



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



DEPARTMENT OF
CIVIL AND ENVIRONMENTAL ENGINEERING
土木及環境工程學系

CEE



Hong Kong Society for Transportation Studies



Methods and Applications for Dynamic Transit Assignment

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Abstract

A growing field of research over the last 20 years has been investigating descriptive models of transit path choices, based on variations in services by time of day. This may reflect changes in frequencies during the day, differences in crowding during the day, or services that adhere closely to a fixed timetable. The applications of these models may be considerable, especially when determining services for the peak periods, for the shoulders of the peak period, and for off-peak periods. Models that can capture variations in public transport demand across these periods may assist planners in better matching service to meet these needs. With this as motivation, I will discuss some of the existing models and methods that can be used for time-dependent (or dynamic) transit assignment, describing their advantages and limitations. I also will discuss one approach to an open-source transit assignment tool, called the Flexible Assignment and Simulation Tool for Transit and Intermodal Passengers (FAST-TrIPs), that is currently being implemented for large-scale transit networks in the USA. FAST-TrIPs involves both methods for path building and path choice set generation, while also capturing passenger path preferences. Some of the practical issues in model development, calibration, and computation will also be discussed.

Date: 13 December 2017 (Wednesday)

Time: 17:00 – 18:00

Venue: Room Z414, Block Z, 4/F,
The Hong Kong Polytechnic University,
Hung Hom, Kowloon, Hong Kong

Speaker's Biography

Prof. Mark Hickman is the Transport Academic Partnership (TAP) Professor of Transport Engineering within the School of Civil Engineering at the University of Queensland. He is also the Director of the Centre for Transport Strategy within the School of Civil Engineering. Prof. Hickman has held previous positions at the University of Arizona, the Texas A&M University, and the University of California, Berkeley. Prof. Hickman teaches and conducts research in public transit planning and operations, travel demand modelling, traffic engineering and roadway design, and remote sensing applications in transport. He has more than 50 journal publications and more than 100 refereed conference publications in these areas. Prof. Hickman also serves as an Associate Editor for three journals in the areas of public transport and transport systems.

*** All Interested Are Welcome ***

For further information, please contact Prof. Anthony Chen at Tel. 3400-8327.

Free Admission. Please reserve your seat with Ms. Connie F.Y. Lam by email: fyv.lam@polyu.edu.hk.

Certificates of attendance will be provided to participants who attend the whole seminar.