

NORTH AMERICAN TRAVEL MONITORING
EXPOSITION AND CONFERENCE
AUGUST 27-31, 2000
MIDDLETON, WISCONSIN

Program

Sunday, August 27, 2000

9:30 AM - 12:00 PM

A1D10 Committee on Travel Survey Methods

Chair: Elaine Murakami, Federal Highway Administration

10:00 AM - 12:00 PM

A1D09 Committee on Statewide Transportation Data and Information Systems

Chair: Ron Tweedie, New York State DOT

A5015 Committee on Spatial Data and Information Science, Subcommittees

Co-Chairs: David Fletcher, Consultant and Kitty Hancock, University of Massachusetts, Amherst

1:00 PM - 5:00 PM

A1B09 Committee on Freight Transportation Data

Chair: Paul Bingham, WEFA Inc.

A1D08 Committee on Urban Transportation Data and Information Systems

Chair: Chuck Purvis, Metropolitan Transportation Commission

A5003 Committee on Information Systems and Technology

Chair: Jeffrey Western, Wisconsin DOT

1:00 PM - 5:00 PM

A5015 Committee on Spatial Data and Information Science, Full Committee

Co-Chairs: David Fletcher, Consultant and Kitty Hancock, University of Massachusetts, Amherst

A2B08 Committee on Highway Traffic Monitoring

Chair: Dave Huft, South Dakota DOT

North American Travel Monitoring Exposition and Conference

Monday, August 28, 2000

8:30 AM - 10:00 AM

AVOIDING CRASHES ON THE INFORMATION HIGHWAY: Creating High Quality Information

Keynote Speaker: Larry English, INFORMATION IMPACT International Inc.

Information quality is not about improving the quality of data-it is about improving the effectiveness of the enterprise while reducing its costs of process failure and information scrap and rework resulting from non-quality information.

10:30 AM - 11:45 AM

Welcome

Terry Mulcahy, Secretary, Wisconsin DOT

Quality in Traffic Data Programs

Chair: Michael Bronzini, George Mason University

Data Quality: Challenges for State DOTs (Presentation)

Ernie Wittwer, Administrator, Division of Transportation Investment Management, Wisconsin DOT

Robust Data (Presentation)

Ashish Sen, Director, Bureau of Transportation Statistics

Getting Quality Information from Our Highway Information Programs (Presentation)

Barna Juhasz, Director, Office of Highway Policy Information, FHWA

12:00 PM - 1:30 PM

Luncheon Speaker

Congressman Tom Petri

Congressman Tom Petri, Vice-Chair of the House Committee on Transportation and Infrastructure, will announce the latest Congressional transportation initiatives impacting the travel monitoring community.

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Monday, August 28, 2000

1:30 PM - 3:00 PM

Data Integration Part 1: Sharing Lessons Learned - Where are we today?

Chair: Pat Hu, Oak Ridge National Lab

Establishing a Traffic Monitoring System Based on the Tradas Software (Presentation)

Paul Stein, Data Management Section, Wisconsin DOT

The Data Integration Challenge: Suppliers, Customers and Tools (Presentation)

Tremain Downey, California Department of Transportation

Data Integration in Virginia Department of Transportation

Murali Rao, Director, Data Management Division, Virginia DOT

Progress of the Michigan DOT Data Integration Program

Ron Vibbert, Manager, Strategic Systems Operations & Maintenance Section, Michigan DOT

The Benefits of Integrating GIS into a Traffic Monitoring System (Presentation)

Ralph Basile, Pennsylvania DOT

GPS and Cell Phones for Traffic and Travel Monitoring

Chair: Elaine Murakami, Federal Highway Administration

Cell Phones for Traffic Monitoring (Presentation)

David Lovell, Assistant Professor, University of Maryland, College Park

Comparing Traffic Conditions Using Loop Data to GPS

Mike McNally, University of California, Irvine

Using a National Network of Cellular Service for Highway Performance Monitoring (Presentation)

Richard Mudge, President, Compass Services Division, US Wireless Corp.

