Sessions and Events

Sunday, June 27

1 8:30 a.m.–5 p.m., Aurora
Peer Exchange (by invitation)
Anita Vandervalk, Cambridge Systematics, Inc., presiding
Sponsored by Statewide Transportation Data and Information Systems Committee

2 1:30 p.m.–2:30 p.m., Cambria/Britannia
Committee Meeting: Research Subcommittee of the Freeway Operations Committee

3 2:30 p.m.–3:30 p.m., Cambria/Britannia
Committee Meeting: Freeway Management and Operations Handbook Task Force of the Freeway Operations Committee

3 p.m.–5 p.m., Constellation B
Associated Meeting: Portable Nonintrusive Traffic Systems Working Group

4 3 p.m.–5 p.m., Lenore
Committee Meeting: Urban Transportation Data and Information Systems Committee
Ed Christopher, Federal Highway Administration, presiding

6 3:30 p.m.–5 p.m., Cambria/Britannia
Executive Session: Freeway Operations Committee
Peter Briglia, Washington State Department of Transportation, presiding

5 p.m.–6 p.m., Lenore
Associated Meeting: ITS America Data Quality Special Interest Group
Richard Taylor, Intelligent Transportation Society of America (ITS AMERICA), presiding

The meeting will discuss action items from the national Traffic Management Center Data Quality Workshop held February 2004 in Houston, Texas. All interested parties are welcome to attend.

6 p.m.–7:30 p.m., Bay Terrace
Reception

Monday, June 28

7:30 a.m.–8:30 a.m., Constellation AB Foyer
Continental Breakfast

7 8 a.m.–noon, Cambria/Britannia
Committee Meeting: Freeway Operations Committee
Peter Briglia, Washington State Department of Transportation, presiding

8 8:30 a.m.–10 a.m., Constellation AB
Opening Session
Mark Hallenbeck, University of Washington, presiding

Keeping a Region Moving with Good Information
Gary Gallegos, San Diego Association of Governments

Elected officials and other decision makers depend on good transportation information for setting courses of action, to improve travel mobility in metropolitan regions. Critical funding decisions require accurate and timely information. The importance of obtaining and maintaining quality information has become higher than ever. The public also is placing greater demands and emphasis on quantitative measures for evaluating the effectiveness of strategies designed to improve regional transportation systems. In this presentation, Gary Gallegos will focus on the strategies used in the San Diego region to monitor the performance of the existing transportation system and to evaluate the effectiveness of planned improvements.

The Role of Complex Data in a One-Pager World
Timothy Lomax, Texas Transportation Institute

Tim Lomax, a well-known researcher who regularly uses traffic data, will discuss the opportunities and challenges associated with analyzing and communicating transportation issues. In this presentation, he will apply his experiences from 20 years of talking to reporters, the business community, and elected officials, to provide some perspective on the role of data in framing the urban transportation discussion agenda. Hint: He thinks good traffic data is very important. Lomax is a coauthor of several reports on traffic congestion problems and solutions.

(continued on page 5)

(Opening Session, continued from page 4)

A Federal Perspective on Traffic Information for National Purposes
Barna Juhasz, Federal Highway Administration

The Director of the Federal Highway Administration's Office of Highway Policy Information will discuss the status of reauthorization legislation, including an overview of new requirements for traffic data. Barna Juhasz also will provide an update on what the FHWA is doing to improve the quality of information in highway information programs.

10 a.m.–10:30 a.m., Constellation AB Foyer
Break

10:30 a.m.–11 a.m., Aurora
Exhibitor Presentation: Battelle
Mohammed Alam, Battelle, presiding

Battelle will discuss methodologies and processes for incorporating truck traffic data into the National Highway Planning Network (NHPN) and other critical highway links using readily available public data sources. Furthermore, Battelle will demonstrate truck data assignment methods, to create a network of national truck traffic flow data for highway sections where information is not available. Battelle has a unique truck traffic data repository with the ability to generate current, historical, and trend information at the national level as well as for specific corridors and study areas. Battelle's truck traffic database uses the latest version of the Highway Performance Monitoring System (HPMS) as the initial data source and then refines it with state data and the VITRIS database maintained by Federal Highway Administration's Office of Information. The truck data also can be extended to include vehicle classification and weigh-in-motion data points, including geospatial locations, to provide configuration information.

9
10:30 a.m.–noon, Lenore
AASHTO 2002 Pavement Design Guide: What It Means for Data Collection
Mark Gardner, Fugro–BRE, Inc., presiding

This session is an opportunity for state departments of transportation representatives to discuss their perceptions of requirements in the new design guide, approaches to meeting those requirements, implications to operations, barriers to implementation, and other issues. Speakers will relate the kinds of problems they have encountered and how they are working through them. This session will help states, contractors, and vendors better understand the ongoing activities in this area.

