

Transportation, Energy, and Climate Change



1 V. Thera Black, Chair of the Metropolitan Policy, Planning, and Processes Committee (*left*), briefs a group of first-time and young professional Annual Meeting attendees at the Welcome Session, which offered opportunities to network, learn about TRB, and become involved.

2 Members of President Barack Obama's Department of Transportation transition team, Jeff Morales, PB Consult, Inc. (*left*), and Peter J. Basso, American Association of State Highway and Transportation Officials (AASHTO), brief the TRB Executive Committee on the Administration's transportation agenda.

The 2009 Transportation Research Board Annual Meeting turned the spotlight on the challenges and issues surrounding transportation, energy, and climate change, January 11–15, 2009, in Washington, D.C. Despite the economic downturn, nearly 10,000 transportation researchers, practitioners, policy makers, and administrators converged for the meeting, which offered approximately 3,000 presentations at 90 workshops and 600 sessions—including lectern and meet-the-author poster sessions—plus 450 committee



meetings, special events, awards presentations, and more. The theme of transportation, energy, and climate change was covered in 60 sessions and workshops.

As always, the meeting was a prime occasion for transportation professionals from the United States and abroad to network and share knowledge with their peers across all modes and disciplines. More than 1,800 papers were included in the 2009 Annual Meeting Compendium of Papers, and 60 sessions were recorded and posted online as e-sessions at www.TRB.org.

This year's Welcome Session, an event for meeting newcomers, attracted more than 400 first-time attendees. Committee chairs made informal presentations on their areas and recruited more than 200 volunteers to serve on TRB standing committees.

Geraldine Knatz of the Port of Los Angeles delivered the 2009 Thomas B. Deen Distinguished Lecture, and General Motors research executive Lawrence D. Burns spoke at the Chairman's Luncheon, which included major award presentations. This year's meeting also featured a special briefing by members of the Obama Administration's transition team for transportation to the TRB Executive Committee.

Details and highlights appear on the following pages.

Annual Meeting
photographs by Cable
Risdon Photography

TRB 2009 ANNUAL MEETING HIGHLIGHTS

INTERSECTIONS

1 Audience members listen to panelists discuss the Moving Cooler study, which assessed the cost-effectiveness of measures to reduce greenhouse gas emissions, at one of 60 spotlight sessions on energy and climate change.



2 Northwestern University students (*left to right*) Omer Verbas, Jean Goilav, Hermann Orth, and Alexis Roque plan out their meeting agenda with the 300-page Annual Meeting program.



3 At the welcome session, young and first-time attendees gained an overview of TRB, tips on navigating the Annual Meeting, career development information, and more.



4 TRB Technical Activities Council is the hub of Annual Meeting planning.



5 International Road Federation fellows are introduced at the International Participants' Reception.



6 Guy Bourgeois, head of the European Conference of Transport Research Institutes, which has a collaborative agreement with TRB, acknowledges applause at the International Participants' Reception.

4 (TRB Technical Activities Council front row, left to right:) Cynthia J. Burbank; Katherine F. Turnbull; Karla H. Karash; Mark R. Norman; Leanna Depue; Jeannie G. Beckett; Edward V. A. Kussy; (back row, left to right:) Robert M. Dorer; James M. Crites; Robert C. Johns; Daniel S. Turner; Mary Lou Ralls; Paul H. Bingham.



7 Robert Accetta and Mark Bagnard of the National Transportation Safety Board (NTSB) prepare for a presentation at a session on emerging highway safety issues.



8 The well-attended exhibit hall showcased a variety of transportation-related products and services, as well as displays by TRB sponsors.



TRB 2009 ANNUAL MEETING HIGHLIGHTS



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SPOTLIGHT SESSIONS

1 Steven Davis-Mendelow, Bombardier Aerospace, speaks at Climate 101: Basics of Climate Change.

2 George C. Eads, Charles River Associates, Inc., discusses Climate Change and Transportation 101.

3 Nancy Young, Air Transport Association of America, addresses Reducing Your Aviation Carbon Footprint.

4 Robyn V. McGregor, EBA Engineering Consultants, Ltd., discusses winter road management in Adapting Transportation Infrastructure to Accommodate Climate Change.



