TRB PRELIMINARY PROGRAM

NATMEC

Improving Traffic Data Collection, Analysis, and Use

June 21–24, 2010

Seattle Sheraton Hotel
Seattle, Washington

Organized by
Transportation Research Board

Supported by
Federal Highway Administration
Office of Highway Policy Information

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A Must-Attend Conference for Anyone Interested in Traffic Data

Turner

Whether you collect, manage, analyze, or use traffic data, take advantage of NATMEC 2010 to get timely and relevant information. Exchange information and share ideas in the sessions. See commercial exhibits to learn about the latest in equipment and tools for collecting, managing, and analyzing traffic data. Most of all, use networking and social opportunities throughout the conference, whether you want to meet with industry experts or simply catch up with existing colleagues.

If you are a state or regional traffic data collector, traffic data user, manager of data programs, or vendor, your input will help NATMEC continue to be the premier venue for sharing experiences on effectively monitoring traffic flow, whether for operational decision making, planning, or program management. I look forward to visiting with you throughout the conference!

—Shawn M. Turner
Conference Planning Team Chair
*Texas Transportation Institute*8:30 a.m.–10:00 a.m.

Inaugural Tour de NATMEC

Thursday, June 24, 2:30 p.m.–5:30 p.m.

You are invited to stay an extra afternoon and enjoy the Seattle sights on two wheels! This easy-paced bike tour will take in scenic and often unseen parts of the city and surrounding environs. We are planning to rent bikes in Seattle, so all you need to bring is comfortable pedaling clothing. RSVP to Shawn M. Turner (shawn-turner@tamu.edu) to confirm your attendance and reserve a bike.

PROGRAM SESSIONS

Tuesday, June 22

Opening Session
Shawn M. Turner, Texas Transportation Institute, *presiding*

Traffic Data: Value and Challenges
Paula Hammond, Washington Department of Transportation

Growing National Traffic Data Needs
David R. Winter, Federal Highway Administration

10:30 a.m.–noon
Traffic Monitoring Fundamentals: Back to the Basics!
David W. Gardner, Ohio Department of Transportation, *presiding*

The traffic monitoring community has seen an increased demand in the amount and type of data collected. A number of advances in equipment and software applications have made collecting these data much more efficient; however, we need to ensure continued focus on the basics of traffic monitoring. This session will touch upon subjects that relate to the core functions of traffic monitoring programs, including administration, data collection techniques, reporting, and sensors.

Collecting Manual Traffic Studies by Video
Don R. Crownover, Oregon Department of Transportation
Washington State Permanent Traffic Recorder Site Installation Best Practices
Jim Stack, Washington State Department of Transportation
Managing Changing Core Priorities of Illinois Traffic Monitoring Program
Rob E. Robinson, Illinois Department of Transportation

10:30 a.m.–noon
Congestion Monitoring and Analysis: Tools and Techniques, Part 1
Daniela Bremmer, Washington State Department of Transportation, *presiding*

The use of congestion and performance monitoring is increasing among public agencies in the United States. This session includes several excellent examples of congestion monitoring at the national, state, and regional levels. Several of the presentations in this session were also included in the Workshop on Innovations in Congestion Monitoring, cosponsored by TRB's Performance Measures Committee in Beijing, October 2009.

Analyzing 2008 Travel Times in Central Puget Sound
Katherine Boyd, Washington State Department of Transportation
Using Private Sector Companies' Traffic Data in Regional Mobility Monitoring and Transportation Planning
Wang Zhang, Maricopa Association of Governments

Portal 2.0: Toward Next-Generation Archived Data User Service
Kristin A. Tufte, Portland State University
Congestion Performance Monitoring in Beijing
Huimin Wen, Beijing Transportation Research Center, China

10:30 a.m.–noon
Federal Traffic Data Programs and Activities
Ed Christopher, Federal Highway Administration, *presiding*

Federal programs are constantly changing to meet customer requirements. Knowledgeable program experts will provide you with their perspective on the latest information about federal traffic data programs and activities and the most recent changes.

Traffic Monitoring in National Park Service
Butch Street, National Park Service
FHWA Office of Highway Policy Information Update
Tianjia Tang, Federal Highway Administration
The 2010 Highway Performance Monitoring System
Ralph A. Gillmann, Federal Highway Administration
Motorcycle Highway Travel Monitoring and Operations Demonstration Results and Current Status of Motorcycle Data Collection and Reporting
Harshad R. Desai, D Consulting
HPMS Reassessment—Challenges for Washington State
Ralph A. Gillmann, Federal Highway Administration

2:00 p.m.–3:30 p.m.
Traffic Data Issues and Application Posters Poster Session
Poster Session
Ed Christopher, Federal Highway Administration, *presiding*

A cross-section of expert traffic data collectors, users, and managers presents research, projects, and initiatives; attendees can meet one-on-one with the presenters to discuss questions.

