

# The Transportation Center Northwestern University

## Faculty and Researchers 2008 - 2009

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| Name  | Academic/Research Specialties   |
|---|---|
| <p><b>Jan D. Achenbach</b><br/>Walter P. Murphy and Distinguished McCormick School Professor, Departments of Civil and Environmental Engineering; Mechanical Engineering, and Applied Mathematics; Former Director, Center for Quality Engineering and Failure Prevention</p>                           | <p>Airworthiness assurance of aircraft structures; ultrasonic methods in quantitative nondestructive evaluation; fracture mechanics</p>   |
| <p><b>Henry Binford</b><br/>Associate Professor, Department of History, Weinberg College of Arts and Sciences</p>   | <p>Urban historian specializing in the evolution of subcommunities within cities; redevelopment of cities; history of transportation relating to growth of cities</p>                               |
| <p><b>David E. Boyce</b><br/>Adjunct Professor, Department of Civil and Environmental Engineering; McCormick School of Engineering and Applied Science; Professor Emeritus of Transportation and Regional Science, Department of Civil and Materials Engineering, University of Illinois at Chicago</p> | <p>Urban travel and location forecasting models; transportation network analysis and modeling ; history of urban travel forecasting methods and practice</p>  |
| <p><b>Ronald R. Braeutigam</b><br/>Associate Provost for Undergraduate Education, Northwestern University; Harvey Kapnick Professor of Business Institutions and Professor of Economics, Weinberg College of Arts and Sciences</p>  | <p>Applied microeconomic theory and industrial organization; regulatory economics</p>   |
| <p><b>Fabián E. Bustamante</b><br/>Associate Professor, Department of Electrical Engineering and Computer Science, McCormick School of Engineering and Applied Science</p>  | <p>Design, deployment and evaluation of large-scale distributed systems in both wide-area and mobile networks; experimental systems, in particular operating systems and distributed computing.</p> |
| <p><b>Clarke L. Caywood</b><br/>Director, Graduate Program in Corporate Public Relations; Professor, Department of Integrated Marketing Communications, Medill School of Journalism</p>   | <p>Marketing and communications; crisis management and communications; stakeholder relationship management; political and deceptive messages and advertising.</p>                                   |

**Roger Chen**

Post-Doctoral Fellow,  
The Transportation Center

Travel demand forecasting; dynamics of user behavior; complex systems; analysis of activities; transportation sociology; environmental, climate and health impacts.

**Wei Chen**

Professor, Department of Mechanical Engineering,  
McCormick School of Engineering and Applied Science

Engineering design; optimization under uncertainty; demand modeling; computational design methods; decision making; automotive engineering

**Sunil Chopra**

Senior Associate Dean, Curriculum and Teaching;  
IBM Distinguished Professor of Operations Management & Information Systems; Department of Managerial Economics & Decision Science, Kellogg School of Management

Supply chain management and operations; design of communication and distribution networks; supply chain risk

**James G. Conley**

Clinical Professor of Technology, Kellogg School of Management; Faculty Fellow, Institute for Design Engineering and Applications, McCormick School of Engineering and Applied Science

Product design and development technologies; intellectual property strategies; intellectual capital; innovation management

**Anne Coughlan**

Professor of Marketing  
Kellogg School of Management

Distribution channel management and design; pricing strategy; reverse channels for product returns; competitive strategy

**David A. Dana**

Dean for Faculty and Research  
Northwestern University School of Law

Environmental and land use law, regulation and policy; for example: methods of allocating carbon credits; regulation and technological change in the automobile industry; eminent domain reform and urban sprawl

**Mark S. Daskin**

Walter P. Murphy Professor, Department of Industrial Engineering and Management Sciences, McCormick School of Engineering and Applied Science

Supply-chain analysis; application of operations research to transportation; integrated production and distribution models; network design and location problems; inventory planning

**Jing Dong**

Post-Doctoral Fellow  
The Transportation Center

Transportation network analysis; real-time traffic operations; dynamic pricing; intelligent transportation systems

**Xavier Duran**

Visiting Lecturer, Department of Economics  
Weinberg College of Arts and Sciences

Microeconomics; economic history; railroads; shipping

**Pablo Durango-Cohen**

Associate Professor of Civil and Environmental Engineering, McCormick School of Engineering and Applied Science

Transportation infrastructure management; modeling and analysis of production control systems; capacity management; statistical performance modeling; contract analysis and design