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5 Panelists for Climate Change Law 101 were Kyle Danish, Van Ness Feldman (*left*); David H. McCray, California Department of Transportation (DOT); and Janet L. Myers, Federal Highway Administration (FHWA).

6 Gordana Petkovic, Norwegian Public Roads Administration (*left*), chats with session moderator Deborah Goodings, University of Maryland, at Geotechnical Engineering Strategies to Meet Effects of Climate Change on Transportation Infrastructure.



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7 Robert Rosner, Argonne National Laboratory, considers The U.S. Energy Crisis: Solutions to Meeting the Nation's Energy Needs.

8 David L. Miller, Conway Inc., offers the motor carrier perspective at Moving Freight Through Global Change, Part 2.

9 Laurie Cullen, HNTB Corporation, speaks at Roles and Responsibilities of Government Entities on Climate Change Regulations in Aviation.



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10 Jeff Houk, FHWA (*left*), and Douglas S. Eisinger, Sonoma Technology Inc., guide discussion at Incorporating Greenhouse Gas Considerations into Transportation Project and Metropolitan Planning Requirements.

11 David Diamond, LMI, asks a question at Moving Cooler, a session on strategies to reduce greenhouse gas emissions.



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TRB 2009 ANNUAL MEETING HIGHLIGHTS

SESSIONS AND WORKSHOPS

1 Jeff Heilman, Parametrix, Inc., emphasizes a point in Measuring Ecosystem Effects in the Emerging World of Ecosystem Markets.



2 Richard Marrotoli, VA Connecticut Healthcare System (*left*), and Shelley Bhatnagarya, University of Kansas, listen to presentations at Medications and Medical Review.



3 Gabriel Rousseau, FHWA, reviews the Nonmotorized Transportation Pilot Program and How It Works.

4 Terry Allard, Office of Naval Research (*standing*), speaks at Human Factors Implementation: The Way Ahead.



5 Ron Duych, Research and Innovative Technology Administration (*left*), discusses issues with presenter Doug MacIvor, California DOT, at Freight Data Research in 2008 and Priorities for the Future.



6 John Francis Munro, FHWA, speaks at the International Research Collaboration session.

7 Mary Lou Ralls, Ralls Newman, LLC (*left*), and Bituminous Materials Section Chair Bob McGennis, Holly Asphalt Center (*right*), present Mariely Mejias and Haley Bell, both of the U.S. Army Corps of Engineers, with the section's award for best poster.



8 Robert Accetta, NTSB, delivers a presentation on a motor coach override during the Emerging Highway Transportation Issues session.

9 Shay K. Hope, Virginia DOT, moderates Issues That Will Shape Disadvantaged Business Enterprise Programs in the Future.



10 A poster session on the Second Strategic Highway Research Program (SHRP 2) allowed participants to network and exchange ideas.



TRB 2009 ANNUAL MEETING HIGHLIGHTS



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SESSIONS AND WORKSHOPS

(continued)

1 Attendees examine a poster detailing the status of projects in the SHRP 2 Capacity Research Focus Area.

2 Charles R. Everett, TranSystems Corporation, makes a presentation during a session on the possibilities of airline reregulation.

3 Rebecca M. Brewster, American Transportation Research Institute, moderates discussion during Truck Drivers, Congestion, and Carbon Footprints.

4 Turen Al-Ahad Eham, University of Central Florida, asks a question during Traffic: Why We Drive the Way We Do (And What It Says About Us): A Conversation with Tom Vanderbilt.

5 Author Vanderbilt responds with insights from his book.

6 Richard de Neufville, Massachusetts Institute of Technology (*center*), receives the Aviation Group's Francis X. McKelvey Award from Greg Casto, Airport and Aviation Professionals, Inc. (*left*), and Group Chair James M. Crites, Dallas-Fort Worth International Airport, during the Aviation Forum.

7 Allison C. de Cerreño, New York University, moderates a session on financing passenger rail.

8 Arlene Dietz, A&C Dietz and Associates, LLC (*left*); Eric Shen and Jolene Hayes, Port of Long Beach; and Paul H. Bingham, IHS Global Insight, participate in the Freight Systems and Marine Forum.

