

On 9-13 December 2002, the Department of Civil and Structural Engineering, The Hong Kong Polytechnic University, organized a workshop on advanced modeling for transit operations and service planning in Hong Kong. This workshop was sponsored by the Croucher Foundation and took place at the Harbour Plaza Metropolis, Hong Kong. Prof. Y.K. Cheung, Croucher Trustee, The Croucher Foundation, was invited to deliver the opening address in the opening session. Prof. Cheung received warm welcome from Prof. Y.S. Li, Head of the Department of Civil and Structural Engineering.



Prof. Y.K. Cheung delivered the opening address



Prof. Y.S. Li presented the souvenir to Prof. Y.K. Cheung

In total, 51 participants attended this workshop; including the PhD's students, engineers and professors from the overseas and local universities. At the workshop, SIX internationally known experts on transit planning and modeling, to give a series of lectures and to participate in discussions. Dr. Dorothy Chan, the former Deputy Commissioner for Transport of Hong Kong SAR, was invited to give a presentation on "Public Transport Development - Review and Challenges" in Hong Kong.

Day 1, 9 December 2002

Morning Session

- ✧ Sketch planning for Urban Bus Transit System
- ✧ Sketch planning for Urban Rail Transit System

Prof. S.C. Wirasinghe
University of Calgary, Canada



Prof. S.C. Wirasinghe

Afternoon Session (1)

1. Public Transport Development - Review and Challenges
Dr. Dorothy Chan, the Former Deputy Commissioner for Transport, Hong Kong SAR
2. Research on Urban Public Passenger Transport Planning of Daqing City
Prof. Yulong Pei, Harbin Institute of Technology, China
3. Operation of Urban Bus Transportation in Japan - Experiences and Researches -
Dr.. Fumibiko Nakamura, Yokohama National University, Japan

Afternoon Session (2)

1. Transit Network Analysis: Issues and Developments in Japan
Prof. Ryuichi Kitamura, Kyoto University, Japan)
2. Transit Travel Demand Estimation by Schedule Based Transit Assignment using Passenger Counts
Prof. Seungjae Lee, The University of Seoul, Korea)
3. Estimation of Transit Passenger Origin-Destination Matrices from Passenger Counts in Congested Transit Networks
Prof. William H.K. Lam, The Hong Kong Polytechnic University, Hong Kong)



Prof. William H.K. Lam, Chairman of Organizing Committee, thanked Dr. Dorothy Chan for her talk



Prof. William H.K. Lam responded to questions from participants

Welcome Dinner in the Harbour Plaza Metropolis



(L to R) Mrs. and Prof. W.H.K. Lam, Mrs. and Prof. A. Ceder, Mrs. and Prof. Y.K. Cheung, and Prof. M.G.H. Bell



(L to R) Dr. Y.F. Yin, Prof. J. Zhou, Dr. H. Yang, Dr. H.K. Lo and Prof. O.A. Neilsen



(L to R) Dr. F. Nakamura, Dr. J.M.S.J. Bandara, Prof. R. Kitamura and Prof. Y.L. Pei



(L to R) Mrs. and Prof. P.H.L. Bovy, Dr. S. Hoogendoorn, Dr. R.V. Nes, Mrs. S. Hoogendoorn and Mrs. S.F. Catalano

Day 2, 10 December 2002

Morning Session

- ✧ Timetabling and Vehicle Scheduling
- ✧ Design of Transit Networks and Routes

Prof. A. Ceder
Technion Israel Institute of Technology, Israel



Prof. A. Ceder

Afternoon Session (1)

1. Multimodal Transit Modeling in Singapore
Dr. Soi-hoi Lam, Nanyang Technological University, Singapore
2. Modeling Competitive Multi-modal Services
Dr. Hong K. Lo, The Hong Kong University of Science and Technology, Hong Kong
3. Multimodal Travelling and its Impact on Public Transport Network Design
Dr. Rob van Nes, Delft University of Technology, Netherlands

Afternoon Session (2)

1. An Intelligent Monitoring System for Highway Bus Transit Operation
Prof. Lawrence W. Lan, National Chiao Tung University, Taiwan)
2. A Simulation-based Reliability Assessment Approach for Congested Transit Network
Dr. Yafeng Yin, University of California, USA
3. Reinforcement Learning Algorithm for Transit Headway Control at Traffic Signal
Dr. Amer Shalaby, University of Toronto, Canada



Prof. Lawrence W. Lan responded to questions from participants

Day 3, 11 December 2002



Prof. A. Nuzzolo

Morning Session

- ✧ Transit Path Choice & Assignment Model Approaches
- ✧ Schedule-based Transit Assignment Models