Understanding Traffic Inputs to the Pavement Design Guide Software
Steven Jessberger, Ohio Department of Transportation

Doing More With Less: An Inexpensive Weigh-in-Motion Option to Support the 2002 Pavement Design Guide
Todd Westhuis, New York State Department of Transportation; Roy Czinku, International Road Dynamics, Inc. (IRD)

Expanding the Texas Weigh-in-Motion Program to Meet AASHTO 2002 Traffic Data Needs
Jim Neidigh, Texas Department of Transportation; Jason Crawford, Texas Transportation Institute

Weigh-in-Motion Data for Pavement Design
Herbert Weinblatt, Cambridge Systematics, Inc.

10
10:30 a.m.–noon, Constellation AB
Use of Classification Data in Urban Settings or Truck Data: What Do We Need, Why, and How Do We Get It?
Joseph Avis, California Department of Transportation, presiding

Collection of truck data in urban areas is essential for making well-informed transportation planning decisions. This session will examine what is needed and why. Methods being deployed in cooperation with state and local transportation organizations to collect truck data will be discussed.

Automatic Vehicle Classification Project
Alex Estrella, San Diego Association of Governments

Study of Nonintrusive Detectors
Daniel Inabnitt, Kentucky Transportation Cabinet

Monitoring Truck Mobility on Urban Roadways
Mark Hallenbeck, University of Washington

11
10:30 a.m.–noon, Sovereign
Emerging Technologies for Traffic Monitoring (Part 1 of 3)
Mark Hickman, University of Arizona, presiding

Wireless Location Technology, Traffic Monitoring Demonstration and Evaluation Project
Brian Smith, University of Virginia

Regional Automated Vehicle Location Demonstration Project
Mario Oropeza, San Diego Association of Governments

Automated Microscopic Traffic Data from Aerial Video
Mark Hickman, University of Arizona

Traffic Surveillance from Unmanned Aerial Vehicles (UAVs): Results and Lessons from an Extended Field Experiment
Benjamin Coifman, Mark McCord, Rabi Mishalani, and Keith Redmill, Ohio State University

Sessions and Events: *Monday, June 28*

11 a.m.–11:30 a.m., Aurora
Transportation Research Board (TRB)
Barbara Post, Transportation Research Board, presiding

The TRB infomercial will provide information on TRB's products and services, including tips on accessing TRB's database and web resources.

11:30 a.m.–noon, Aurora
Exhibitor Presentation: DYMEC

Bayside will provide a presentation on the role DYMEC plays in the intelligent transportation systems environment, as well as information on StarComm brand modems and communications devices. WCSI also will discuss its role in interfacing with California Department of Transportation and other DOT contractors and projects.

Noon–2 p.m., Commodore Ballroom
Lunch

Noon–4 p.m., Commodore Ballroom
Exhibits

12 12:15 p.m.–2 p.m., Cambria/Britannia
Joint Committee Meeting: National Transportation Data Requirements and Programs Committee and Highway Traffic Monitoring Committee
Patricia Hu, Oak Ridge National Laboratory, presiding
Mark Garnder, Fugro-BRE, Inc. presiding

13 2 p.m.–3:30 p.m., Lenore
Use of Intelligent Transportation System (ITS) Archives to Improve Operational Decision Making (Part 1 of 2)
Peter Briglia, Washington State Department of Transportation, presiding
Also sponsored by the Freeway Operations Committee

The speakers will discuss the ways that transportation agencies in their state or province are using data collected and archived by their ITS devices, such as freeway management systems or traffic signal systems, to improve the operation of their roadways.

Use of Performance Measurement System (PeMS) Data Archive for Operations Decision Making in California
Alexander Skabardonis, University of California-Berkeley
Use of ITS Data for Operations Decision Making in Rhode Island
Cynthia Levesque, Rhode Island Department of Transportation
Use of ITS Data for Operations Decision Making in Ontario, Canada
Philip Masters, Ministry of Transportation, Ontario
Virginia Archived Data System (ADMS–VA): A Tool to Support Operations
Ken Earnest, Virginia Department of Transportation

14 2 p.m.–3:30 p.m., Constellation AB
HPMS: Building Data Partnerships Around VMT
Ed Christopher, Federal Highway Administration, presiding

Vehicle Miles Traveled (VMT) is one of the most widely examined, used, and talked about variables in the data bag of the transportation planner or analyst. One of the most popular sources for VMT comes from the data submitted annually to the Federal Highway Administration by the states through the Highway Performance Monitoring System (HPMS) process. This session will explore some of the emerging partnerships and VMT estimation practices facing the data submitted through HPMS.

A Methodology for Randomly Selecting Traffic Count Locations in Texas: Results and Benefits
William Frawley, Texas Transportation Institute
VMT Meets ITS and HPMS
Hualiang Teng, University of Virginia
VMT: The Illinois Experience
Rob Robinson, Illinois Department of Transportation

15 2 p.m.–3:30 p.m., Sovereign
Trouble-Shooting Counting Devices: Volume and Classification
Glenda Fuller, Idaho Department of Transportation;
Jeff Patten, Federal Highway Administration, presiding

Road tubes, loops, and piezo—in conjunction with a host of traffic counting devices—have been used widely for many years by traffic counting professionals to collect volume and classification data. This session will cover examples of best practices and techniques, employed by state departments of transportation and contractors to overcome difficulties associated with using these volume and classification counting systems.