9 H. Thomas Kornegay, Port of Houston Authority, reviews port funding and governance options at Institutional Framework of Seaports as Public Enterprise for the 21st Century.



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10 Doug Meegan, Applied Research Associates (*left*), reviews findings on Smart Sensors for Autonomous Noise Monitoring with Xion Yu, Case Western Reserve University, during a poster session of TRB's Innovations Deserving Exploratory Analysis (IDEA) Program.



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TRB 2009 ANNUAL MEETING HIGHLIGHTS

SESSIONS AND WORKSHOPS

(continued)

1 Peter M. Bartek, Pro-Tran1 LLC, demonstrates an approaching-train warning device at the Transit IDEA Program poster session.



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2 TRB Executive Director Robert E. Skinner, Jr. (left), and Planning and Environment Group Chair Katherine F. Turnbull, Texas Transportation Institute, present Melissa Miller, Whatcom Council of Governments (right), with a communications award for Transportation Town: A Regional Transportation Website.



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3 Terry Shelton, Federal Motor Carrier Safety Administration (FMCSA), reviews FMCSA's analysis, research, and technology.

4 Speakers for Naturalistic Driving Analysis Methods for SHRP 2.



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4 (Speakers for Naturalistic Driving Analysis Methods for SHRP 2, standing, left to right:)

Daniel V. McGehee, University of Iowa (UI); Shauna Hallmark, Iowa State University; Linda Ng Boyle, UI; Lidia P. Kostyniuk, University of Michigan; (seated, left to right: Gary A. Davis, University of Minnesota; and Paul P. Jovanis, Pennsylvania State University.



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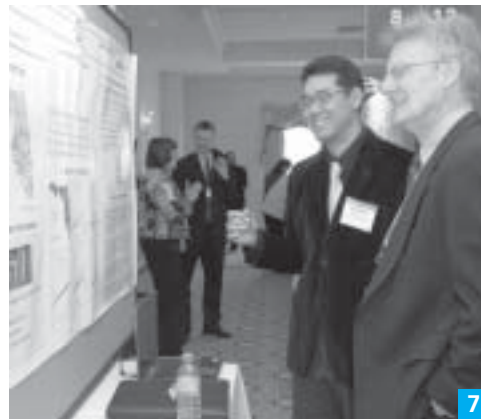
5 Ronald Knipling discusses his book, *Safety for the Long Haul*.

6 Stephen Perkins, Organisation for Economic Co-operation and Development, speaks on SHRP 2 International Coordination.



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7 Jeongho Oh, Texas Transportation Institute (left), discusses a poster at Research Program and Project Evaluations: International Perspective.



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8 Lily Elefteriadou, University of Florida, provides a researcher's perspective at SHRP 2: Reliability and the Highway Capacity Manual.



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9 Jim Deschenes, Michael Baker Jr., Inc., speaks at Design-Build: Playing a Critical Role in Emergency Project Delivery.



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10 Panelists at a session on biofuels included (left to right: Jesse Fleming, Natural Resources Canada; Audrey Lee, U.S. Department of Energy; and Ian Hodgson, European Commission, Belgium.



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TRB 2009 ANNUAL MEETING HIGHLIGHTS



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COMMITTEE MEETINGS

1 Technical Activities Council (TAC) Chair Robert C. Johns, University of Minnesota, and Mark R. Norman, TRB Director of Technical Activities, guide the TAC meeting.

2 Members of the Special Task Force on Climate Change and Energy are briefed on research programs addressing climate change.

3 Design and Construction Group Chair Mary Lou Ralls reviews National Cooperative Highway Research Program projects during a meeting of the Structures Section.

4 Anthony Perl (*striped shirt, center*), Simon Fraser University, chairs a meeting of the Intercity Passenger Rail Committee.

5 Cheryl Allen Richter, FHWA (*left*), and Charles Larson, Stantec Consulting, Inc., consider plans for Pavement Management Section initiatives.

