

civil & environmental engineering department presents

2014 Distinguished Lecture

Kirlin Distinguished Seminar Series

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Using Smart Data and Complementary Data to Improve Public Transport Systems



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Automatic data collection systems including automatic vehicle location systems, automatic passenger counting systems and electronic fare payment and ticketing systems are becoming ubiquitous in large public transport systems and are starting to have an impact on the quality and availability of information for both off-line and real-time functions needed for service provision. The off-line functions include service and operations planning, and performance monitoring and measurement while the critical real-time functions include operations management and control, and customer information. While the impacts of these advances are already apparent in many systems, there is the potential for much deeper impact in the future. The power and cost-effectiveness of information technology continues to advance and will offer opportunities to develop and apply more ambitious models which should positively affect many facets of the performance of public transport systems. This talk will present a framework for assessing the various roles that smart card data and complementary data can play in public transport systems and will summarize recent applications of the resulting methods based on richer automated data collection systems developed at MIT for Transport for London and MTR (Hong Kong). The potential for further enhancement of critical public transport agency functions in the future making even greater use of these data sources will be discussed.

2014



FRIDAY, OCTOBER 10, 2014

10:00-11:30am

CEE Conference Room

1179 Glenn Martin Hall