Ohio Department of Transportation's Classification Tree
Steven Jessberger, Ohio Department of Transportation
Portable Count Quality Control
James Porter, Louisiana Department of Transportation and Development
Troubleshooting Loops
Daniel Inabnitt, Kentucky Transportation Cabinet

2 p.m.–2:30 p.m., Aurora

Exhibitor Presentation: Kistler Instrument Corp.
Don Beehler, Kistler Instrument Corp., presiding

The Kistler infomercial includes performance capability and installation information. A mini demonstration is included.

2:30 p.m.–3 p.m., Aurora

Exhibitor Presentation: FHWA LTPP Traffic Data Collection Activities
Deborah Walker, Federal Highway Administration, presiding

The Federal Highway Administration's Long-Term Pavement Performance (LTPP) Team will be available to discuss traffic data collection activities, including the status of the traffic data received from the states. The LTTP Team will answer any questions about how the traffic data is processed once it is submitted to the LTPP Regional Support Contractors. The LTPP specific pavement study, the Traffic Data Collection Pooled–Fund Study, will be briefly discussed; a more detailed presentation will occur later in the week.

3 p.m.–3:30 p.m., Aurora

Exhibitor Presentation: Northrop Grumman IT

Northrop Grumman IT will present existing Florida Department of Transportation traffic monitoring systems and capabilities.

3:30 p.m.–4 p.m., Commodore Ballroom

Break

16 4 p.m.–5:30 p.m., Lenore

Use of Intelligent Transportation System Archives to Improve Operational Decision Making (Part 2 of 2)
Peter Briglia, Washington State Department of Transportation, presiding
Also sponsored by the Freeway Operations Committee

Development of Web-Based Traffic Signal Control System Monitoring and Decision Support Tool
Byungkyu (Brian) Park, University of Virginia

Leveraging Data Fusion for Operations Decision Making
James Pol, Federal Highway Administration

The Integrated Toll and Traffic Management System (ITTMS) of the Athens Peripheral Highway
Bill Halkias, Attikes Diadromes SA

Implementing a Freeway Usage and Performance System in the Phoenix Area
Mark Schlappi, Maricopa Association of Governments

17 4 p.m.–5:30 p.m., Constellation AB

Communicating with Your Data Collection Site: Real-Life Experience with Modern Technology
David Gardner, Ohio Department of Transportation, presiding

Communication with data collection devices is critical to the efficiency of operations and in making data available to customers. This session will explore the different types of technologies used by practitioners to communicate with their data collection devices.

Communicating with Road Weather Information System (RWIS) Sites Using Spread-Spectrum Technologies in the Alaska Department of Transportation
Jack Stickel, Alaska Department of Transportation and Public Facilities

Cutting the Cord: New York State Department of Transportation's Experience with Wireless Communications
Todd Westhuis, New York State Department of Transportation

Automated Data Collection for the Riverside County Congestion Management Program
Erik Ruehr, VRPA Technologies

VideoSync
Joe Palen, California Department of Transportation

18 4 p.m.–5:30 p.m., Sovereign

Congestion Pricing: What Does It Mean for Data Collection and Planning?
Ray Traynor, San Diego Association of Governments, presiding

The underlying rationale for congestion pricing schemes is based upon an amalgamation of traffic data, policy goals, and attitudinal factors of constituents. This session will explore the various data forms, latest collection methods, and issues associated with data used for the planning and development of congestion pricing programs and facilities.

Data Collection Surrounding the I-15 Congestion Pricing Project in San Diego
Robert Davis, Wilbur Smith Associates

New York State Thruway Authority's Traffic Data System
Lee Maynus, New York State Thruway Authority

Measures of Road Traffic Congestion
John Polak, Imperial College, London, United Kingdom

Evaluation Plan for the Next Generation Pricing Project in San Diego
Eric Schreffler, ESTC

Monday, June 28 (continued)

4 p.m.–4:30 p.m., Aurora

Exhibitor Presentation: Chaparral Systems Corporation
Joe Wilkinson, Chaparral Systems Corporation, presiding

The session will provide an overview of Chaparral System Corporation's traffic data quality control, summarization, and analysis software product, TRADAS 3. TRADAS 3 is the new and reengineered upgrade of Chaparral's flagship data processing product. It fully integrates the processing of short-term and continuous volume, vehicle classification, length, speed, weigh-in-motion, and other kinds of traffic data.

19 7 p.m.–9:30 p.m., Cambria/Britannia

Committee Meeting: Statewide Transportation Data and Information Systems Committee
Anita Vandervalk, Cambridge Systematics, Inc., presiding

Tuesday, June 29

20 7 a.m.–8:30 a.m., Lenore

Committee Meeting: Data and Information Systems Section (by invitation)
Alan Pisarski, Consultant, presiding

7:30 a.m.–8:30 a.m., Constellation AB Foyer

Continental Breakfast

7:30 a.m.–8:30 a.m., Sovereign

Associated Meeting: Vehicle Travel Information System (VTRIS) User Group
David Jones, Federal Highway Administration, presiding

This meeting is for the users of VTRIS.

