Department of Mathematical Sciences
The Johns Hopkins University

SEMINAR

Donald W. Hearn
Department of Industrial & Systems Engineering
University of Florida

October 3, 2002
304 Whitehead Hall
Refreshments: 3:30 p.m.
Seminar: 4:00 p.m.

CONGESTION TOLL PRICING MODELS AND METHODS

Abstract

We will describe recent progress on the theory and computational methods for computing congestion tolls in traffic assignment. The approach centers on the construction of toll sets as polyhedra, then the optimization of various objectives, such as minimizing toll revenue or the number of required toll booths. The resulting tolls provide alternatives to the traditional marginal social cost pricing tolls for both first and second best pricing models.