Assessment of Dynamic Message Sign Travel Time Information Accuracy (Paper)

Cesar Quiroga, Assistant Research Engineer, Texas Transportation Institute

Rising Expectations for Travel Data

Chair: Joseph Nestler, Wisconsin DOT

LTTP Expectations for Traffic Data

Charles Churilla, R&D Technical Director for Pavements, FHWA

Environmental Expectations for Traffic Data

Andy Paluri, Manager, Transportation Engineering, The Louis Berger Group, Inc.

Safety Expectations for Traffic Data

Terry Klein, Bureau of Transportation Statistics

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3:30 PM - 5:00 PM

Data Integration Part 2: Road-Map Development - Where should we be next?

Chair: Pat Hu, Oak Ridge National Lab

Integration Across Data Sources

Terry Klein, Bureau of Transportation Statistics

Geography as an Integrating Tool (Presentation)

David Fletcher, Consultant

Statistical and Data Issues

Catherine Lawson, Transportation Research Group Manager, Portland State University

Data User's Perspective

Chuck Purvis, Senior Transportation Planner, Metropolitan Transportation Commission

Integration in the Justice Community (Presentation)

Win Lyday, Policy Advisor/Consultant Office of the General Counsel, OJP/U.S. Department of Justice

The New 2002 Pavement Design Guide: Expectations for Traffic Data

Chair: Dave Huft, South Dakota DOT

Report from the NCHRP Project Principal Investigator (Presentation)

John Hallin, ERES Consultants

Panel of Traffic Data Practitioners

Rob Robinson, Data Management Unit Chief, Illinois DOT

George Cepress, Director of Traffic Forecasts and Analysis Section, Minnesota DOT

VMT Estimates - Getting Better or Worse?

Chair: Ron Tweedie, New York State DOT

FHWA Perspective

Barna Juhasz, Director, Office of Highway Policy Information, FHWA

State DOT Perspective (Presentation)

Jonette Kreideweis, Director, Office of Management Data Services, Minnesota DOT

MPO Perspective (Presentation)

James Thorne, Transportation Engineer, NIRPC

Critical VMT Issues In Regional Air Quality Modeling

Mark Janssen, Emissions Director, Lake Michigan Air Directors(LADCO)

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New Sensor Technology Experiences

Chair: Lawrence Klein, Consultant

Update of the Evaluation of Non-Intrusive Detectors (Presentation)

Erik Minge, Associate, SRF Consulting Group, Inc.

Farideh Amiri, ITS Project Manager, Office of Advanced Transportation Systems

Tests of New Classifiers: Peek's Idris and SEO's Autosense IIA

Neal MacDonald, Illinois Tollway

Acoustic etc. Sensor Experience

David Gardner, Ohio DOT

Fibre Optic Sensor Experience (Presentation)

Tim Thex, Team Leader, Transportation Systems Monitoring, Oregon DOT

Real World Uses of Archived ITS Data

Chair: Catherine Lawson, Portland State University

ITS as an Alternative Data Source: Can ITS-Generated Data Help Better Estimate Traffic Information?

Pat Hu, Program Manager, Oak Ridge National Lab

Mobility Monitoring Using ITS Data (Presentation)

Rich Margiotta, Cambridge Systematics

Using Archived ITS Data for Transit Operations, Planning, and Scheduling: The Tri-Met Experience (Presentation)

Thomas Kimpel, Research Assistant, Portland State University

Travel Time Methodologies: Better Simulating User Experience (Presentation)

Robert Benz, Assistant Research Engineer, Texas Transportation Institute

A Summary Status of USDOT ITS Data Archiving Initiatives (Presentation)

Ralph A. Gillmann, ADUS Program Leader, Federal Highway Administration

E-Commerce Impacts on Freight Transportation, Logistics and Freight Data Requirements

Chair: Paul Bingham, WEFA Inc.

Overview

Ben Ritchey, Vice President & General Manager, Transportation Market, Battelle

The Retail/General Economy and E-Commerce (Presentation)

Scott Hazelton, Vice President, WEFA

Freight Carriers and E-Commerce (Presentation)

Joe Bryan, Managing Principal, Reebie Associates

Planning/Land Use and E-Commerce

Lance Grenzeback, Senior Vice President, Cambridge Systematics Inc.

