

The 6th Conference of Hong Kong Society for Transportation Studies
Transportation Planning and Management in the 21st Century
Conference Programme

Time	Programme				
08:30 – 09:00	Registration (<i>Pre-Function Area</i>)				
09:00 – 09:15	Welcome Address (<i>Ballroom C</i>)				
09:15 – 10:25	Keynote Address (<i>Ballroom C</i>) Ir. George F. K. Lai, JP Deputy Commissioner for Transport Transport Department Prof. David Boyce University of Illinois Prof. Chan Wirasinghe University of Calgary				
10:25 – 10:50	Coffee Break (<i>Pre-Function Area</i>)				
10:50 – 12:00	Plenary Session – Invited Lectures <i>(Ballroom C)</i> Prof. Masao Kuwahara University of Tokyo Prof. Benjamin Heydecker University College London Prof. Ryuichi Kitamura Kyoto University	Session 1 <i>(Tang 1)</i> Theory and measurement of Traffic Flows	Session 2 <i>(Tang 2)</i> Intelligent Transportation Systems		
12:00 – 13:30	Conference Lunch (<i>Sky Lounge 18/F</i>)				
13:30 – 15:00	Session 3 <i>(Tang 1)</i> Traffic Management I	Session 4 <i>(Tang 2)</i> Freight Transportation and Logistics Management	Session 5 <i>(Ballroom A)</i> Transportation Planning and Network Design	Session 6 <i>(Ballroom B)</i> Transportation Infrastructure	Special Session A <i>(Ballroom C)</i> Transportation Development and Policy in China
15:00 – 15:20	Coffee Break (<i>Pre-Function Area</i>)				
15:20 – 16:45	Session 7 <i>(Tang 1)</i> Traffic Management II	Session 8 <i>(Tang 2)</i> Road Networks and Traffic Assignment	Session 9 <i>(Ballroom A)</i> Travel Behavior	Special Session B <i>(Ballroom B)</i> Transit Modelling	
16:45 – 17:00	Closing Address (<i>Ballroom C</i>)				
18:30 – 20:30	Optional Conference Dinner				

**SIXTH CONFERENCE OF HONG KONG SOCIETY FOR TRANSPORTATION STUDIES
TRANSPORTATION PLANNING AND MANAGEMENT IN THE 21ST CENTURY
Conference Programme**

08:30 – 09:00

Registration

09:00 – 09:15

Welcome Address (Ballroom C)

Professor L.K. Chan (Dean, Faculty of Business, City University of Hong Kong) and
Professor William H.K. Lam (President, HKSTS)

09:15 – 10:25

Keynote Address (Ballroom C)

Chair: Dr. Hing-Po Lo

**Transport Department's Strategy to Enhance the Performance of the Hong
Kong Transport System through the Deployment of Intelligent Transport
Systems**

Ir. George F. K. Lai, JP

Deputy Commissioner for Transport, Transport Department

Is the Sequential Travel Forecasting Paradigm a Counterproductive Concept?

Prof. David Boyce

University of Illinois

Impact of New Large Aircraft on Airport Planning and Operations

Prof. Chan Wirasinghe, Alexandre G. de Barros

University of Calgary

10:25 – 10:50

Coffee Break (Pre-Function Area)

10:50 – 12:00

Plenary Session – Invited Lectures (Ballroom C)

Chair: Prof. William H K Lam

A Theoretical Analysis on Dynamic Marginal Cost Pricing

Prof. Masao Kuwahara

University of Tokyo

Objective Functions for Static and Dynamic Traffic Assignment

Prof. Benjamin Heydecker

University College London

**From Planning for Work to Planning for Play: A Comparative Analysis of the
City and the Suburb**

Prof. Ryuichi Kitamura

Kyoto University

10:50 – 12:00

Session 1: Theory and Measurement of Traffic Flow (Tang 1)

Chair: Dr. C.O. Tong

Integer Programming Models for Optimal Selection of Screen Lines in Road Networks

Liping Gan, Hai Yang

Department of Civil Engineering, The Hong Kong University of Science and Technology

Accuracy of Assignment of Stations with Short Period Counts

K. M. Cheung, H. P. Lo

Department of Management Sciences, City University of Hong Kong

Validation of Short-Term Prediction for Annual Average Daily Traffic in Hong Kong

Yuen Fan Tang, William H.K. Lam

Department of Civil and Structural Engineering, The Hong Kong Polytechnic University