21 8:30 a.m.–10 a.m., Constellation A

Measuring Urban Traffic Congestion
Mark Schlappi, Maricopa Association of Governments, presiding

Different methods for measuring urban traffic congestion will be evaluated, including three ways of measuring travel speed using Global Positioning System (GPS): (1) GPS units in floating cars, (2) GPS units in fleet trucks, and (3) GPS units in city buses.

Test Comparison of GPS Probe Data Results to Aerial Surveillance Methods
Robert Winick, Motion Maps, LLC

Using Intelligent Transportation System (ITS) Data to Measure Arterial Travel Time in Portland
Robert Bertini, Portland State University

Using GPS, Geographic Information System (GIS), and Video to Improve the Quality of Travel Speed Studies
Mark Schlappi, Maricopa Association of Governments

Building a Robust Traffic Data Archive for Planning Purposes
Sarath Joshua, Maricopa Association of Governments

22 8:30 a.m.–10 a.m., Constellation B

New Ways to Collect and Use Truck Activity Data
Frank Southworth, Oak Ridge National Laboratory, presiding

This session examines a variety of methods for collecting and reporting truck movements. Panelists will discuss new forms of nonintrusive and informatics-based truck movement data that in the future could replace and supplement traditional data collection methods. One potential outcome would be the computation of improved freight system performance measures.

Developing the Freight Information Highway
Daniel Murray, American Transportation Research Institute

Real-Time Freight Performance Measures
Rolf Schmitt, Federal Highway Administration

Mainstreaming Passive Truck–Oriented Data Collection: Archived Data User Service (ADUS) to the Rescue
Catherine Lawson, State University of New York–Albany

Truck Traffic Analysis Using Weigh-in-Motion Data in California
John Harvey, University of California–Davis

23 8:30 a.m.–noon, Reliance

Collecting and Using Traffic Data: Poster Session (1 of 2)
Ralph Gillmann, Federal Highway Administration, presiding

Presenters will be available from 8:30 a.m. to 10 a.m.

Alaska's Weigh-in-Motion Data Port
Mary Ann Dierckman, Alaska Department of Transportation and Public Facilities;
Paul Marrero, Wostmann & Associates, Inc.

Innovative Use of Staff for Traffic Counting at Iowa Department of Transportation
Phillip Meraz, Iowa Department of Transportation

The Archived Data Management System in Kentucky
Mei Chen, University of Kentucky;
Niels Robert Bostrom and Daniel Inabnitt, Kentucky Transportation Cabinet

How Partnering Will Improve Your Traffic Program
Mary Kladiva and John Miller, Missouri Department of Transportation
New Hampshire Traffic Monitoring
Mike Curley, New Hampshire Department of Transportation
North Dakota Department of Transportation Traffic Data Section
Zdravka Zeric, North Dakota Department of Transportation
A Quick Administrative Tool for Weigh-in-Motion Quality Control Analyses
Herbert Southgate, Consultant

9 a.m.–9:30 a.m., Aurora
Exhibitor Presentation: Control Specialists Company
Eric Deason, Control Specialists Company, presiding

Control Specialists Company will be providing information about the Infrared Traffic Logger (TIRTL), a non-invasive, axle-detection counter–classifier device. The presentation will explain the benefits of this device over piezo- and loop-based systems.

9:30 a.m.–10 a.m., Aurora
Exhibitor Presentation: 3M
Marcia Lozier, 3M Company, presiding

10 a.m.–10:30 a.m., Commodore Ballroom
Break

10 a.m.–4 p.m., Commodore Ballroom
Exhibits

10:30 a.m.–11 a.m., Aurora
Exhibitor Presentation: EIS Electronic Integrated Systems, Inc.
Don Drewell, EIS Electronic Integrated Systems, presiding

In presenting wireless traffic counting solutions, EIS will introduce a wide-area traffic counting solution that features Remote Traffic Microwave Sensor (RTMS) vehicle detectors, which communicate through the cellular network to a central office.

24 10:30 a.m.–noon, Cambria/Britannia
State of the Practice for Intelligent Transportation System (ITS) Data Archiving
Ralph Gillmann, Federal Highway Administration, presiding

This session will examine how the archiving of ITS data is incorporated into the business practices of transportation agencies. The session also will discuss the experience of those who have archived ITS-generated data for years and how ITS data archiving has affected everyday practice.

