services based on Expectation-Confirmation Theory Yidi Zhang and Peihong Chen* Beijing Jiaotong University
17:10–17:30	225	Analysis on Customer Satisfaction of Shared Bikes Based on ACSI Model Xu Shiyi* and Peihong Chen Beijing Jiaotong University

**Special Session K: Comprehensive Management of Traffic Congestion****Session Chair: Chengfeng Huang & Chaofeng Shi****Time:** Sunday, 13th October, 2019 (14:10–17:10)**Location:** Room B-5, Mechanical Engineering Building (机械工程楼 B-5)

Chair: Chengfeng Huang & Chaofeng Shi		
Time	Paper No.	Topics
14:10–14:30	46	Optimization of Variable Message Sign Locations Considering Stochastic User Equilibrium Zhuanglin Ma, Ronghui Zhang* and Wenjing Zhao Chang'an University
14:30–14:50	47	Optimizing and Evaluating the Effect of Variable Message Sign Layout Zhuanglin Ma, Ronghui Zhang* and Wenjing Zhao Chang'an University
14:50–15:10	106	Short-term Traffic Congestion Prediction Based on Time Series Association Rule Mining Qiyang Wang* and Huiyu Zhou Beijing Jiaotong University
15:10–15:30	152	Two-period Dynamic Pricing with Consumer Switching Behavior Hao Li, Xi Yang* and Xuexia Xiong Yanshan University
15:30–15:50		Coffee Break
15:50–16:10	162	The Effect of Introducing Intermediaries to Sell Products on the Whole Supply Chain Hao Li, Aihua Yu* and Aihua Yu Chongqing Jiaotong University
16:10–16:30	172	The Market Design and the General Set-up of Tradable Parking Permit Experiment Brands*, Verhoef, Koster and Knockaert Vrije Universiteit Amsterdam
16:30–16:50	183	Price Commitment or Fixed Pricing? Based on the Competitive Perspective of High-Speed Railway and Aviation Hao Li, Hao-Nan Xu* and Yu Tu Chongqing Jiaotong University, College of Economics and Management
16:50–17:10	207	Pricing Strategy of Online Retailers under Limited Sales — From the Perspective of Multi-brand Competition and Consumer Preference Hao Li, Yu Tu* and Xi Yang Chongqing Jiaotong University



Special Session L: Data-driven Travel Behavior Modeling and Analysis

Session Chair: Hongtai Yang, Chuan Ding & Binglei Xie

Time: Sunday, 13th October, 2019 (14:10–17:50)

Location: Room 302, Siyuan East Building (思源东楼 302)

Chair: Hongtai Yang, Chuan Ding & Binglei Xie		
Time	Paper No.	Topics
14:10–14:30	58	Data Fusion for Bus Arrival Time Prediction: A Deep Learning with Bayesian Inference Approach Yuan Yuan*, Chun-Fu Shao, Liang Han, Bingjian Yang and Min Yan Beijing Jiaotong University
14:30–14:50	109	Exploring the Equity Level of Traditional and E-hailing Taxi Services: A Case Study of New York City Renbin Pan*, Hongtai Yang, Kun Xie and Yi Wen Southwest Jiaotong University
14:50–15:10	133	A Simulation-Optimization Approach to Estimate OD Matrices Based on Traffic Counts and Mobile Data Cassiano Augusto Isler*, Guilherme Belegante and Gabriel Bogo University of São Paulo
15:10-15:30	136	Use Characteristics and Alternative Mode Choice Behavior of Ride-hailing Users in Chengdu, China: A Study Based on Stated Preference Survey Guocong Zhai and Hongtai Yang* Southwest Jiaotong University
15:30–15:50		Coffee Break
15:50–16:10	138	Analysis of Public Travel Behaviors of Elderly in Cold Region Cities with Multi-source Data Fusion Xiaowei Hu* and Hanghang Sun Harbin Institute of Technology
16:10–16:30	145	Travel Characteristics Analysis and Passenger Flow Prediction of Intercity Shuttles of Urban Agglomeration in Holidays Xie Binglei, Sun Yu* and Huang Xiaolong Harbin Institute of Technology, Shenzhen
16:30-16:50	166	Study on Nonlinear Relevance between Land Use and Commute Travel Mode Choice Hang Ren and Chuan Ding* Beihang University
16:50-17:10	198	Gravity Model of Human Mobility: A New Distance Weighted Attractiveness Zhibin Tan, Zhigang Cao*, Xiaoyong Yan and Hanqing Zhao School of Economics and Management, Beijing Jiaotong University
17:10-17:30	238	Research on the Relationship Between Individual Characteristics of Electric Cyclists and Illegal Speeding riding behavior: a Questionnaire-based Study Changxi Ma*, Jibiao Zhou, Dong Yang, Yuanyuan Fan and Raksud Somjet Lanzhou Jiaotong University
17:30-17:50	249	Spatial-temporal Analysis of Pedestrian Injury Severity with Geographically and Temporally Weighted Regression Model in Hong Kong Xuecai Xu, Xiangjian Luo, Changxi Ma* and Daiquan Xiao Lanzhou Jiaotong University