Session 2: Intelligent Transportation Systems (Tang 2)

Chair: Dr. W.G. Wong

A Review of Focus Group Observations on Strategy for Successful Implementation of Traveler Information Systems (TIS) in Hong Kong

Y. P. Lam, Department of Management,

William H. K. Lam, Department of Civil and Structural Engineering,

Leon Y. O. Li, Department of Management

The Hong Kong Polytechnic University

Evaluation of Visual Guiding Tools

Wing Gun Wong , Ka Hung Lai , Patrick Eberling

Department of Civil and Structural Engineering, The Hong Kong Polytechnic University

Benefits Evaluation of Advanced Traveler Information Systems (ATIS): A Comparison between Static versus Dynamic Models

W.Y. Szeto, Hong K. Lo

Department of Civil Engineering, The Hong Kong University of Science and Technology

12:00 – 13:30

Conference Lunch (Sky Lounge 18/F)

13:30 – 15:00

Session 3: Traffic Management I (Tang1)

Chair: Prof. Toshio Yoshii

Balance of Road Tolling & Capacity Expansion for Solving Bottleneck Problem

Z.X. Wu, William.H.K. Lam

Department of Civil and Structural Engineering, The Hong Kong Polytechnic University

Delay-Minimizing Road Markings and Signal Settings for Isolated Junctions

C.K. Wong, S.C. Wong

Department of Civil Engineering, The University of Hong Kong

Development of Optimum Ramp Metering System

Toshio Yoshii

Department of Infrastructure Systems Engineering, Kochi University of Technology

Dynamic Traffic Control Strategies

Andy H.F. Chow, Hong K. Lo

Department of Civil Engineering, The Hong Kong University of Science and Technology

Session 4: Freight Transportation and Logistics Management (Tang 2)

Chair: Dr. Stephen Lam

Applications of Advanced Vehicle Locationing Technology in Fleet Management

Keith Wong, Stephen Lam

The University of Hong Kong

Optimization Model For Ferry Fleet Management

M.F. Lai, Hong K. Lo

Department of Civil Engineering, The Hong Kong University of Science and Technology

Logistics Service Mode Based On Information Flow

Wenjin Yu

School of Traffic and Transportation, Northern Jiaotong University

Influence on Freight Transit between Inland and Hong Kong by the West Development

Mei Han, Kai Liu

School of Traffic and Transportation, Northern Jiaotong University

Session 5: Transportation Planning and Network Design (Ballroom A)

Chair: Dr. S C Wong

Land use and Transport Interaction Dynamics – A Case Analysis of the Western Ring Road in Melbourne

K.H. Lau, Transport Research Centre, and B.H. Kam, School of Marketing, RMIT Business
Royal Melbourne Institute of Technology, Melbourne

Formulation of a Multi-Class Model for Urban Taxi Services

K.I. Wong, S.C. Wong,
Department of Civil Engineering, The University of Hong Kong
H. Yang,
Department of Civil Engineering, The Hong Kong University of Science and Technology
J.H. Wu, TJKM Transportation Consultants, California, U.S.A.

Comparative Analysis of Alternative Network Design Problems

Judith Y. T. Wang, Hai Yang
Department of Civil Engineering, The Hong Kong University of Science and Technology

Selection of a Suitable LRT Access to Calgary International Airport

J.M.S.J. Bandara,
Department of Civil Engineering, University of Moratuwa
S.C. Wirasinghe,
Department of Civil Engineering, The University of Calgary

Session 6: Transportation Infrastructure (Ballroom B)

Chair: Dr. Hai Yang

Determination of Optimal Toll Levels and Locations of Toll Cordon in Transportation Network

Xiaoning Zhang, Hai Yang
Department of Civil Engineering, The Hong Kong University of Science and Technology

Recent Developments in Bridge Construction on the South African National Roads Network

Yuchen Wang
Transport Infrastructure, Transportek, CSIR

Study on Pinghu Distribution Center Site Selection and its Market Survey

Xiaodong Zhang, Kai Liu
Institute of Modern Logistics, Northern Jiaotong University

Special Session A: Transportation Development and Policy in China (Ballroom C)
Chair: Dr. Anming Zhang

An Examination of China's International Aviation Policy

Anming Zhang

Department of Economics and Finance, City University of Hong Kong

Characterization of Air Cargo Trends in China

Y.V. Hui

Department of Management Sciences, City University of Hong Kong

L.C. Leung

Department of Decision Science and Managerial Economics, Chinese University of Hong Kong