Regional Data Archive and Performance Measures
Robert Bertini, Portland State University
Calculating Annual Average Daily Traffic (AADT) With Sporadic Data
Shawn Turner, Texas Transportation Institute
The Benefits of Archived Data User Service (ADUS) for Operations and Planning
David Register, Science Applications International Corporation
ADUS Implementations
Ralph Gillmann, Federal Highway Administration

25 10:30 a.m.–noon, Constellation A
Handling Large Amounts of Data: Tools for Data Manipulation and Management
Glenda Fuller, Idaho Department of Transportation, presiding

Traffic monitoring data analysis is becoming more complicated and extensive. In turn, this analysis requires more detailed data sets that are becoming increasingly large in size. This session will present some of the tools used to manipulate and manage these large data archives.

Application of Data Warehouse Design Principles in Traffic Data Archives
Ramkumar Venkatanarayana, Smart Travel Laboratory
North Carolina Department of Transportation Traffic Survey Unit Weigh-in-Motion Data Processing Software
Mike Ashbrook, North Carolina Department of Transportation
Validation of Weigh-in-Motion Data: Manual to Automated
Mohammad Fatemi, California Department of Transportation
Successfully Processing and Providing Large Volumes of Traffic
Joshua Evarts, Trancite Logic Systems

26 10:30 a.m.–noon, Constellation B
Emerging Technologies for Traffic Monitoring (Part 2 of 3)
Mark McCord, Ohio State University, presiding

This session includes presentations on the use and the potential use of nontraditional traffic sensing technologies or methodologies, such as the interpretation of cell phone signals to infer traffic conditions and the use of remote sensing to estimate traffic measures. Empirical results and deployment plans will be discussed.

Tests of Unintrusive Traffic Detectors and Automated Data Retrieval
Panos Prevedouros, University of Hawaii–Manoa; Lawrence Klein, Consultant; Steve Tagupa, Hawaii Department of Transportation
(*continued on page 10*)

(Session 26, continued from page 9)

Evaluation of Microwave Vehicle Detection
Bill Wald, California Department of Transportation

Portable Nonintrusive Traffic Detection System
Jerry Kotzenmacher, Minnesota Department of Transportation; Erik Minge, SRF Consulting Group, Inc.

Improved Annual Average Daily Traffic (AADT) Estimation from Weighted Ground- and Image-Based Data
Mark McCord, Zhuojun Jiang, and Prem Goel, Ohio State University

11 a.m.–11:30 a.m., Aurora

Exhibitor Presentation: Jamar Technologies, Inc.
Don Gettner, Jamar Technologies, Inc.,presiding

In this presentation, *Evolutionary vs. Revolutionary Developments in Traffic Data Collection and Analysis,* Jamar Technologies will provide its take on whether attendees should switch to new data collection technologies or stick with manual and automatic data collection systems. The presentation will include new traffic counters that can read standard Global Positioning System receivers for precise and automatic location; traffic counters that can test the signals from road tubes; PDA (personal digital assistant) software that reads and validates traffic data in the field; and office software that shows traffic data on a map.

11:30 a.m.–noon, Aurora

Exhibitor Presentation: Econolite Control Products, Inc.
Frank Provenzano, Econolite Control Products, Inc., presiding

Econolite Control Products will present a new concept in traffic monitoring: using today's Internet-based systems to automate, archive, and distribute traffic information.

Noon–2 p.m., Commodore Ballroom

Lunch

27 12:15 p.m.–2 p.m., Lenore

Committee Meeting: Freight Transportation Data Committee
Paul Bingham, Global Insight, Inc., presiding

1 p.m.–2 p.m., Aurora

Associated Meeting: Federal Highway Administration Staff Meeting

28 2 p.m.–3:30 p.m., Cambria/Britannia

Intelligent Transportation System (ITS) Archives: Their Design, Development, and Operation
Brian Smith, University of Virginia, presiding

The transportation community is increasingly interested in retaining data collected by ITS, to support a wide range of applications. In early ITS systems, data archives consisted of relatively simple compilations of raw data that are difficult to access. ITS data archives now are being designed, developed, and operated with careful attention to data screening, aggregation, and accessibility. This session focuses on the experiences in the design, construction, and operation of state-of-the-art ITS data archives.

Design and Development of Archived Data Management System (ADMS) Virginia
Barbara Skiffington, Open Roads Consulting, Inc.

Florida Department of Transportation's Approach to Complement Traditional Traffic Monitoring Needs Using ITS Information
James Golden, Florida Department of Transportation

Central Florida Data Warehouse Expansion
Rick Schuman, Post, Buckley, Schuh & Jernigan, Inc. (PBS&J)

29 2 p.m.–3:30 p.m., Constellation A

Evolving Traffic Data Partnerships: New Ways to Collect Data, Collecting More with Less
Jonette Kreideweis, Minnesota Department of Transportation, presiding

Resource limitations are challenging many transportation agencies to rethink their traffic data collection methods. This session will explore innovative partnerships that are evolving between public agencies, academic institutions, transportation associations, and the private sector, to provide quality traffic data.