Prof. A. Nuzzolo
“Tor Vergata” University of Rome, Italy

Afternoon Session (1)

1. Methodology for Planning Primary Route Network of a Regional Bus Service in a Developing Country
Dr. J.M.S.J. Bandara, University of Moratuwa, Sri Lanka
2. Optimization of Public Transportation Schedule in Two Ways Route Based on Service Zone
Dr. Sutanto Soehodho, University of Indonesia, Indonesia
3. 2-Phase Transit Network Design in an Integrated Transit System
Quentin K. Wan, The Hong Kong University of Science and Technology, Hong Kong

Afternoon Session (2)

- ✧ Panel Discussion

Chairperson: Prof. M. Florian

Members: Prof. A. Ceder and Prof. A. Nuzzolo



Dr. S. Soehodho presented his works



(L to R) Prof. A. Ceder, Prof. A. Nuzzolo and Prof. M. Florian responded to questions from participants

Sponsored by:

The Croucher Foundation

Organised by:



The Hong Kong
Polytechnic University
Dept. of Civil & Structural
Engineering

Supported by:



Hong Kong Society for
Transportation Studies

Day 4, 12 December 2002



Prof. M. Florian

Morning Session (1)

- ◇ Frequency-based Transit Assignment Models

Prof. M. Florian
University of Montreal, Canada

Morning Session (2)

- ◇ Capacity Constraint Transit Assignment Models and Reliability Analysis

Prof. M.G.H. Bell
Imperial College of Science, Technology & Medicine, UK



Prof. M.G.H. Bell

Afternoon Session (1)

1. Research on the Theory and Methodology about Urban Transit Network Equilibrium Assignment
Dr. Quansheng Lei, Northern Jiaotong University, China
2. Network Loading Algorithm in a Schedule-based Congested Transit Network
Dr. M.H. Poon, Highway Department, Hong Kong
3. Timetable-based Transit Assignment with Error Components in the Utility Functions
Prof. Otto Anker Nielsen, Technical University of Denmark, Denmark

Afternoon Session (2)

1. A Multi-period Dynamic Taxi Service Model with Endogenous Service Intensity
Dr. Hai Yang, The Hong Kong University of Science and Technology, Hong Kong
2. Park-and-Ride Location and Price Optimisation in a Linear Monocentric City with Deterministic Mode Choice
Judith Y.T. Wang, The Hong Kong University of Science and Technology, Hong Kong
3. Cooperative and Competitive Fare Strategies in the Transit Market with Elastic Demand
Prof. Jing Zhou, Nanjing University, Hong Kong



Dr. H. Yang presented his paper

Farewell Dinner in 14/F Li Ka Shing Tower, The Hong Kong Polytechnic University



(L to R) Prof. H. Mahmassani, Prof. S.C. Wirasinghe, Prof. and Mrs. Y.K. Cheung



(L to R) Mrs. and Prof. M. Florian, Mrs. and Prof. A. Ceder, Prof. J.M. Ko, Prof. M.G.H. Bell and Prof. A. Nuzzolo



(L to R) Prof. L.W. Lan, Prof. O.A. Nielsen, Prof. W.H.K. Lam, Dr. H.K. Lo and Prof. P.H.L. Bovy



(L to R) Dr. N. Zhang, Dr. C.O. Tong, Dr. U. Crisalli and Dr. P. Copppla

Day 5, 13 December 2002

Morning Session

- ✧ ATIS and User Behavior in Travel Choices
- ✧ DYNASMART-IP: Dynamic Traffic Assignment Meso-Simulator for Intermodal Networks

Prof. H. Mahmassani
University of Maryland, USA



Prof. H. Mahmassani

Afternoon Session (1)

1. Network Equilibrium for Congested Multi-mode Networks with Elastic Demand
Z.X. Wu, The Hong Kong Polytechnic University, Hong Kong
2. Simultaneous Optimization of Transit Line Configuration and Passenger Line Assignment on a Minimum Tree Network
Dr. Hai Yang, The Hong Kong University of Science and Technology, Hong Kong
3. Tools for Walking Infrastructure Design: Continuous Time and Space Dynamic User-Optimal Assignment Models
Dr. Serge Hoogendoorn, Delft University of Technology, Netherlands
4. Estimation of Time-dependent Origin-destination Matrices in Transit Networks
Dr. S.C. Wong, The University of Hong Kong, Hong Kong

Afternoon Session (2)

- ✧ Panel Discussion

Chairperson: Prof. M.G.H. Bell

Members: Prof. M. Florian and Prof. H. Mahmassani



Dr. S. Hoogendoorn responded to questions from participants



(L to R) Prof. M. Florian, Prof. H. Mahmassani and Prof. M.G. H. Bell answering the participant's questions