6 Wade Casey, FHWA, offers insights at a meeting of the Maintenance and Preservation Section.

7 Roadside Safety Design Committee Chair Ronald Seitz, Kansas DOT (*left*), presents the committee's best paper award to Dean Sicking, University of Nebraska, Lincoln; and Karla Lechtenburg and Cody Stolle, Midwest Roadside Safety Facility.

8 Concrete Materials Section Chair Jamshid Armaghani, Florida Concrete and Products Association (*left*), presents a certificate of appreciation to Mohammad S. Khan, Professional Service Industries, Inc., outgoing chair of the Basic Research and Emerging Technologies Related to Concrete Committee.

TRB 2009 ANNUAL MEETING HIGHLIGHTS

EXHIBITS

1 John Risley, Traffix Devices, Inc. (*left*), and Steve Phillips, Forum of European National Highway Research Libraries (FEHRL), discuss FEHRL's model roadway display.



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2 Anja Estel of Ruhr University, Germany (*left*), observes as Paul Tremont explains an FHWA exhibit.



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3 A SHRP 2 task group meets in the exhibit hall to discuss implementation.



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CHAIRMAN'S LUNCHEON

4 General Motors research executive Lawrence D. Burns—a former student of 2009 Executive Committee Chair Adib Kanafani—delivered the Chairman's Luncheon Address on high-tech innovations in automotive design.



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5 Roy C. Edgerton, 1978 recipient of the W. N. Carey, Jr., Distinguished Service Award and retired TRB Director of Technical Activities, takes a bow at the Chairman's Luncheon.



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OUTSTANDING PAPER AWARDS

6 The Fred Burggraf Award recognizes outstanding papers by young researchers.



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6 Jennifer Duthie (*right*) and S. Travis Waller (*not pictured*), University of Texas, Austin, received the Burggraf Award in Planning and Environment from TAC Chair Robert C. Johns, University of Minnesota (*left*).

7 Wesley Marshall (*left*), Norman W. Garrick, and Gilbert Hansen (*not pictured*), University of Connecticut, won the Wootan Award for "Reassessing On-Street Parking."



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7 The Charley V. Wootan Award honors an outstanding paper in policy and organization.

8 The Patricia F. Waller Award recognizes an outstanding paper in the field of safety and system users.



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8 Recipients of the Waller Award, with TAC Chair Robert C. Johns (*right*): (*back row, left to right*): Richard D. Blomberg, Dunlap and Associates, Inc.; Martin M. Levy, National Highway Traffic Safety Administration; Yingling Fan, University of Minnesota; Austin Brown, University of North Carolina (UNC); David Henderson of the Miami-Dade Office of the County Manager; and (*front row, left to right*): Jane Stutts, Lauren Marchetti, Charles V. Zegeer, Libby J. Thomas, and Laura S. Sandt, UNC. (*Not pictured*: Scott Masten, UNC.)

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TRB 2009 ANNUAL MEETING HIGHLIGHTS



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AWARDS

1 Geraldine Knatz (center), Executive Director of the Port of Los Angeles, presented the 2009 Thomas B. Deen Distinguished Lecture on "Local Seaport Initiatives Driving International Policy."

2 Thomas B. Deen, recipient of the Frank Turner Medal for Lifetime Achievement in Transportation, addresses the audience at the Chairman's Luncheon.

3 Dennis C. Judycki, former Associate Administrator for Research, Development, and Technology, FHWA (left), was honored for his leadership in transportation research management with the Roy W. Crum Distinguished Service Award, presented by 2009 TRB Executive Committee Chair Adib Kanafani.

4 Michael D. Meyer, Professor of Civil and Environmental Engineering at the Georgia Institute of Technology, shares his reflections after receiving the W. N. Carey, Jr., Distinguished Service Award.

1 TAC Chair Robert C. Johns (left); Robert E. Skinner, Jr., TRB Executive Director; Thomas B. Deen, former TRB Executive Director; and 2008 Executive Committee Chair Debra L. Miller (right) present Knatz (center) with the Deen Distinguished Lecture-ship plaque.