1) **THE FHWA Truck Weight Study (TWS)**
David L. Jones, Federal Highway Administration
2) **Freight Performance Measures Web Tool**
Jeffrey Bradford Short, American Transportation Research Institute
3) **Reidentification of Vehicle Magnetic Signatures**
Karric Kwong, Sensys Networks
4) **Techniques to Visualize and Monitor Performance of Transit Fleets in Congested Urban Areas**
Wei Feng, Portland State University
5) **Counting Motorcycles and Estimating Motorcycle Vehicle Miles Traveled (VMT)**
Herbert Weinblatt, Cambridge Systematics, Inc.
6) **Deformation-Based Vehicle Detection and Weigh-In-Motion Sensors**
Gregory Raymond Miller, University of Washington
7) **High-Resolution Detector Data Collection and Storage for Real-Time Intersection Performance Measurement**
Yao-Jan Wu, University of Washington
8) **A Video-Based System for Collecting Traffic Parameters from Low-Height Cameras**
Stan Birchfield, Clemson University
9) **It's 2010, Do You Know What Your WIM Is Doing?**
James Kramer, Michigan Department of Transportation
10) **Using GPS and Public Sensor Data for Real-Time Traffic**
Andre Gueziec, Triangle Software LLC
11) **Traffic Monitoring Research—The LTPP Experience**
Deborah Walker, Federal Highway Administration
12) **Using Private Sector Traffic Speed Data in TTI's 2010 Urban Mobility Report**
Timothy J. Lomax, Texas Transportation Institute

2:00 p.m.–3:30 p.m.
Congestion Monitoring and Analysis: Tools and Techniques, Part 2
Walter H. Kraft, Eng-Wong Taub and Associates, *presiding*

Demand for highway travel by Americans continues to grow, adding more and more stress to our limited capacity in the form of congestion. This is the second session focusing on several of the latest data innovations to deal with this nationwide congestion phenomenon.

Adding Arterial Data to Freeway ADMS
Karl Petty, Berkeley Transportation Systems
Concurrent Monitoring, Analysis, and Visualization of Freeway and Arterial Performance for Recurring and Nonrecurring Conditions
Robert M. Winick, Motion Maps, LLC
Integrated Data System Structure for Active Traffic Management: Planning and Operation
Xiao-Yun Lu, University of California, Berkeley

2:00 p.m.–3:30 p.m.
Traffic Data at Washington State DOT: Meeting Emerging Needs
Catherine McGhee, Virginia Transportation Research Council, presiding

Sponsored by Traffic Monitoring Conference (NATMEC) Task Force

Traffic data customers exist throughout agencies. Understanding how data are used and what customer requirements for accuracy and temporal and spatial distribution is key to designing a data collection program that provides the most benefit to the largest number of users. Washington State presents several data user perspectives, including future data elements and analysis improvements that could more completely meet the needs of all data users.

Traffic Data Customers: Performance Measurement
Daniela Bremmer, Washington State Department of Transportation
Emerging Customers for Traffic Data at Washington State Department of Transportation
Mark E. Hallenbeck, University of Washington
A State Traffic Data Program Perspective
John Rosen, Washington State Department of Transportation
A Federal Traffic Data Perspective
Steven Jessberger, Federal Highway Administration
Private Traffic Data Services Provider
Peter Keen, Digital Traffic Systems, Inc.

2:00 p.m.–3:30 p.m.
Traffic Monitoring Equipment Basics: Installation and Maintenance
Deborah A. Morgan, Maine Department of Transportation, *presiding*

This is a companion session to Traffic Monitoring Fundamentals and will focus specifically on the basics of traffic monitoring equipment installation and maintenance.

