

2016 - 2017

DISTINGUISHED

SPEAKER SERIES

traffic21
a transportation research institute of Carnegie Mellon University

**Technologies for
Safe and Efficient
Transportation**

**THE NATIONAL USDOT UNIVERSITY
TRANSPORTATION CENTER FOR SAFETY**

Carnegie Mellon University UNIVERSITY of PENNSYLVANIA



George Kocur recently retired as senior lecturer in Civil and Environmental Engineering at M.I.T., where he led research projects in public transportation and taught several computer science courses from 1998-2015. From 1985-1998 he was a researcher at GTE Laboratories in telecommunications. He received his Ph.D. from Carnegie Mellon in 1981 from the Heinz School; his thesis advisor was Prof. Chris Hendrickson.

A RADICAL APPROACH TO SAVE A FEW BILLION DOLLARS COLLECTING FARES IN LONDON

Tuesday, September 20, 2016, Noon-1 p.m.
Hamburg Hall 1002 Lunch will be provided.

My students and I designed and architected a new fare payment system for London's public transportation system that allows riders to pay with their phones or contactless credit cards. The system was implemented in the fall of 2014. Adoption by riders has been very fast; fare collection costs have been reduced from 15% to 6% of revenue; and 20-somethings have gotten excited about a fare system... The system is based on substantial engineering and mathematical analysis, including optimization and probability models. The talk will describe the architectural principles and briefly present the five core models.

www.traffic21.heinz.cmu.edu