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5 Khandker M. N. Habib, University of Alberta, Canada (left); Eric J. Miller, University of Toronto, Canada; and Juan-Antonio Carrasco, Universidad de Concepcion, Chile (not pictured), won the Pyke Johnson Award for their paper, "Social Context of Activity Scheduling: Discrete-Continuous Model of Relationship Between 'With Whom' and Episode Start Time and Duration."

6 The K. B. Woods Award went to Thomas A. Bennert (left) and Ali Maher, Rutgers University, for "Field and Laboratory Evaluation of a Reflective Crack Inter-layer in New Jersey."



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OUTSTANDING PAPER AWARDS

(continued)

5 The Pyke Johnson Award is presented annually for a paper in the field of transportation systems planning and administration.

6 The K. B. Woods Award recognizes the best paper in the area of design and construction of transportation facilities.

7 The D. Grant Mickle Award honors an outstanding paper in the field of operation, safety, and maintenance of transportation facilities.

7 Authors of the Mickle Award-winning paper, "Safety-Effectiveness of Selected Treatments at Urban Signalized Intersections," are (left to right:) Nancy X. Lefler and Frank Gross, Vanasse Hangen Brustlin, Inc.; Forrest M. Council, University of North Carolina (UNC); and Bhagwant Persaud and Craig Lyon, Ryerson University, Canada. (Not pictured: Raghavan Srinivasan, UNC.)



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New Officers Guide Executive Committee

Adib Kanafani, civil engineering professor at the University of California, Berkeley (UCB), is the 2009 Chair of the TRB Executive Committee. He succeeds Debra L. (Deb) Miller, Secretary of the Kansas Department of Transportation. Michael R. Morris, Director of Transportation, North Central Texas Council of Governments, is the 2009 Vice Chair.



Kanafani

Kanafani is the Edward G. and John R. Cahill Professor of Civil Engineering at UCB. Elected to the National Academy of Engineering in 2002, he has received many awards, including the American Society of Civil Engineers' (ASCE) James Laurie Prize in 2000. In 2008, Kanafani was named a lifetime National Associate of the National Academies. He is the author of more than 170 publications on transportation, and has been active on TRB committees since the mid-1970s.

A member of the UCB faculty since 1970, Kanafani has engaged in research addressing such

topics as transport demand analysis, airport capacity analysis, and airline network analysis. Director of UCB's Institute of Transportation Studies from 1983 to 1998, Kanafani was a founding member of Mobility 2000 and of California's Partners for Advanced Transit and Highways (PATH) program, and played an important role in establishing the intelligent transportation systems research effort in the United States. His areas of expertise include the planning and

economics of transportation systems, airport planning and design, airline economics, and air traffic management.

Kanafani's long record of public service includes membership on national and international advisory panels to governments, multinational organizations, and industry, as well as National Research Council (NRC) panels and committees. He chaired the ASCE Air Transport Division. He earned his master's and PhD degrees from UCB, and a bachelor's degree in

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POLICY INSIGHTS

1 James Jensen, the National Academies' Director of Congressional and Government Affairs, offers perspectives at the Executive Committee meeting on governmental changes accompanying the transition to the Obama Administration. He reported that eight members of the National Academy of Sciences were appointed to posts in the new Administration.

2 Mort Downey, Chair of PB Consult, Inc., and member of the presidential Transportation Transition Team, discusses the new Administration's perspectives on transportation policy.

Speakers at the Executive Committee policy session addressed knowledge gaps on key issues in transportation and climate change and recommended research:

3 Cynthia Burbank, PB Americas;

4 Sue McNeil, University of Delaware; and

5 Jim Whitty, Oregon DOT.



TRB 2009 ANNUAL MEETING HIGHLIGHTS



EXECUTIVE COMMITTEE

1 Michael Morris, North Central Texas Council of Governments, was named Executive Committee Vice Chair for 2009.

2 Executive Committee Chair Debra L. Miller, Kansas DOT, and Executive Director Robert E. Skinner, Jr., guided the business meeting agenda.

3 C. Michael Walton, University of Texas, Austin, Chair of the Subcommittee for NRC Oversight, enjoys a break in the discussions.