Special Session M: Transportation Resilience

Session Chair: Daqing Li

Time: Sunday, 13th October, 2019 (14:10–17:50)

Location: Room 303, Siyuan East Building (思源东楼 303)

Chair: Daqing Li		
Time	Paper No.	Topics
14:10–14:30	21	Resilience Measure in Urban Traffic Systems Considering Transportation Sharing Hongyan Dui, Chi Zhang, Guanghan Bai* National University of Defense Technology, China
14:30–14:50	26	Estimation of Mean and Covariance of Path Flows Based on Plate Scanning Technology under Network Uncertainty Liang Shen and Hu Shao* China University of Mining and Technology
14:50–15:10	29	Comparative Analysis of Highway Reliability in Mountainous Areas and Plain Areas in China Meng Wei, Yong Huang* and Guoqing Ge Chongqing university
15:10-15:30	31	A Route Redundancy-based Vulnerability Analysis of Metro Networks Weiwei Jing, Xiangdong Xu* and Yichao Pu Tongji University
15:30–15:50	Coffee Break	
15:50–16:10	40	Statistical Analysis of Resilience in Air Transport Network Guoqiang Xu, Xuejun Zhang and Yongxiang Xia Zhejiang University*
16:10–16:30	85	The Analysis of Traffic Congestion Propagation Causal Network In Peak Period Wen Xuan Li, Li Yun He, Dong Wei Xu* and Qi Xuan Zhejiang University of Technology
16:30-16:50	107	Resilience of Beijing Metro System Ziyao Wang*, Shiyun Liu, Daqing Li* and Jianjun Wu Beihang University
16:50-17:10	161	Spectral Analysis for Road Network Connectivity Shoichiro Nakayama*, Shun-Ichi Kobayashi and Hiromichi Yamaguchi, Kanazawa University
17:10-17:30	204	Simple Method to Extract Very Important Nodes in Network Based on Eigenvector Centrality and Filtering with Distance Shun-Ichi Kobayashi*, Shoichiro Nakayama, Tran Thanh Hai and Hiromichi Yamaguchi Kanazawa University
17:30-17:50	206	Exploring the Relationship Between Resilience and Traffic State Shoufeng Lu* and Ximin Liu Changsha University of Science & Technology



Special Session N: Transport Economics and Management

Session Chair: Achim I. Czerny & Xiaowen Fu

Time: Sunday, 13th October, 2019 (14:10–17:30)

Location1: Room 304, Siyuan East Building (思源东楼 304)