Key Factors to Successful Partnerships
Jeff Tayman, San Diego Association of Governments

Partnering for Freight Performance Measures
Rolf Schmitt, Federal Highway Administration

Pennsylvania Partnerships: A New Way to Do Business
Kim Ferroni, Pennsylvania Department of Transportation

Examples of Traffic Data Partnerships in Kentucky
David Gardner, Ohio Department of Transportation; Niels Robert Bostrom, Kentucky Transportation Cabinet

30 2 p.m.–3:30 p.m., Constellation B

Traffic Detector Data Quality
Ralph Gillmann, Federal Highway Administration, presiding

This session will highlight recent research and workshops on traffic detector data quality. It also will describe early results from a follow-on project to measure traffic data quality.

Defining and Measuring Traffic Data Quality
Shawn Turner, Texas Transportation Institute
Analysis of Virginia Department of Transportation Traffic Monitoring Maintenance
Hualiang Teng, University of Virginia
Advances in Traffic Data Collection and Management
Dan Middleton, Texas Transportation Institute
Spatial Validation Model for Short-Term Volume Counts
Kent Taylor, North Carolina Department of Transportation

2 p.m.–2:30 p.m., Aurora

Exhibitor Presentation: International Road Dynamics, Inc. (IRD)
Tamara Sullivan, International Road Dynamics, presiding

IRD utilizes a complete line of weigh-in-motion technology for the screening of truck size and weight compliance. New initiatives in truck enforcement include the virtual weigh station, which includes the use of advanced video capture technology to monitor remote or isolated locations.

2:30 p.m.–3 p.m., Aurora

Exhibitor Presentation: RoadRAMP Systems
Tim Fielder, RoadRAMP Systems, presiding

The presentation will demonstrate various installation techniques for the RoadRAMP Highway axle sensors and discuss typical classification results.

3 p.m.–3:30 p.m., Aurora

Exhibitor Presentation: MetroCount USA, Inc.
Michael Kenny, MetroCount USA, Inc., presiding

In its presentation, "New Techniques for Extracting Meaningful Traffic Data Reports," MetroCount will discuss advanced, new intelligent software for detailed vehicular traffic data analysis, including using new XML transforms.

3:30 p.m.–4 p.m., Commodore Ballroom

Break

31 4 p.m.–5:30 p.m., Cambria/Britannia

Travel Time, Congestion, and Reliability: Rural and Urban
Timothy Lomax, Texas Transportation Institute, presiding

This session will focus on how state highway agencies are collecting, using, and reporting travel time and reliability information in rural and urban areas.

San Diego Regional Travel Time Study
Linda Culp, San Diego Association of Governments
Travel Time Estimation for Urban Freeway Performance Measurement: Understanding and Improving Upon the Extrapolation Method
Brian Smith, University of Virginia
The Corridor Monitoring System in the iFlorida Project
Rick Schuman, Post, Buckley, Schuh & Jernigan, Inc. (PBS&J)
Use of Commercial Vehicle Information Systems and Networks (CVISN) Truck Tags to Monitor Intercity Travel Times and Roadway Performance
Mark Hallenbeck, University of Washington

32 4 p.m.–5:30 p.m., Constellation A

Data Quality Procedures for Weigh in Motion and Classification
Fred Dial, California Department of Transportation, presiding

This session will discuss the vehicle classification and truck weight data required for the *AASHTO 2002 Design Guide*. It will explore ways for determining the degree of data accuracy needed for the various design requirements described in the design guide and possible methods for monitoring and improving data quality.

Bench Marking of Vehicle Classification Data
Walton Jones, Florida Department of Transportation
Data Quality Control Metrics for Classification and Axle Weight Sensors
Darcy Bullock, Purdue University
Signal Probe and Processing Methods for Improving Weigh-in-Motion Data
Taek Mu Kwon, University of Minnesota–Duluth
Quality Control of Automated Vehicle Classification and Weigh-in-Motion Data
Herbert Southgate, Consultant

Tuesday, June 29 (continued)

33 4 p.m.–5:30 p.m., Constellation B

Emerging Technologies for Traffic Monitoring (Part 3 of 3)
Robert Leore, Transport Canada, presiding

This session will focus on the use of new techniques and technologies for collecting and using traffic data. It examines new ways to process existing detector signals in order to obtain more robust data from those sensors, as well as new ways to test and use the data coming from sensors.

Overview of Vehicle Re-Identification
Benjamin Coifman, Ohio State University
Loop Detectors and the Berkeley Highway Laboratory System
Joe Palen, California Department of Transportation
Develop and Implement Traffic Monitoring Equipment Evaluation Facility
Dan Middleton, Texas Transportation Institute
Using Video Technology for Next Generation Simulation Models
Robert Hranac and Andre Chandra, Cambridge Systematics, Inc.

Wednesday, June 30

7:30 a.m.–8:30 a.m., Commodore Ballroom

Continental Breakfast

7:30 a.m.–noon, Commodore Ballroom

Exhibits

34 8:30 a.m.–10 a.m., Cambria

Intelligent Transportation System (ITS) Traffic Data Quality: Issues and Effective Practices
Robert Benz, Texas Transportation Institute, presiding

This session will explore the data quality issues that can occur with traffic data collected by ITS, including missing data, infrequent equipment calibration, confusing error codes, and inconsistent location referencing. Speakers will describe how they diagnose data quality problems and how they remove obstacles to quality ITS data archives.