Identification of Non-Physical Barriers in China's Port and Maritime Transport

James Jixian Wang

Department of Geography, The University of Hong Kong

Economic and Employment Impacts of Hong Kong Air Cargo Industry

Winnie Lo, Anming Zhang

Department of Economics and Finance, City University of Hong Kong

15:00 – 15:20

Coffee Break (Pre-Function Area)

15:20 – 16:45

Session 7: Traffic Management II (Tang1)

Chair: Prof. Masao Kuwahara

Investigation of Macroscopic Factors Influencing the Traffic Fatality Level in a Fully Developed and Urbanized City

Kwok Suen Ng, Wing Tat Hung

Department of Civil and Structural Engineering, The Hong Kong Polytechnic University

Level of Service Standards for Stairways in Hong Kong Underground Stations

Jodie Y. S. Lee, William H. K. Lam, Susanna M. L. Tam

Department of Civil and Structural Engineering, The Hong Kong Polytechnic University

Developing a TCSS Design in Hong Kong

Wilfred Wai Tong Lau, Toni Tung Yee Zen

Ove Arup & Partners Hong Kong Limited

A Decision Support System for Transit Service Planning

C.O. Tong, M.C. Tan, S.C. Wong

Department of Civil Engineering, The University of Hong Kong

Session 8: Road Networks and Traffic Assignment (Tang 2)

Chair: Benjamin Heydecker

Risk Analysis and Performance Evaluation of Road Networks with Non-Recurrent Congestion

Tsz Hang Lam, Wilson H. Tang, Hai Yang

Department of Civil Engineering, The Hong Kong University of Science and Technology

An Improved Solution Procedure for Solving a Dynamic Traffic Assignment Model Using Genetic Algorithm

W. M. Cheung, S.C. Wong, C. O. Tong

Department of Civil Engineering, The University of Hong Kong

Stochastic Traffic Assignment Models: Calibration and Validation in Hong Kong Expressway Network

K.S. Chan, William H.K. Lam

Department of Civil and Structural Engineering, The Hong Kong Polytechnic University

Freeway Travel Time Estimation Using Artificial Neural Network (ANN)

Zifeng Jiang, Shengrui Zhang, Yongfeng Ju

Xi'an Highway University

Session 9: Travel Behavior (Ball room A)

Chair: Dr. Donggen Wang

A Supernetwork Model for Commuting Versus Telecommuting Decision Making

June Dong

Department of Management, The Hong Kong Polytechnic University

Anna Nagurney

Department of Finance and Operations Management, University of Massachusetts

Use of a Latent Class Logit Model to Study the Effect of Knowledge About Traffic Conditions

H. P. Lo, Wendy S P Lam

Department of Management Sciences, City University of Hong Kong

Modeling Behavioral Responses to Cost Changes in Transport Model Choice

Donggen Wang

Department of Geography, Hong Kong Baptist University

Jiukun Li

Department of Geography, Hong Kong Baptist University Shenyang Architectural and Civil Engineering Institute

Special Session B: Transit Modelling (Ballroom B)
Chair: Prof. Agostino Nuzzolo

Dynamic Path Choice Models for Transit Networks: A General Overview on the Schedule-Based Approach

Agostino Nuzzolo, Umberto Crisalli
Department of Civil Engineering, "Tor Vergata" University of Rome
Francesco Russo
Department of Computer Science, Mathematics, Electronics and Transportation,
University of Reggio Calabria

A Schedule-Based Approach in dynamic Assignment Modelling for Public Transport Networks

Agostino Nuzzolo, Umberto Crisalli
Department of Civil Engineering, "Tor Vergata" University of Rome
Francesco Russo
Department of Computer Science, Mathematics, Electronics and Transportation,
University of Reggio Calabria

Dy-Bus: A Software Tool For the Dynamic Simulation of High-Frequency Transit Systems Using a Schedule-based Approach

Agostino Nuzzolo, Umberto Crisalli
Department of Civil Engineering, "Tor Vergata" University of Rome
Luca Rosati
T-LOG Engineering, Italy

Applications of Schedule-Based Path Choice and Assignment Models for Transit Networks

Umberto Crisalli, Pierluigi Coppola
Department of Civil Engineering, "Tor Vergata" University of Rome

16:45 – 17:00
Closing Address (Ballroom C)

18:30 – 20:30
Optional Conference Dinner