Chair: Achim I. Czerny & Wijnand Veeneman		
Time	Paper No.	Topics
14:10–14:30	70	Impact of Driving Restriction Policy (DRP) on Air Quality Index(AQI): An Empirical Study of Tianjin Shitong Wang, Xuemei Li* and Khalid Mehmood Alam Beijing Jiaotong University
14:30–14:50	96	Economic and Social Impact of High-speed Railway on Different Cities — Based on Threshold Autoregressive Model Weidong Li* and Ying Wang Beijing Jiaotong University
14:50–15:10	116	The Material-informational Relationship and Efficiency Improvement of Official Vehicles Reform in China from the Perspective of Time-space Dan Zhu* Beijing Jiaotong University
15:10-15:30	130	A Theoretical Analysis on the Allocation of Airline Operations in a Two-airport System - the Case of the Opening of Beijing Daxing International Airport Meng Hou, Kun Wang and Hangjun Yang* University of International Business and Economics
15:30–15:50	Coffee Break	
15:50–16:10	158	A Multiple Driverless Delivery Vehicles Space-time Route Optimization Algorithm Coordinated With Delivery Task Assignment Problem Based on the Maximization of Profit Jianqiang Wang*, Liping Zheng, Shiwei Li and Xue Yang Lanzhou Jiaotong University
16:10–16:30	165	Competition and Cooperation between High-speed Rail and Air Transport: Catchment Area Expansion Hongyi Gu* and Yulai Wan* The Hong Kong Polytechnic University
16:30–16:50	176	Beijing's Evolution of Parking Problems under Proactive Urban Shrinkage Hong Xu* and Yutao Li* Beijing Jiaotong University Chinese Academy of Macroeconomic Research, ICT-NDRC
16:50-17:10	177	A Unified Equilibrium Model of Transportation Networks and Land Use Shoichiro Nakayama* and Hiromichi Yamaguchi Kanazawa University
17:10-17:30	280	Valuing Infrastructure: High Speed Lines and Beyond Wijnand Veeneman* Delft University of Technology

**Special Session N: Transport Economics and Management****Session Chair: Achim I. Czerny & Xiaowen Fu****Time:** Sunday, 13th October, 2019 (14:10–16:30)**Location2:** Room 306, Siyuan East Building (思源东楼 306)

Chair:Achim I. Czerny & Aksel Ersoy		
Time	Paper No.	Topics
14:10–14:30	182	Space-Time Measure Dimension: Economic Goods Attributes of Parking-Space and Parking-Garage Hong Xu* and Yutao Li* Beijing Jiaotong University Chinese Academy of Macroeconomic Research, ICT-NDRC
14:30–14:50	185	Analysing Flight On-time Performance in China's Airline Market Xiaowen Fu, Shaoxuan Liu, Zheng Lei, Kun Wang* and Jia Yan University of International Business and Economics
14:50–15:10	201	An Airport Pricing versus Slots Game: the Case of Substitute Air Services Hao Lang* and Achim Czerny* The Hong Kong Polytechnic University
15:10–15:30	214	Research on Railway Freight Rate Evaluation Index System Based on BP Neural Network Jin Zeng*, Fangrong Qi* and Xiaoqing Zhang Beijing Jiaotong University
15:30–15:50		Coffee Break
15:50–16:10	217	Research on the Impact of High-speed Railway on Economic Growth along Railway Line Based on Synthetic Control Method Zhiyuan Liang* and Xv Yang Beijing Jiaotong University
16:10–16:30	239	The Impact of Urban Rail Transit on Sentiment and Activity in High-Density Cities: A Case Study in Hong Kong Haoliang Chang and Lishuai Li* City University of Hong Kong

**Special Session O: City Logistics & Sustainable Development****Session Chair: Guang Cheng****Time:** Sunday, 13th October, 2019 (14:10–17:30)**Location:** Room 307, Siyuan East Building (思源东楼 307)