Washington State Short Duration Traffic Count Field Equipment and Procedures
Doug Blake, Washington State Department of Transportation
Permanent Traffic Counter and WIM Sites
Jack Helton, Idaho Transportation Department
Traffic Monitoring Equipment: Challenges, Lessons Learned, and Their Role with the Traffic Enforcement Community (P-NATMEC2010-0067)
Lawrence Whiteside, Michigan Department of Transportation
Developing Specifications for Permanent Site Installation
Howard Helkenn, Alaska Department of Transportation and Public Facilities

4:00 p.m.–5:30 p.m.
Monitoring Pedestrians and Bicyclists: Needs, Methods, and Technologies
Jeannette Montufar, University of Manitoba, Canada, *presiding*

This session provides several perspectives on emerging issues about pedestrian and bicycle monitoring. Despite a growing demand for a better understanding of pedestrian and bicycle traffic, there remain important knowledge gaps about data collection and estimation practices. This session identifies these gaps, outlines efforts to implement bicycle and pedestrian monitoring programs, and describes technologies that can support these efforts.

Knowledge Gaps in Estimating Pedestrian Traffic Volumes
Maryam Moshiri, University of Manitoba Transport Information Group
Counts that Count: Implementing a Bicycle and Pedestrian Documentation Project
Ian Macek, Washington State Department of Transportation
The State of Colorado Bicycle and Pedestrian Project
Elizabeth Stolz, Colorado Department of Transportation
The National Bicycle and Pedestrian Document Project: Responding to the Need for Improved Data on Bicycling and Walking
Jennifer Donlon, Alta Planning + Design
A Computer-Vision System for Automated Pedestrian and Cyclist Data Collection
Yegor Malinovskiy, University of Washington

4:00 p.m.–5:30 p.m.
Integrating Planning and Operations-Based Traffic Data: Collect Once, Use Many Times
Eileen Singleton, Baltimore Metropolitan Council, *presiding*

The presentations in this session will focus on the interoperability of traffic data between traditional travel monitoring and operational (or Intelligent Transportation Systems) data resources and how to use all the traffic data to create visualizations.

Planning and Operations Data Integration: State of the Art Tools
Anita Vandervalk-Ostrander, Cambridge Systematics, Inc.
Effective Ways for Transportation Planning to Develop Working Relationships with Intelligent Transportation Systems Groups
Doug Eberline, Arizona Department of Transportation
Linking Data Mining to Travel Forecasting for Oregon DOT's Hours of Congestion Study
Christopher Maciejewski, DKS Associates, Inc.
Innovative Use of Count Data for Planning and Operational Models
Stephen Perone, PTV America, Inc.

4:00 p.m.–5:30 p.m.
The Mechanistic–Empirical Pavement Design Guide (MEPDG)
Mark P. Gardner, Fugro Consultants, Inc., *presiding*

This session will review the traffic data input files required for the MEPDG software and show how Minnesota has developed a program that extracts data from a comprehensive database and analyzes the data, develops an input file for the MEPDG, and develops factors used for short-duration traffic count expansion. Also, alternative uses (safety, road use, bridge design, and regulatory compliance) of the data collected for the MEPDG will be discussed.

PrepME for WIM Data Processing for MEPDG
Michael M. Moravec, Federal Highway Administration
Data Warehouse Integration of WIM and Vehicle Class Data; and Application Developments of MEPDG, Adjustment Factors, and Reporting
Taek M. Kwon, University of Minnesota, Duluth
Leveraging Truck Traffic Data from Mechanistic–Empirical Pavement Design to Support Other Transportation Engineering Decisions
Jonathan D. Regehr, Montufar and Associates

5:30 p.m.–6:30 p.m.
Highway Performance Monitoring System (HPMS) Listening Session
David Winter, Federal Highway Administration, *presiding*

This is an open session for the States to present their status and challenges on implementing the HPMS Reassessment 2010. If you did not sign up in advance to speak, you may sign up at the registration desk until noon Tuesday. All are welcome.

HPMS Reassessment—Challenges for Washington State
Pat Whittaker, Washington State Department of Transportation

Wednesday, June 23

7:30 a.m.–9:00 a.m.
Exhibitor Advisory Council
Julie A. Miller, Transportation Research Board, *presiding*

8:30 a.m.–10:00 a.m.
Safety Needs for Traffic Data
Jack R. Stickel, Alaska Department of Transportation and Public Facilities, *presiding*

The new safety tools and requirements are hungry for traffic data. This session examines state case studies and what the newly adopted Highway Safety Manual will be expecting. Likewise, advanced safety research projects provide a glimpse of traffic data needs, especially the capability for integrating large traffic, roadway, and crash data sets.