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10:30 AM - 11:45 AM

Preview of the New Traffic Monitoring Guide (TMG)

Chair: Tony Esteve, Federal Highway Administration

Overview of the New TMG by the Author (Presentation)

Mark Hallenbeck, Director, TRAC, University of Washington

Comments from State DOT's

Curtis Dahlin, Director, Traffic Data & Analysis, Minnesota DOT

Deborah Graham, Engineer of Traffic Analysis, Texas DOT

Rob Robinson, Data Management Unit Chief, Illinois DOT

Public and Private Relationships in Traffic Data Dissemination

Chair: Thomas Palmerlee, TRB

Public-Private Partnerships in Advanced Traveler Information System Deployment (Presentation)

Connie Li, Principal, TranSmart Technologies, Inc.

"Community Update": a Public-Private Partnership for Maintaining Traffic GIS Data (Presentation: Portable Document Format or Powerpoint Format Including Author Notes)

Donald Cooke, Geographic Data Technology, Inc.

Public Agency Use of Propriety Highway Network Geographic Base Files: Issues and Approaches

Kitty Hancock, Assistant Professor, University of Massachusetts, Amherst

NAFTA: Cross Border Approaches to Traffic

Chair: John McCray, University of Texas at San Antonio

Data and Modeling Cross Border Transportation and Statewide Commodity Flows (Presentation)

Rick Donnelly, Senior Engineering Manager, Parsons Brinckerhoff Quade & Douglas, Inc.

North American Trade and Traffic Data: Trends, Sources and New Initiatives (Presentation)

Lisa Randall, International Economist, Bureau of Transportation Statistics

WIM Data and Cross Border Transportation Flows

Robert Harrison, Senior Research Scientist and Executive Director, University of Texas at Austin

Remote Sensing Forum Part 1: Introduction to the National Consortium on Remote Sensing in Transportation - Flows

Chair: Joel Morrison, The Ohio State University

Traffic Monitoring Using Satellite and Ground Data

Carolyn Merry, The Ohio State University

Mark McCord, Associate Professor, The Ohio State University

Prem Goel, Professor, The Ohio State University

The RSPA/DOT University Research Consortia Program

Joel Morrison, The Ohio State University

NCRST-Flows First Year Activities

Mark McCord, Associate Professor, The Ohio State University

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12:00 PM - 1:30 PM

Luncheon Speaker

E. Dean Carlson, Kansas Secretary of Transportation

Dean Carlson, Kansas Secretary of Transportation and AASHTO Vice President, will offer a transportation executive's perspective on the evolving requirements for traffic data and his expectations on future support within state DOTs and nationally for travel data programs.

1:30 PM - 3:00 PM

Maintaining Sites and Equipment: State Experience in Contracting Out

Chair: Mulder Brown, Florida DOT

Traffic Data Collection and Use in the Mexican Interurban Road Network (Paper)

Jorge Acha-Daza, Chief, New Systems Unit, Instituto Mexicano del Transporte

Public/Private Partnerships and the Sharing of Data Collection Risks (Presentation)

Todd Westhuis, NYSDOT Traffic Monitoring Unit

Site Maintenance by "Pushbutton" (Presentation)

Mulder Brown, Florida DOT

Continuous Classification: How Good is the Data?

Chair: Harshad Desai, Florida DOT

Continuous Vehicle Classification Data: How Good is It? (Paper or Presentation)

Richard Reel, Florida DOT

Getting the Most from Your Continuous Classification Data (Paper or Presentation)

John Williamson, Wisconsin DOT

Vehicle Classification System: FHWA Perspective (Paper or Presentation)

Ed Kashuba, Chief, Travel Monitoring and Surveys, Federal Highway Administration

Statistical Issues in Traffic Data

Chair: Vonu Thakuriah, University of Illinois at Chicago

Exploratory Statistical and Geographical Freight Traffic Data Analysis (Paper)

Roberto Aguerrebere, Transport Integration Coordinator, Instituto Mexicano del Transp.