Chair: Guang Cheng		
Time	Paper No.	Topics
14:10–14:30	72	Joint Optimization on Logistics infrastructure investment and CO2 emission taxes in a sustainable urban logistics network: a goal programming approach Dezhi Zhang*, Shenjie Long, Hui Liu, Yajie Liu and Shuxin Yang Central South University
14:30–14:50	117	Ergonomic Analysis of Train Brake Testing System Xiufang Sun* and Ze Liu Beijing Union University
14:50–15:10	125	Research on warehouse facility planning and vehicle route optimization for iron and steel manufacturing enterprise Cuixin Ma, Xiaoyi Qu, Huibin Hu, Yu Chen, Xue Sun* and Liting Cao Beijing Union University
15:10–15:30	144	Research on Ergonomic Testing of Knob Operations Ai-Ping Yang* and Yun-Ni Xu Beijing Union University
15:30–15:50		Coffee Break
15:50–16:10	150	Research on Urban Agricultural Product Supply Chain Architecture Based on Resident Demand Analysis Ping Li*, Jingyun Liu* and Lihua Zhao* Beijing Union University
16:10–16:30	153	A Short-term Traffic Flow Prediction Method Based on Deep Learning Framework Chengming Qi*, Lishuan Hu and Liting Cao Beijing Union University
16:30–16:50	155	Research and optimization of urban logistics node location Xuelian Li* Beijing Union University
16:50–17:10	157	Optimum Energy-Saving Distribution System based on Joint Distribution Hongxia Yang and Liting Cao* Beijing Union University
17:10–17:30	159	Optimal Operation Analysis of Electronic Consumer Product Transportation Boyang Hao* Beijing Union University



Special Session O: City Logistics & Sustainable Development

Session Chair: Guang Cheng

Time: Sunday, 13th October, 2019 (14:10–17:30)

Location: Room 308, Siyuan East Building (思源东楼 308)

Chair: Guang Cheng & Liting Cao		
Time	Paper No.	Topics
14:10–14:30	163	Channel Selection Based on Hotelling Model of Market Competition Supply chain Hao Li, Wenwei Chen* and Aihua Yu Beijing Union University
14:30–14:50	167	Hub Location of Urban Underground Logistics System with Hub-and-Spoke Layout: Integrating modified SCP with Clustering model Jianjun Dong, Lingxiang Wei*, Junjie Zhang, Yuanxian Xu* and Zhilong Chen* Yancheng Institute of Technology Army Engineering University of PLA
14:50–15:10	171	Perspective for Low Carbon Energy to Solve the Problem of Logistics Distribution in Cold Chain Transportation Jiaqi Qian, Xin Wang, Na Li, Xue Sun* and Ping Li Beijing Union University
15:10–15:30	173	A Short-term Traffic Flow Prediction Method Based on Deep Learning Framework Chengming Qi*, Lishuan Hu and Liting Cao Beijing Union University
15:30–15:50	Coffee Break	
15:50–16:10	175	Research and Optimization of Urban Logistics Node Location Xuelian Li* Beijing Union University
16:10–16:30	184	Optimum Energy-Saving Distribution System based on Joint Distribution Hongxia Yang and Liting Cao* Beijing Union University
16:30–16:50	187	Optimal Operation Analysis of Electronic Consumer Product Transportation Boyang Hao* Beijing Union University
17:10–17:30	190	Hub Location of Urban Underground Logistics System with Hub-and-Spoke Layout: Integrating modified SCP with Clustering model Jianjun Dong, Lingxiang Wei*, Junjie Zhang, Yuanxian Xu* and Zhilong Chen*, Yancheng Institute of Technology, Army Engineering University of PLA

**Special Session P: Logistics Planning for Port and Shipping****Session Chair: Jianfeng Zheng & Hongtao Hu****Time:** Sunday, 13th October, 2019 (14:10–17:50)**Location:** Room 611, Siyuan East Building (思源东楼 611)

Chair: Jianfeng Zheng & Hongtao Hu		
Time	Paper No.	Topics
14:10–14:30	22	Impacts of New International Land-Sea Trade Corridor on the Freight Patterns among China, Central Asia and the ASEAN Countries Yonglei Jiang* Dalian Maritime University
14:30–14:50	30	An Improved Benders Decomposition Method for Stochastic Yard Template Planning in Container Terminals Hongtao Hu, Jiao Mo and Lu Zhen* Shanghai University
14:50–15:10	64	Simulation-based Liner Ship Scheduling when Entering and Exiting a Tidal Port Jianfeng Zheng* and Chao Li Dalian Maritime University
15:10–15:30	65	The Emission Control Area location problem: A case of China Jianfeng Zheng* and Yulong Sun Dalian Maritime University
15:30–15:50		Coffee Break
15:50–16:10	69	Planning Shuttle Vessel Operations in Large Container Terminals based on Waterside Congestion Cases Xuanyi Song and Jiangang Jin* Shanghai Jiao Tong University
16:10–16:30	86	Carbon Quota Allocation in Port Logistics Service Supply Chain Tingsong Wang* and Mengfan Xu Wuhan University
16:30–16:50	112	Combinatorial Optimization Techniques for Hub-and-Spoke Urban Underground Logistics System Planning Wanjie Hu, Jianjun Dong*, Bon-Gang Hwang and Zhilong Chen Nanjing Tech University
16:50–17:10	114	Ship Fleet Scheduling in an Inland River: A bottleneck Model Yao Deng and Zhi-Chun Li* Huazhong University of Science and Technology