**Aaron J. Gellman**

Professor of Transportation and Industrial Engineering, McCormick School of Engineering and Applied Science and the Transportation Center; Adjunct Professor of Management & Strategy, Kellogg School of Management

Transportation management, economics and policy; aviation management; regulation; financial analysis; the management of technology and innovation; technology forecasting

**Robert J. Gordon**

Stanley G. Harris Professor in the Social Sciences, Weinberg College of Arts and Sciences

Macroeconomic theory; monetary theory; airline economics; airline management; airline history; airline customer experience

**Kimberly A. Gray**

Professor, Department of Civil and Environmental Engineering, McCormick School of Engineering & Applied Science

Urban sustainability; brownfield and urban redevelopment; environmental impacts of transportation on ecological and human health; energy efficient technology

**Brian Hanson**

Associate Director, Roberta Buffett Center for International and Comparative Studies; Lecturer in Political Science, Weinberg College of Arts and Sciences

International political economy, globalization, international trade, and the changing role of the state in world politics.

**Paul M. Hirsch**

James L. Allen Distinguished Professor of Strategy and Management and Organizations; Chair, Management and Organizations Department, Kellogg School of Management

Organizational change; mass communication and the sociology of culture

**Tito Homem-De-Mello**

Associate Professor of Industrial Engineering and Management Sciences, McCormick School of Engineering & Applied Science

Stochastic modeling and analysis; optimization; stochastic optimization in transportation and revenue management

**Joel Horowitz**

Charles E. and Emma H. Morrison Professor of Economics, Weinberg College of Arts and Sciences

Econometrics, travel demand modeling, urban transportation, air quality

**Yucong Hu**

Visiting Scholar in Civil & Environmental Engineering; McCormick School of Engineering & Applied Science; Associate Professor, College of Civil and Transportation, South China University of Technology

Transportation network analysis, optimization and designing; transportation economics and policy; urban transportation and planning

**Thomas N. Hubbard**

John L. & Helen Kellogg Professor of Management and Strategy, Kellogg School of Management

Industrial organization; trucking industry; economics of strategy; applied econometrics; economics of technology

**John C. Hudson**

Professor; Director, Geography Program; Associate Director, Environmental Sciences Program, Department of Anthropology, Weinberg College of Arts and Sciences

Cultural and physical geography of North America; biogeography; economic geography; cartography and mapping; geographic information systems

**Albert Hunter**

Professor of Sociology; Director of Urban Studies, Weinberg College of Arts and Sciences

Transportation in urban areas; public policy; urban sociology; community; ethnicity, culture and literature; methods

**Arthur P. Hurter**

Professor Emeritus of Industrial Engineering and Management Sciences, McCormick School of Engineering and Applied Science

Logistics; applied microeconomic analysis; routing and risk analysis; facility locations; plant and equipment investment and replacement.

**Seyed Iravani**

Associate Professor of Industrial Engineering and Management Sciences, McCormick School of Engineering and Applied Science

Stochastic modeling and analysis; production and logistics; optimization of queueing systems; manufacturing and supply chain management; white collar work and service operations systems; analysis of integrated production and maintenance policies.

**Bret Johnson**

Director, Center for Commercialization of Innovative Transportation Technology

Knowledge and technology transfer and technology commercialization best practices; technology based economic development strategy; space and technology innovation policy; homeland security research priorities.

**Richard Joseph**

John Evans Professor of International History and Politics; Senior Fellow (non-resident), The Brookings Institution

Growth, Governance, and Sustainable Development; Comparative Democratization; African Politics; HIV Prevention Strategies; Energy, Environment and Transportation.

**William L. Kath**

Professor; Center for Photonic Computing and Communication; Co-Director, Northwestern Institute on Complex Systems; Professor of Neurobiology and Physiology, McCormick School of Engineering and Applied Science

Computational neuroscience, fiber optics, wave propagation, nonlinear dynamics, complex systems.

**Diego Klabjan**

Associate Professor of Industrial Engineering and Management Sciences, McCormick School of Engineering and Applied Science

Business intelligence and analytics in air transportation, logistics, railway industry, retail, and supply chain management.