Augustin Bustos, Associated Researcher, Instituto Mexicano del Transporte

Eric Moreno, Senior Researcher, Instituto Mexicano del Transporte

Data Needs in Evaluation of Adaptive Signal Control Systems

Vonu Thakuriah, Assistant Professor, University of Illinois at Chicago

Development of Unequally-Spaced Traffic Measurements Prediction Model (Paper)

Jung-Taek Lee, Research Assistant Professor, University of Illinois at Chicago

Local Multicollinearity and Recursive Partitioning Regression: An Illustration with Personal Travel Data

Heather Contrino, Bureau of Transportation Statistics

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1:30 PM - 3:00 PM

Remote Sensing Forum Part 2: NCRST-F - First Year Projects

Chair: Joel Morrison, The Ohio State University

Modern Remote Sensing Technologies in Support of Traffic Flow Monitoring

Dorota Grejner-Brzezinska, Associate Professor, The Ohio State University

Charles Toth, The Ohio State University

Mark McCord, Associate Professor, The Ohio State University

NCRST - F Activities at the University of Arizona

Pitu Mirchandani, Professor, University of Arizona

Mark Hickman, Assistant Professor, University of Arizona

Robert Schowengerdt, University of Arizona

Using Airborne-Based Data in Real-Time Network State Estimation and Traffic Management

Kim Boyer, The Ohio State University

Ben Coifman, The Ohio State University

Rabi Mishalani, Assistant Professor, The Ohio State University

Ümit Özgüner, The Ohio State University

Feasibility of Using Remote Sensing to Monitor Truck Rest Area Availability and Utilization (Paper)

Michael Bronzini, Dewberry Chair Professor, George Mason University

Richard Gomez, Senior Research Scientist, George Mason University

3:30 PM - 5:00 PM

Improving Data Collection

Chair: Allan Heckman, MODOT

Status of the Vehicle Detector Clearinghouse (Presentation)

Luz-Elena Mimbela, Project Manager, Vehicle Detector Clearinghouse, New Mexico State University

Status of the NTCIP DCM Workgroup Effort (Presentation)

Rick Stalowski, Peek Traffic

Status of the WIM Standard Revision

Clyde Lee, Professor, University of Texas - Austin

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3:30 PM - 5:00 PM

Traffic Data Quality Session

Chair: Ron Tweedie, New York State DOT

The Traffic Data Quality (TDQ) Pooled Fund Project (Presentation)

Mark Flinner, Research Analyst Specialist Senior, Minnesota DOT

How Florida Deals With Traffic Data Quality Assessments and Quality Control (Presentation)

Harshad Desai, Florida DOT

Data Quality in the New England Traffic Monitoring System (Presentation)

Amy Gamble, Traffic Research Engineer, Vermont Agency of Transportation

Freight O-D & Weight and Dimensions Data Collection in Mexico: Lessons Learned and Challenges

Alberto Mendoza, Transport Operation and Safety Coordinator, Instituto Mexicano del Transporte

Alfonso Rico, Director General, Instituto Mexicano del Transporte

Jose Luis Gutierrez, Senior Researcher, Instituto Mexicano del Transporte

Building ITS Data Archives: Examples from Around the Country

Chair: Shawn Turner, Texas Transportation Institute

Overview of the Archived Data User Service Program Plan (Presentation)

Jim Bunch, Senior Principal, Mitretek Systems

Data Warehousing and ITS: Using Archived Data to Improve Transportation Services (Presentation)

Cathy McGhee, Senior Research Scientist, Virginia Transportation Research Council

Data Archiving for Traffic Management Systems in Minnesota: Experiences in the Twin Cities (Presentation)

Jim Aswegan, Traffic Management Center

CHARTing a Data-Rich Future in Maryland (Presentation)

Bob Winick, Motion Maps

Remote Sensing Forum Part 3: NCRST-F - Future Directions

Chair: Joel Morrison, The Ohio State University

Panelists:

Carolyn Merry, The Ohio State University

Prem Goel, Professor, The Ohio State University

Richard Gomez, Senior Research Scientist, George Mason University

Pitu Mirchandani, Professor, University of Arizona

Mark Hickman, Assistant Professor, University of Arizona

Michael Bronzini, Dewberry Chair Professor, George Mason University

Mark McCord, Associate Professor, The Ohio State University

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Tuesday, August 29, 2000

5:30 PM - 7:00 PM

[Policy Analysis and Systems Monitoring Working Group Meeting](#)

Co-Chairs: Alan Pisarski, Consultant and Mary Lynn Tischer, Arizona DOT

Add your priorities on traffic monitoring to the national research agenda. The Policy Analysis and Systems Monitoring Working Group is participating with NATMEC to collect recommendations for systems monitoring research programs.