Data Quality Issues for ITS Data Archiving
David Wolfson, Maricopa County Department of Transportation
Traffic Data Quality in Central Florida: Working in the Real World
Rick Schuman, Post, Buckley, Schuh & Jernigan, Inc. (PBS&J)
Private-Sector Perspective on Traffic Data Quality
Scott Perley, Mobility Technologies
Automated Techniques for Assisting with Detector Maintenance
Karl Petty, Berkeley Transportation Systems

35 8:30 a.m.–10 a.m., Sovereign

Measures of Travel Reliability and Public Information Dissemination: What Do You Say About Travel Reliability and How Do You Say It?
Karl Wunderlich, Mitretek Systems Inc., presiding

The growing need for roadway users to be on time, combined with increasingly intense and unpredictable urban congestion, has resulted in more traveler stress and more reports of a decline in urban quality of life. Although reliability is a key determiner of roadway system performance, motorists and roadway managers often are unfamiliar with the measures that define and describe it. This session will highlight approaches to define, monitor, and convey measures of travel reliability that make sense and carry weight with decision makers and roadway users.

Federal Highway Administration Congestion Monitoring Update
Dale Thompson, Federal Highway Administration
Making Sense of Nationwide Travel Reliability: Lessons from the Urban Congestion Reporting (UCR) Project
Karl Wunderlich, Mitretek Systems, Inc.
Use of Traffic Message Channel (TMC) Data from Philadelphia to Develop Travel Time Route Reliability Models
Lily Elefteriadou, Pennsylvania State University
The Hurricane Evacuation Analysis and Decision Support Utility Program (HEADS UP): Florida
Robert Collins, Post, Buckley, Schuh & Jernigan, Inc. (PBS&J)

36 8:30 a.m.–noon, Reliance

Collecting and Using Traffic Data: Poster Session (2 of 2)
Ralph Gillmann, Federal Highway Administration, presiding

Presenters will be available from 8:30 a.m. to 10 a.m.

California Traffic Census Program: Wireless Communication
Michael Kerzic, California Department of Transportation
California Traffic Census Program: Automatic Vehicle Classification Installation
Steve Malkson, California Department of Transportation

California Traffic Census Program: Solar Power Telemetry Traffic Monitoring Sites
Ray Vandeweerd, California Department of Transportation
Florida Traffic Information CD
Richard Reel, Florida Department of Transportation
Ohio Department of Transportation Traffic Monitoring Program
David Gardner, Ohio Department of Transportation
Meeting New Challenges within the Texas Department of Taxation
Jim Neidigh, Texas Department of Transportation; Bill Frawley, Texas Transportation Institute; and Jason Crawford, Texas Transportation Institute
New York State Department of Transportation Applications of New Traffic Monitoring Technology
Todd Westhuis, New York State Department of Transportation
Summary of U.S. National and Regional Trends in Truck Loading
David Jones, Federal Highway Administration

10 a.m.–10:30 a.m., Commodore Ballroom

Break

37 10:30 a.m.–noon, Cambria

Air Quality Uses for Traffic Data
David Lively, California Department of Transportation, presiding

This session will include presentations on the use of traffic data in air quality analysis and on the use of weigh-in-motion (WIM) data, archived intelligent transportation system (ITS) data, and on in-vehicle monitors.

The Development and Demonstration of a Real-Time Vehicle Performance and Emissions Monitoring System (VPEMS)
John Polak, Imperial College, London, United Kingdom
Using WIM Data to Study Heavy-Duty Truck Traffic Patterns for Emission Inventory Development
Oliver Gao, University of California–Davis
Relationship Between PM2.5 Concentrations and Traffic Activity
Richard Margiotta, Cambridge Systematics, Inc.

38 10:30 a.m.–noon, Britannia

Long-Term Pavement Performance Program's (LTPP) Push for Research Quality Traffic Data
Barbara Katherine Ostrom, MACTEC Engineering and Consulting, Inc., presiding

The specific pavement studies (SPS) of LTPP are short on traffic data with known quality and sufficient coverage. Since 1999, LTPP has been working on a national effort to collect such information, particularly weigh-in-motion (WIM) data. LTPP has adopted site evaluation procedures that examine pavement smoothness and set standards for precision of classification and loading information. This is a progress report on the national effort, the tools developed, and how LTPP data is being used to improve data quality.

Assessment and Evaluation of SPS WIM Locations
Barbara Katherine Ostrom, MACTEC Engineering and Consulting, Inc.
WIM Site Smoothness: A Criterion for Evaluation and Its Impacts
Gonzalo Rada, MACTEC Engineering and Consulting, Inc.
Upgrading SPS WIM Locations for Data Quality Improvement
Deborah Walker, Federal Highway Administration

39 10:30 a.m.–noon, Sovereign

Resolving Institutional Issues in the Collection and Use of Intelligent Transportation System (ITS) Data
Anita Vandervalk, Cambridge Systematics, Inc., presiding

The collection and use of ITS data involves many technical and institutional hurdles; some of the most challenging are institutional issues related to data integration and the use of data for decision making. This session presents problems and solutions in the collection and use of ITS data for planning and operating ITS systems.

