



Transportation Seminar Series

*Friday, March 6th, 2009
4 - 5 p.m. in 240 Bechtel Engineering Center*

Nigel Wilson

Professor in the MIT Department of Civil and Environmental
Engineering

Improving the Performance of Transit Systems taking advantage of Automatic Data Collection Systems

Abstract: Over the past decade many large urban public transport operators have deployed a range of automated systems such as Automatic Vehicle Location Systems, Automatic Passenger Counting Systems and Automatic Fare Collection Systems. These systems have dramatically increased the amount and quality of data available on the operation and use of the transit systems. This seminar addresses the improvements which have become possible as a result of the deployment of these data collection systems focusing on better monitoring of system performance both in real-time and off-line, better characterization of the usage of the system and the attributes of the passengers, and the better use of these data in operations planning and control. Examples are presented from London, Chicago and Boston with which the MIT Transit Research Program has been working closely for a number of years. Prospects for more widespread deployment of these methods and additional applications are also addressed.

Bio: Nigel Wilson is a Professor in the MIT Department of Civil and Environmental Engineering where he has been on the faculty for the past 39 years. His research and teaching focus is on urban public transport and he directs the MIT Transit Research and Professional Development Program which has long-term research relationships with the Chicago Transit Authority and Transport for London focusing on the planning, finance and operation of the transit systems in those two cities. He is currently on sabbatical leave and spending much of the year in Minnesota where he is working with both the University of Minnesota and Metro Transit. In prior sabbatical leaves he has had visiting faculty appointments at Stanford University, University College London, Napier University and the Technical University Delft as well as worked at the MBTA and London Transport. He teaches a range of graduate subjects in transportation and has directed the interdepartmental Master of Science in Transportation degree program for much of the past 30 years.

Please join us for a TRANSOC-sponsored cookie hour in the ITS library at 3:30 p.m.