[FHWA Oversight of Traffic Monitoring \(FHWA only\)](#)

[Non-Intrusive Technologies Technical Working Group \(Open Meeting\)](#)

Wednesday, August 30, 2000

8:00 AM - 10:30 AM

A5016 Committee on National Transportation Data Requirements and Programs

Chair: Alan Pisarski, Consultant

[NOTE: For exhibitor materials please see the Exhibitor Information page.](#)

8:30 AM - 8:50 AM

Chaparral Systems Corporation

Athens Technical Specialists, Inc. - Traffic Classifier Test Equipment

ECM Inc.

9:00 AM - 9:20 AM

EIS Electronic Integrated Systems Inc. - Real RADAR Traffic Detection

Diamond Traffic Products - Update on Current and Future Products

Transfo - Automated Video-Based Information

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9:30 AM - 9:50 AM

Traffic Signal Company of Wisconsin Inc. - Operation, Handling and Installation of Fiberoptic Sensors for Counting, Classification and WIM

PAT America, Inc. - Traffic Classification Using Portable Sensors to Permanent Sensors and Weigh In Motion Products

TrafInfo.Com - Internet-based Wireless Telemetry for Traffic Counters

10:00 AM - 10:20 AM

Omni Weight Corporation - Non-intrusive Weigh In Motion

Schwartz Electro-Optics, Inc.

JAMAR Technologies Inc. - Flexible Automatic Traffic Recording Using A Multiplicity of Sensors

10:30 AM - 10:50 AM

SmarTek Systems, Inc. - The Use of Non-Embedded Sensors and Wireless Communications In Data Collection

International Road Dynamics Inc. - Protection of Your Roadway Infrastructure and Why It Is Important

11:00 AM - 11:20 AM

MetroCount - MetroCount 5600 Series Vehicle Classifier System

Measurement Specialties Inc. - Fiber Optic axle sensors for vehicle counts, classification, speed and toll treadles

Wednesday, August 30, 2000

11:30 AM - 11:50 AM

Peek Traffic, Inc. - Peek Into the Future

Battelle - Battelle's GPS Leader

1:30 PM - 3:00 PM

Setting the Standards for Research Quality Data at LTPP SPS Sites

Chair: Barbara K. Ostrom, LAW PCS - ([Introduction](#) - [Excel Spreadsheets: 1](#) [2](#) [3](#))

Status of the SPS Traffic Action Plan and Options for State Involvement (Presentation)

Larry Wisner, Traffic Lead, FHWA LTPP Team, FHWA

Equipment Selection and Site Installation for LTPP SPS WIM Sites (Paper or Presentation)

Barbara K. Ostrom, Transportation Engineer, LAW PCS

Smoothness Criteria for Construction and In-Service Conditions LTPP SPS WIM (Paper or Presentation)

John Weaver, Indiana DOT

Verification of Scale Accuracy for LTPP SPS WIM Sites (Paper or Presentation)

Richard Quinley, California Department of Transportation

WORKSHOP - Traffic Data 101: A Statistical Primer for Traffic Data Practitioners

Chair: Joe Wilkinson, Chaparral Systems

Wisconsin's Approach to Variation in Traffic Data (Paper)

Bruce Aunet, Wisconsin DOT

1:30 PM - 3:00 PM

Performance Monitoring and Measurement

Chair: Anita Vandervalk, Florida DOT

Improved Performance Measures for Freeway Operations (Presentation)

Mark Hallenbeck, Director, TRAC, University of Washington

California's Transportation System Performance Measures (Presentation)

Tremain Downey, California Department of Transportation

Minnesota's Transportation Performance Measures (Presentation)