National Perspectives on ITS Archiving
James Pol, Federal Highway Administration
Targeted Solutions to Institutional Barriers in Implementing ITS Data Support Programs
Jack Stickel, Alaska Department of Transportation and Public Facilities
Central Ohio Transit Authority Consolidated Long-Term Database Blueprint
Mark Nawrath, Central Ohio Transit Authority
Institutional Issues Associated with Data Collection to Develop ITS Performance Measures
Anita Vandervalk, Cambridge Systematics, Inc.

10:30 a.m.–11 a.m., Aurora

Exhibitor Presentation: TrafInfo Communications, Inc.
Sudhir Murthy, TrafInfo Communications, Inc., presiding

TrafInfo Communications, Inc., will present its latest wireless product, the Trafmate™6, which allows real-time communication over the Internet. Trafmate6 utilizes the latest digital personal communications service (PCS) technology for fast, reliable, and cost-effective wireless communication with remote traffic monitoring stations. The presentation will describe the features of the Trafmate6, including the various modes of operations and user interface options, as well as methods to enable existing serial communication software to communicate over the Internet.

11 a.m.–11:30 a.m., Aurora

Exhibitor Presentation: InfoTek Associates
Mike Poursartip, InfoTek Associates, presiding

Noon–1:30 p.m., Constellation AB

Lunch

40 Noon–1:30 p.m., Constellation AB

Wednesday Luncheon
Mark Hallenbeck, University of Washington, presiding

Easing Traffic Congestion: It's All in the Numbers
Randell Iwasaki, California Department of Transportation

Relief for motorists stuck daily in traffic jams might partially lie in numbers. Randy Iwasaki of the California Department of Transportation discusses the importance of sophisticated traffic data, collected from the state's highway network, and its use by the state transportation department and its partners in improving the movement of people and goods across the Golden State.

41 1:30 p.m.–3 p.m., Cambria

Traffic Data: Bringing It to the Masses. Getting Your Data Noticed, Used, and Appreciated by the Public and Your Bosses
Harshad Desai, Federal Highway Administration, presiding

Support for data collection programs only occurs if the data collected are actively used. This session explores ways that agencies have marketed their data to potential users. The session also discusses efforts to make data more accessible to agency staff, key and understandable statistics available to the public, and collected data key inputs to decision support systems.

San Diego State of the Commute Report
Alex Estrella, San Diego Association of Governments

SANDAG Transportation Forecast Information Center
Ziyang Ouyang, San Diego Association of Governments

Florida Traffic Data Customer Support
Richard Reel, Florida Department of Transportation

42 1:30 p.m.–3 p.m., Britannia

Data Integration Challenges and Successes in Freight, Intelligent Transportation Systems (ITS), Corridor Studies, and Transportation Management System
Judith Kim Hajek, Texas Department of Transportation, presiding

This session will investigate data integration efforts and challenges in a variety of areas related to transportation. The session will include discussions of (1) the freight data framework, underway in Idaho and on the I-5 Corridor; (2) integrated transportation management systems from Australia to Colorado; (3) the challenges of data integration for the I-95 Corridor Coalition; and (4) the integration of ITS data for monitoring performance measurement.

Integrating Transportation Management Systems from Australia to Colorado
Marc Kratzschmar, Exor Corporation, Ltd.

The Freight Data Framework Concept Regarding Data Integration: The I-5 Corridor and Idaho Department of Transportation
Catherine Lawson, State University of New York–Albany

Multimodal ITS Data Integration and Performance Measurement in Portland, Oregon
Robert Bertini, Portland State University

Data Integration Challenges in the iFlorida Infostructure Model Deployment
Rick Schuman, Post, Buckley, Schuh & Jernigan, Inc. (PBS&J)

3 p.m.–3:30 p.m., Constellation AB Foyer

Break

Wednesday, June 30 (continued)

43 3:30 p.m.–5 p.m., Constellation AB

Future Directions in Data Collection Programs
Mark Hallenbeck, University of Washington, presiding

Data requirements are changing for many highway agencies now dealing with the increasing complexity in the design process (e.g., the *2002 AASHTO Pavement Design Guide*); the need for more detailed traffic volume and performance data, as a result of the increasing emphasis on operations and planning for operations; and the growing need for greater public accountability. This session will be the capstone discussion on how the technologies and data systems presented throughout the conference are likely to impact the data collection community.

Federal Highway Administration Research Program
Barna Juhasz, Federal Highway Administration

Thursday, July 1

7:30 a.m.–10 a.m., Sovereign

NATMEC Planning Committee Meeting
Mark Hallenbeck, University of Washington, presiding