**Frank S. Koppelman**

Professor Emeritus of Civil and Environmental Engineering, McCormick School of Engineering And Applied Science

Travel demand modeling and prediction; traveler behavior and market research; yield management; urban, regional and intercity transportation planning; and development of advanced travel demand modeling concepts and methods

**Raymond J. Krizek**

Stanley F. Pepper Professor, Department of Civil & Environmental Engineering; Director, Master of Project Management Program, McCormick School of Engineering and Applied Science

Injectability & mechanical properties of grouted sands; disposal of waste slurries; problems involving soil-structure interaction; engineering behavior of dredged materials, and dynamic response of soils

**Bonnie Lindstrom**

Senior Lecturer, Masters of Public Policy & Administration, School of Continuing Studies

Urban sociology; regionalism; transportation and planning

**Hani S. Mahmassani**

William A. Patterson Distinguished Professor of Transportation, McCormick School of Engineering and Applied Science

Dynamic traffic system management; network modeling and optimization; dynamics of user behavior and telematics.

**Therese McGuire**

ConAgra Foods Research Professorship in Strategic Management; Director, Guthrie Center for Real Estate Research and Real Estate Management Program, Kellogg School of Management

State and local public finance, fiscal decentralization, property tax limitations, education finance, and regional economic development

**Leon N. Moses**

Professor Emeritus of Economics  
Weinberg College of Arts and Sciences

Applied microeconomic analysis; logistics and transportation economics; economics of regulation safety and risk; urban and regional economics

**Barry L. Nelson**

Charles Deering McCormick Professor and Chair, Department of Industrial Engineering & Management Sciences, McCormick School of Engineering & Applied Science

Computer simulation of dynamic, stochastic systems; design and analysis of simulation experiments

**Yu (Marco) Nie**

Louis Berger Junior Assistant Professor of Civil and Environmental Engineering, McCormick School of Engineering and Applied Science

Network optimization, traffic flow theory and traffic simulation.

**John C. Panzar**

Professor Emeritus of Economics  
Weinberg College of Arts and Sciences

Theoretical and policy issues relating to network industries (telecommunication, electric transport, air transport and postal services); industrial organization; regulatory economics; applied microeconomic theory

**Kalyan Raman**

Professor, Department of Integrated Marketing Communications, Medill School of Journalism; Professor of Marketing, Kellogg School of Management

Integrated Marketing Communications, Marketing Mix Optimization Issues, Sales Force Compensation, Brand Name Recall and Implications For Advertising And Market Structure, Pricing, Diffusion Models, Supply Chain Management, Reference Prices, Customer Relationship Management.

**Kathryn Reid**

Research Assistant Professor, Department of Neurology, Northwestern Feinberg School of Medicine

Impact of sleep loss and circadian disruption on human performance; health and safety with emphasis on the impact of shiftwork

**Ian Savage**

Associate Chair, Department of Economics; Distinguished Senior Lecturer, Weinberg College of Arts and Sciences

Transportation safety; transportation economics; urban transit

**R. Canan Savaskan**

Assistant Professor of Managerial Economics and Decision Sciences, Kellogg School of Management

Supply chain management; incentives in decentralized supply chains; reverse logistics; quality management and interface between manufacturing and marketing decisions; closed loop supply chain models.

**Joseph L. Schofer**

Associate Dean for Faculty Affairs; Professor of Civil and Environmental Engineering; Director, Infrastructure Institute of Technology; Interim Director, Transportation Center, McCormick School of Engineering and Applied Science

Urban transportation policy planning; data information and decision making in transportation; traveler behavior and market research; intelligent transportation systems; pedestrian and motor vehicle safety

**Karen Smilowitz**

William A. Patterson Junior Professor of Transportation; Associate Professor, Department of Industrial Engineering and Management Sciences, McCormick School of Engineering and Applied Science

Design and operations of logistics network; vehicle routing and scheduling; supply-chain management; applications in commercial and non-profit settings

**Fred W. Turek**

Director, Center for Sleep and Circadian Biology ; Charles E. and Emma H. Morrison Professor of Biology, Department of Neurobiology & Physiology, Weinberg College of Arts and Sciences

Investigation of circadian rhythms and their importance to human health, safety, performance and productivity; relationship between abnormal sleep-wake cycles on fatigue and alertness in the workplace and transportation industry.

**Jan A. Van Mieghem**

Harold L. Stuart Professor of Managerial Economics;  
Chair, Department of Managerial Economics &  
Decision Science; Professor of Operations  
Management, Kellogg School of Management

Operations management and strategy;  
supply-chain management and analysis;  
management and investment under  
uncertainty, e.g. pricing and dynamic  
control of stochastic processing networks

**Michael D. Whinston**

Robert E. and Emily H. King Professor  
of Business Institutions, Department of Economics  
Weinberg College of Arts and Sciences

Industrial organization; antitrust and  
regulation; incentives; microeconomic  
theory; and game theory

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