Executive Education Program

Pricing Highway Infrastructure

September 10-12, 2012

A specially designed executive program for professionals in both the private and public sectors focusing on the principles and methods of pricing highway infrastructure
Program Faculty

Ronald Braeutigam  *Associate Provost, Northwestern University, and the Harvey Kapnick Professor of Business Institutions and Professor of Economics, Weinberg College of Arts and Sciences*

Ronald Braeutigam is the co-author of one of the leading textbooks on intermediate-level microeconomics. His has undertaken research and consulting on pricing, costing, strategy and regulation in the transportation, telecommunications and public utility industries.

Hani S. Mahmassani  *William A. Patterson Distinguished Professor of Transportation and Professor of Civil Engineering, McCormick School of Engineering and Applied Science; Director, The Transportation Center, Northwestern University*

Hani Mahmassani has thirty years of professional, academic, and research experience in network modeling and optimization, traffic engineering, dynamic system management, and real-time operation of logistics and distribution systems.

Ian Savage  *Associate Chair of Economics and Distinguished Senior Lecturer, Weinberg College of Arts and Sciences, Northwestern University*

Ian Savage specializes in urban transportation, and the analysis of safety regulation and safety performance. His research focuses on pricing, costing, subsidies, management strategy, and the impacts of competition and privatization.

Joseph L. Schofer  *Associate Dean, McCormick School of Engineering and Applied Science; Professor of Civil and Environmental Engineering; Director, Northwestern University Infrastructure Technology Institute*

Joseph Schofer has forty years of professional experience. His work focuses on planning and management of transportation systems, particularly the provision and use of data and information for effective system evaluation and policy and operational decision making.
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**Funding of highways is at a crossroads.** Traditional funding mechanisms, such as gasoline-tax revenues, are proving to be insufficient to maintain existing facilities and fund expanded capacity. Government agencies are looking to users to make up for the shortfall. Highway infrastructure offers an exceptional opportunity for raising funds to establish and/or sustain such infrastructure while providing an attractive return on investment to both public and private investors. Key to achieving such returns are the prices charged to users. But how should user charges be set?

- Should every user pay the same fee?
- Is it practical, commercially worthwhile, and socially acceptable to charge user fees?
- How are these pricing principles changed when the facility is congested?
- What methods can be used to forecast future revenue streams?
- How does the pricing of an individual link affect the performance of the neighboring highway network?
- How does private operation of a facility change the pricing objectives?
- How might the public sector regulate prices?

These questions and more will be addressed in this three day course offered by the Northwestern University Transportation Center.

**Who Should Attend**

The course is aimed at: professionals who currently, or may in the future, set user charges; financial personnel; engineers and project managers who oversee facility maintenance and new construction; and government officials who may manage programs of fee-paying private or public facilities. It is also applicable to consultants to infrastructure providers, and those who finance infrastructure projects.

[www.transportation.northwestern.edu/industry/exec-programs/2012_pricing](http://www.transportation.northwestern.edu/industry/exec-programs/2012_pricing)
Program Content

Basic economic principles of pricing
Differential prices across user groups
Principles of congestion pricing
Demand responsive pricing
Revenue projection
Advanced network demand prediction tools
Financing
Social and political acceptability of pricing infrastructure
Pricing in a public/private partnership
Regulation of private-sector pricing
Evaluating investments in capacity enhancement

Course Prerequisites and Format

The focus of the course is on the economics of pricing. Some prior knowledge of economics, such as might be obtained from an introductory college-level microeconomics course, will be useful.

The course will run from 8:30 a.m. until 5:00 p.m. on Monday and Tuesday. It will conclude at 4:00 p.m. on Wednesday.

Professional Development Credit

For information regarding professional development credit hours, please contact Diana Marek at d-marek@northwestern.edu or 847-491-2280.

Why Northwestern?

The Northwestern University Transportation Center is an internationally renowned center of transportation education and research founded in 1954. Its interdisciplinary faculty have provided education on transportation economics, policy, financing, and management to undergraduates, graduate students and transportation professionals for more than fifty years. Transportation Center faculty contribute to the identification, analysis, and resolution of transportation problems and issues concerning all modes of transportation, in all settings — urban, regional, national, and international.
Location and Facilities
Program participants will enjoy the facilities of the state-of-the-art executive conference center in Chambers Hall, the headquarters of the Transportation Center located in the heart of Northwestern’s Evanston campus on the shores of Lake Michigan. Northwestern is located just north of Chicago and approximately 45 minutes from O’Hare International Airport.

Hotel Lodging
Program participants are responsible for their own travel and lodging arrangements. A block of rooms has been reserved at the Hilton Garden Inn – Chicago North Shore / Evanston in downtown Evanston, a short walk from the Northwestern Campus.

Hilton Garden Inn
1818 Maple Avenue, Evanston, Illinois  60201
Reservations: (847) 475-6400
http://www.hgievanston.com

Registration & Fees

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<tr>
<th>Description</th>
<th>Fee</th>
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<tr>
<td>Program Fee</td>
<td>$  2,700</td>
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<tr>
<td>Early Registration Fee (If paid before August 17, 2012)</td>
<td>$2,160</td>
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<tr>
<td>Government &amp; Academic Rate</td>
<td>$2,160</td>
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<tr>
<td>CSCMP Member Fee – 5% Discount</td>
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Program fee includes tuition, all program materials, continental breakfasts, lunches, and a welcome reception.

To Register
For more information or to register on-line, visit www.transportation.northwestern.edu/industry/exec-programs/2012_pricing or contact Program Registrar, Diana Marek at phone: 847-491-2280 email: d-marek@northwestern.edu
“This program is well done. The instructors are outstanding. I had a great and informative experience and met very nice colleagues.”
— Baher Abdulhai, Ph.D., P.Eng
Director, Toronto Intelligent Transportation Systems Centre
Department of Civil Engineering, University of Toronto

“...provides an insight into the state-of-the-art and gives examples of methodological advances in road pricing design schemes.”
— Sascha Ruja
Head of Region West Europe
Q-Free ASA