Mark Larson, Director, Measurement and Evaluation Section, Minnesota DOT

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Wednesday, August 30, 2000

3:30 PM - 5:00 PM

Traffic Data and the World Wide Web

Chair: Mark Hallenbeck, University of Washington

Florida's Traffic Information CD (Presentation)

Harshad Desai, Florida DOT

California's Annual Average Daily Traffic Information on the Internet (Presentation)

Joseph Avis, California DOT

The Potential Role of Internet in Collecting, Analyzing and Providing ITS Data

Pat Hu, Oak Ridge National Lab

Traffic Data for Emergency/Special Events: Working with Emergency Centers

Chair: Richard Reel, Florida DOT

SCDOT Evacuation Information System Use (Continuous Traffic Counters) (Presentation)

William Beck, South Carolina DOT

The Use of Traffic Counter Data in an Avalanche Area

Glenda Fuller, Traffic Survey & Analysis Manager, Idaho Transportation Department

How Florida Met Emergency Management's Traffic Data Challenge (Presentation)

Harshad Desai, Florida DOT

How Good is WIM Data?

Chair: Perry M. Kent, Perry M. Kent & Associates

Essential Provisions for Acquiring Reliable WIM Data

Clyde Lee, Professor, University of Texas - Austin

A Practical Approach to Acquiring Good Data

Mark Gardner, FUGRO-BRE, Inc.

Quality Assurance of WIM Data

Herb Southgate

The Reliability of WIM Data (Presentation)

Wiley Cunagin

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Thursday, August 31, 2000

8:30 AM - 10:00 AM

Location Referencing Problems and Solutions for Traffic Monitoring and Management

Chair: Alan P. Vonderohe, University of Wisconsin, Madison

Functional Requirements for a Comprehensive Transportation Location Referencing System (Paper or Presentation)

Teresa Adams, Associate Professor, Civil and Environmental Engineering, University of Wisconsin at Madison

Integrating Traffic Management Data via an Enterprise LRS (Paper or Presentation)

Tom Ries, GeoAnalytics, Inc.

New Jersey's Automated Straight Line Diagrams and Roadway Inventory Program

Jim Carl, Section Chief, Roadway Systems, New Jersey DOT

Richard Robyak, Project Manager, Michael Baker Jr., Inc.

WIM Data for CVO Enforcement

Chair: Sandy Huxtable, Wisconsin DOT

Coordinating Enforcement and Planning in Wisconsin (Paper or Presentation)

Sandy Huxtable, Captain, Division of State Patrol, Wisconsin DOT

STARS: State Truck Activities Reporting System (Presentation)

Dennis Hult, Montana Department of Transportation

Real Time CMV Enforcement Screening at SHRP Sites (Presentation)

Amy Gamble, Traffic Research Engineer, Vermont Agency of Transportation

Analyzing and Using Traffic Data

Chair: Paul Stein, Wisconsin DOT

Maximizing the Benefits of Traffic Monitoring Data using the FSOA Traffic Volume Projection Model

Do Nam, Principal Transportation Engineer, Parsons Transportation Group

Neil Weinsner, Planning Supervisor, Wisconsin Department of Transportation

Feasibility of a New Vehicle Classification System for Canada (Paper)

Alan Clayton, U of Manitoba

Jeannette Montufar, University of Manitoba

Dan Middleton, Texas Transportation Institute

Bill McCauley, Transport Canada

Evaluation of Quartz Piezoelectric WIM sensors: Second Year Study (Paper)

Anne-Marie McDonnell, Connecticut Department of Transportation

Traffic Load Monitoring and Projections: A Status Report

Rich Margiotta, Cambridge Systematics

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10:30 AM - 12:00 PM

Wrap Up Panel: Strategies to Reconcile Expectations with Resources

Chair: Dave Huft, South Dakota DOT

South Dakota DOT's Dave Huft, who chairs both TRB's Traffic Monitoring Committee and the AASHTO Research Advisory Committee, will lead this interactive session is designed to highlight the hot issues in generating and using quality traffic data. The results of this session will serve as the conference input to the National Research & Technology Partnership Forum. This R&T Forum is the collective effort of TRB, AASHTO and FHWA to develop a national highway research agenda.

NATMEC Recommendations to the Research and Technology Forum

Alan Pisarski, Consultant