17:10-17:30	139	A Hub-and-spoke Shipping Network Design with Consideration of Carbon Emission Taxation Tingsong Wang* and Jingjing Zhu Wuhan University
17:30-17:50	236	Multi-criteria Decision Analysis of Sustainability Factors of Green Ports in China: Fuzzy AHP Approach Vishal Kashav, Xuemuge Wang* and Chandra Prakash Garg Shenzhen Polytechnic



Parallel Sessions

Parallel Session A: Transportation Economic Theory and Practice

Time: Sunday, 13th October, 2019 (14:10–17:50)

Location: Room 612, Siyuan East Building (思源东楼 612)

Session Chair: Zhenhua Chen, Ming Zhong & Huiyu Zhou		
Time	Paper No.	Topics
14:10–14:30	3	Modeling Intra-household and Individual Interactions that Effects Activity/Travel Decisions: A Case Study of Wuhan, China Yunes A.M Almansoub*, Ming Zhong, Asif Raza and Raymond Akuh Wuhan University of Technology
14:30–14:50	34	A Route Planning Method for Supermarket Shuttle Service Based on Taxi Traces Guangfei Yang, Huiyu Zhou, Erbiao Yuan* and Xiang Zhang Dalian University of Technology
14:50–15:10	71	Predicting Weather-Induced Delays of High-Speed Rail and Aviation in China Zhenhua Chen* and Yuxuan Wang The Ohio State University
15:10-15:30	50	In the Emergence of Autonomous Vehicles: Comparison/Lessons Learned between the Netherlands and China Aksel Ersoy, Biyue Wang* and Hongchang Li Delft University of Technolog
15:30–15:50		Coffee Break
15:50–16:10	52	Unravelling the Decision-making Process of the Location Choice of High-speed Railway Stations in China: a Comparative Study of Shenzhen, Lanzhou and Jingmen Biyue Wang*, Ellen van Bueren, Martin de Jong, Yawei Chen and Wijnand Veeneman Delft University of Technology
16:10–16:30	42	Convergence Analysis of High-speed Railway on Urban-rural Income Gap under Network Condition Weidong Li, Xuefang Wang* and Olli-Pekka Hilmola Beijing Jiaotong University
16:30-16:50	87	Towards Competitiveness of Rail Freight for Sustainable Modal Shift: Using Text Mining to Understand Rail Transport Requirements Jieru Zhou*, Ying Wang and Lei Huang Beijing Jiaotong University
16:50–17:10	99	The Impact of High-speed Railway Construction on Urbanization under Networking Conditions Weidong Li, Xuefei Xia and Daniel Johnson* University of Leeds
17:10–17:30	128	Exploring The Stakeholder Interaction Under The Development Of The Underground Logistics System: A System Dynamics Approach Yuanxian Xu*, Jianjun Dong, Rui Ren and Zhilong Chen Army Engineering University of PLA
17:30–17:50	178	The Reconfiguration Effect of China's High Speed Railway on Intercity Connection -- A Study Based on Media Attention Xiaolan Yang, Dongmei Guo, Rui Wang and Weizeng Sun* Central University of Finance and Economics



Parallel Session B: Transportation Economics for Various Transportation Modes

Time: Sunday, 13th October, 2019 (14:10–17:10)

Location: Room 610, Siyuan East Building (思源东楼 610)