Also contributing to the Executive Committee Meeting discussions and deliberations were

4 John T. Gray, Association of American Railroads;

5 Pete K. Rahn, Missouri DOT;

6 Susan Martinovich, Nevada DOT;

7 Steve Williams, Maverick USA, Inc.;

8 Gloria Shepherd, FHWA;

9 Allen D. Biehler, Pennsylvania DOT;

10 Vincent Valdes, Federal Transit Administration (*left*); John C. Horsley, AASHTO; Edward A. Helme, Center for Clean Air Policy;

11 Sarah Dunham, Environmental Protection Agency;

12 Past Chair Linda Watson, LYNX-Central Florida Regional Transit Authority; consultant Gerry Schwartz (*right*), Vice Chair of the Subcommittee for NRC Oversight; and

13 New Executive Committee member Steven Scalzo, Marine Resources Group.



Adib Kanafani, 2009 Chair of the TRB Executive Committee (left), presents a plaque to outgoing Chair Debra Miller during the Chairman's Luncheon.



New Officers Guide Executive Committee

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engineering from the American University of Beirut.

Morris's responsibilities as Director of Transportation for the North Central Texas Council of Governments include implementation of the Regional Transportation Plan, the Transportation Improvement Program, and air quality-related transportation control measures in the State Implementation Plan. Previously, he was assistant director of the Transportation Department and in 1994 received the Transportation Engineer of the Year Award from the Institute of Transportation Engineers. In

1995, Morris was presented with the Texas Department of Transportation Road Hand Award. He earned a master's degree in civil engineering from the State University of New York at Buffalo in 1979 and is a registered professional engineer in the state of Texas.

Newly appointed to the Executive Committee is Steven T. Scalzo, Chief Operating Officer, Marine Resources Group (MRG). Before joining MRG in 2005, Scalzo was president of Foss Maritime for 6 years, after holding positions within the company as port captain, general manager of marine operations, and senior vice president of operations. Scalzo has served on TRB's Marine Board, as well as on other TRB and NRC committees. He is a graduate of the U.S. Merchant Marine Academy and earned a master's degree in law and commerce at Gonzaga University.

Standing Committees Recognize Meritorious Service

TRB awarded emeritus membership to 24 individuals at the 2009 Annual Meeting, honoring significant, long-term contributions and outstanding service on technical activities committees. The honorees and their committees are listed below.

Gerald W. Bernstein
Aviation Economics and Forecasting Committee

James E. Bryden
Work Zone Traffic Control Committee

Betsy Buxer
Paratransit Committee and Accessible Transportation and Mobility Committee

Robert M. Clarke
Motor Vehicle Size and Weight Committee

Forrest M. Council
Safety Data, Analysis, and Evaluation Committee

Carol D. Cutshall
Environmental Analysis in Transportation Committee

Robert T. Dunphy
Transportation and Land Development Committee

Konstadinos G. Goulias
Traveler Behavior and Values Committee

Brelend C. Gowan
Tort Liability and Risk Management Committee

James S. Kalchbrenner
Signing and Marking Materials Committee

Thomas J. Kazmierowski
Pavement Rehabilitation Committee

Performance Measurement Committee Chair Daniela Bremmer presents an Emeritus Membership certificate to Lance A. Neumann, Cambridge Systematics, Inc.

Ronald J. Kilcoyne
Bus Transit Systems Committee

Robert L. Lytton
Engineering Behavior of Unsaturated Soils Committee

Hani S. Mahmassani
Traveler Behavior and Values Committee

David R. Miller
Public Transportation Planning and Development Committee

Eric J. Miller
Transportation Demand Forecasting Committee

Glen E. Miller
Modeling Techniques in Geomechanics Committee

Patricia L. Mokhtarian
Traveler Behavior and Values Committee

Roger P. Moog
Intergovernmental Relations in Aviation Committee

Lance A. Neumann
Performance Measurement Committee

Richard L. Russell
Transportation Law Committee

David J. Sampson
Bus Transit Systems Committee

Gary S. Spring
Artificial Intelligence and Advanced Computing Applications Committee

Richard J. Weiland
Intelligent Transportation Systems Committee