Session Chair: Jaimie Lien, Chao Gao & Yitong Ma		
Time	Paper No.	Topics
14:10–14:30	179	The Influence of the Convenience of Public Transportation Transfer in Beijing Suburbs on Commuting Choice Yaodong Zhou and Tiantian Jin* Beijing Jiaotong University
14:30–14:50	195	Is the Same Price for “Station ticket” and “Seat ticket” Reasonable? - Based Upon Analysis Satisfaction Degree of China Railway Passengers Zhenqi Huang, Kai Zheng*, Zhiqiang An, Bin Sun and Yihong Ru Beijing Jiaotong University
14:50–15:10	210	Competition for Rail Transport Services in Duopoly Market: Case Study of China Railway Express in Chengdu and Chongqing Yitong Ma*, Daniel Johnson, Judith Wang and Xianliang Shi Beijing Jiaotong University
15:10-15:30	218	Non-negative Matrix Factorization Approach for Estimating Travel Purposes of Mobile Phone Location Data Qiao Fang*, Hiromichi Yamaguchi and Shoichiro Nakayama Kanazawa University
15:30–15:50	Coffee Break	
15:50–16:10	137	Research on the Effectiveness of Beijing Subway Peak Shifting Fare Policy based on the Smart Card Data Jianing Yu, Xueling Li, Yifan Wang* Beijing Jiaotong University
16:10–16:30	233	Pricing Equilibrium of Transportation Systems with Behavioral Commuters Jaimie Lien, Vladimir Mazalov and Jie Zheng* Tsinghua University
16:30-16:50	237	Exploring Taxi Ridership Determinants and People's Travel Characteristics Combining GPS, POIs, and Demographic Data in Xi'an, China Tao Lv*, Yuanqing Wang* and Fan Feng Chang'an University
16:50–17:10	241	Evaluating the Spatial-economic Impacts of Missing Link Accessibility on Economic Development: Evidence from China's National Highway System Fang Bian* and Anthony Yeh the University of Hong Kong



Parallel Session C: Transportation Behaviour Analysis

Time: Sunday, 13th October, 2019 (14:10–17:30)

Location: Room 720, Siyuan East Building (思源东楼 720)

Session Chair: Hongqi Li & Zhongxiang Feng		
Time	Paper No.	Topics
14:10–14:30	247	The Feeder-Vehicle Routing and High-Speed-Train Assignment Problem with Time Windows Hongqi Li* and Jun Chen Beihang University
14:30–14:50	248	Technology and Threshold: An Empirical Study of Highway Passenger Transport Emissions Yunlong Liu, Yuan Yuan*, Haichang Guan and Xiaolei Sun Chongqing Jiaotong University
14:50–15:10	252	Analysis of the Factors Affecting Drivers' Queue-jumping Behaviors in China Liping Yang, Zhongxiang Feng*, Xiaohua Zhao, Kang Jiang and Zhipeng Huang Hefei University of Technology
15:10–15:30	253	Optimization of Structural Parameters of Urban Underpass Tunnels Based on Physiological and Behavioral Characteristics of Drivers: A Study Based on Driving Simulation Experiments Zhongxiang Feng*, Miaomiao Yang, Yingjie Du and Jin Xu Hefei University of Technology
15:30–15:50	Coffee Break	
15:50–16:10	259	Dynamic Crosswalk Signal Timing Optimization Model Considering Vehicles and Pedestrians' Delays and Fuel Consumption Cost Keyan Bai, Enjian Yao*, Long Pan, Linze Li and Wei Chen Beijing Jiaotong University
16:10–16:30	260	The Sustainable Tractor Routing Problem Hongqi Li*, Haotian Wang and Jun Chen Beihang University
16:30–16:50	267	Bus Dynamic Travel Time Prediction: Attention Based RNN Using Wide & Deep Data Fusion Model Yuan Yuan, Chunfu Shao*, Zhaocheng He, Changshen Zhu, Yimin Wang, Min Yan and Vlon Jang Beijing Jiaotong University
16:50–17:10	268	Should Vacant Taxis Use HOV Lanes at Urban Level? Dong Ding* Chongqing University of Posts and Telecommunications
17:10–17:30	274	Effectiveness Investigation of Travel Demand Management Measures in Beijing: Existing Measures and a Potential Measure -- Tradable Driving Credit Yue Bao*, Meng Xu, Nico Dogterom and Dick Ettema Beijing Jiaotong University

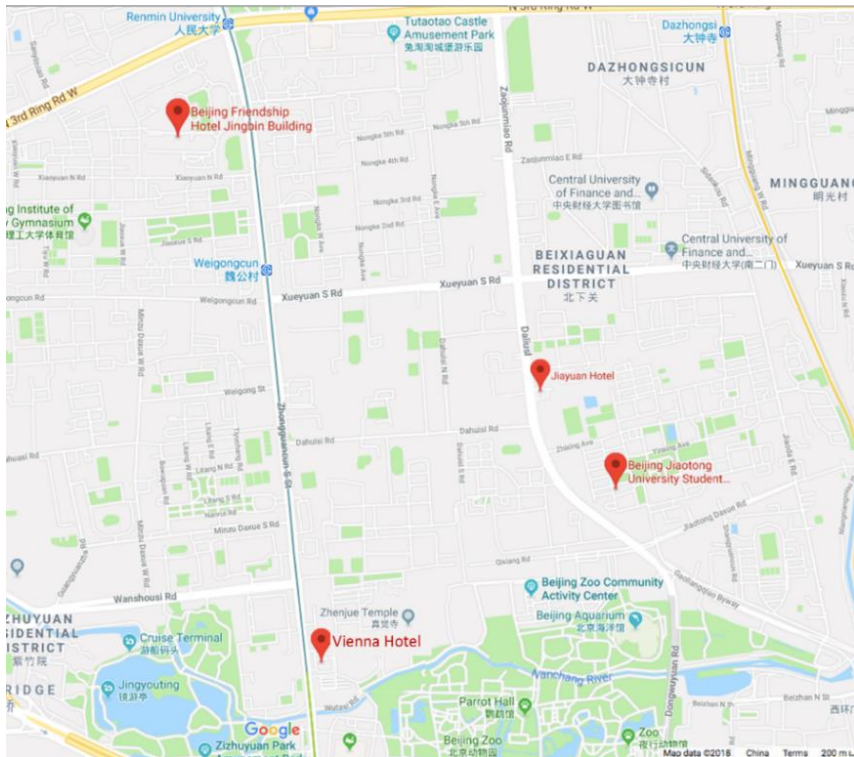


Venue and Accommodation



Red Circle: Siyuan East Building

Green Circle: Mechanical Engineering Building



Beijing Jiaotong University: No.3 Shangyuancun, Haidian District, Beijing
北京交通大学：海淀区西直门外上园村 3 号

Friendship Hotel: 1 Zhongguancun South Street, Haidian District, Beijing
友谊宾馆：海淀区中关村南大街 1 号 (四通桥西南角)

Vienna Hotel: 52 Zhongguancun South Street, Haidian District, Beijing
维也纳国际酒店：中关村南大街 52 号 (近国家图书馆)

Beijing Jiayuan Hotel: 6 Daliushu Road, BeiXiaGuan, Haidian District, Beijing
北京嘉苑饭店：海淀区西直门外大柳树路 6 号 (近北京交通大学)

Beipingshengshi Roast Duck Restaurant: 2nd floor, No.1 Building, 25 Jiaoda East Road, Haidian District (opposite Friendship Hotel), Beijing
北平盛世烤鸭店 (西直门店)：北京市海淀区交通大学路交大东路 25 号 1 号楼 2 层

Taishuxi Home Cooking: 2nd floor, No. 17, Jiaoda East Road, Haidian District, Beijing
太熟悉家常菜 (天府香国店)：北京市海淀区交大东路 17 号



Transportation



Subway



Bus

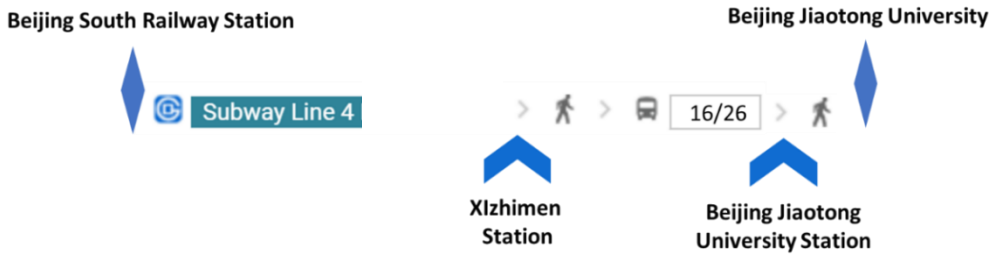


Walking

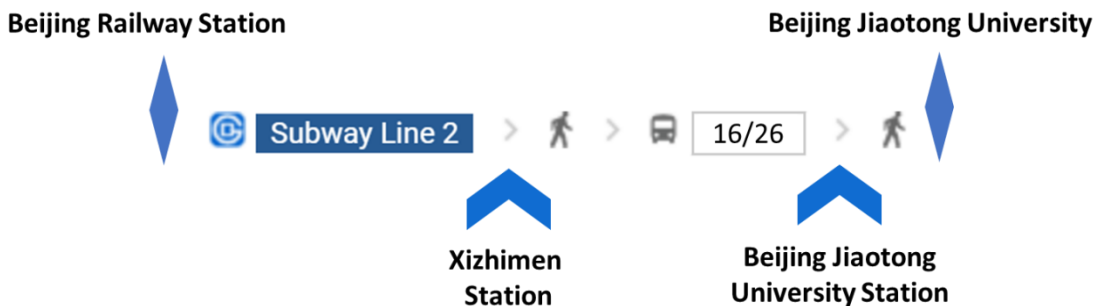
A. Transportation from Beijing Capital International Airport to Beijing Jiaotong University



B. Transportation from Beijing South Railway Station to Beijing Jiaotong University

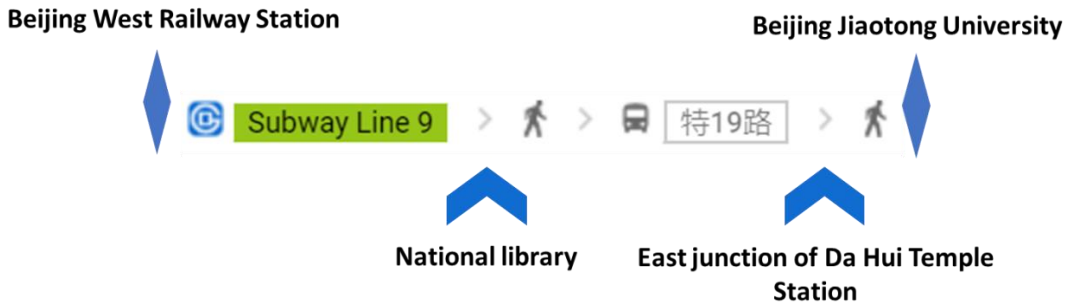


C. Transportation from Beijing Railway Station to Beijing Jiaotong University

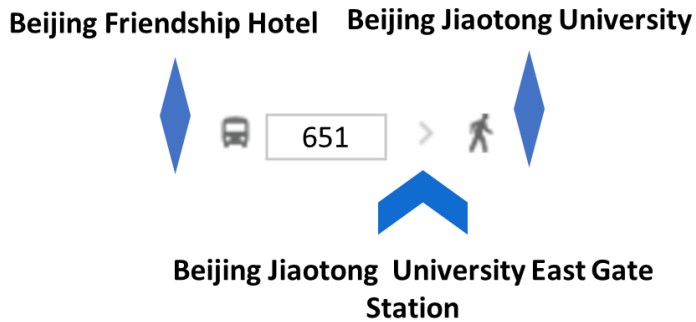




D. Transportation from Beijing West Railway Station to Beijing Jiaotong University



E. Transportation from Beijing Friendship Hotel to Beijing Jiaotong University



F. Transportation from Vienna Hotel to Beijing Jiaotong University