Highway Safety Manual Traffic Data Requirements
John C. Milton, Washington State Department of Transportation
Traffic Data for the Safety Analyst Software at Washington State Department of Transportation
Robert Scott Zeller and Dan Davis, Washington State Department of Transportation
SHRP 2: Integrating Large Traffic Data Sets to Enable Cutting-Edge Safety Research
William A. Hyman, Transportation Research Board
Bicycle–Bus Conflict Area Study
Gregory R. Krykewycz, Delaware Valley Regional Planning Commission

8:30 a.m.–10:00 a.m.
Sharing Data Through Warehouses and Clearinghouses
Andrew P. Nichols, Rahall Transportation Institute, *presiding*

This session will include several examples of states and regions maximizing the value of their data assets by sharing across administrative and jurisdictional boundaries. Presentations will highlight the challenges in creating the infrastructure that facilitates sharing of data as well as the ways in which additional information can be derived through sharing.

Colorado's Statewide Traffic Data Warehouse, Data Sharing, and Role of the Traffic Data Committee in Creating Statewide Traffic Volume and Classification Database
Elizabeth Stolz, Colorado Department of Transportation
Transportation Data Clearinghouse Regional Model
Robert Joseph Benz, Texas Transportation Institute
Data Business Plans: The Road to Enhancing Your Traffic Data Program
Anita Vandervalk-Ostrander, Cambridge Systematics, Inc.
A Framework for a Multimodal Regional Data Archive
Christopher M. Monsere, Portland State University
LTPP Traffic Data—We Have A New Reality
Deborah Walker, Federal Highway Administration

8:30 a.m.–10:00 a.m.
Implementing the MEPDG: A Practitioner's Perspective
Michael M. Moravec, Federal Highway Administration, *presiding*

Implementation of the MEPDG presents challenges for traffic monitoring programs as they generate jurisdiction-specific data and coordinate monitoring programs with the guide's requirements. This session provides a practitioner's perspective on these issues through short presentations followed by an open-mike discussion.

Implementing MEPDG in Wisconsin
Laura L. Fenley, Wisconsin Department of Transportation
Implementing MEPDG in Florida
Wiley Cunagin and Richard Lowell Reel, PBS&J
Traffic Inputs for MEPDG: The North Carolina Experience
Kent L. Taylor, North Carolina Department of Transportation
Implementing MEPDG in Arkansas
Kelvin C. P. Wang, University of Arkansas, Fayetteville

10:30 a.m.–noon
Traffic Data to Address Air Quality and Climate Change
Jack R. Stickel, Alaska Department of Transportation and Public Facilities, *presiding*

Ongoing and new programs on air quality and climate change are resulting in performance measures on VMT and in models hungry for traffic data. This session highlights emerging programs to deal with climate change in one state, with models to help understand and predict impacts and potential new sources of emissions data.

What Are Potential Sources of Traffic Emissions Data?
Mark E. Hallenbeck, University of Washington
Climate Change Initiatives at Washington State Department of Transportation
Katy Taylor, Washington State Department of Transportation
Transportation Data Challenges for Modeling Climate Change Solutions
Mike Hoglund, Portland Metro
Integration of Traffic and Emissions Data
Adam Moore, Portland State University
Traffic Data Collection Programs for PM2.5 Nonattainment Areas
Jack R. Stickel, Alaska Department of Transportation and Public Facilities

10:30 a.m.–noon
Weigh-in-Motion: Equipment, Experiences, and Applications
David L. Jones, Federal Highway Administration, *presiding*

This session will review best practices from several states' points of view and also look at how some of the archived weigh-in-motion (WIM) data are being used.

Best Practices for the Installation of MSI Brass Linguini Piezo WIM Systems
Ken Lakey, Washington State Department of Transportation
Minnesota's WIM System, an Update
Benjamin Timerson, Minnesota Department of Transportation
Performance Measure for Monitoring and Improving WIM Devices
Robert Knox Abercrombie, Oak Ridge National Laboratory
Integration of WIM Data into Archived Data User Service
Karl Petty, Berkeley Transportation Systems
Dual-Purpose Bridge Health Monitoring and WIM System
Anne-Marie H. McDonnell, Connecticut Department of Transportation

10:30 a.m.–noon
Bluetooth-Based Speed and Travel Time Data: Equipment, Evaluations, and Experiences
Nicholas Compin, California Department of Transportation, *presiding*

Mobile Bluetooth-based devices offer the potential for collecting several different types of traffic data, most commonly travel times and origin-destination. This session will highlight several experiences using Bluetooth devices to collect traffic information.

Bluetooth Traffic Monitoring: Technical Attributes and Application Potential
Stanley E. Young, University of Maryland, College Park

Development of Framework for Collecting Traffic Data Using Anonymous Wireless Address Matching
Darryl Puckett, Texas Transportation Institute
Fusion of Bluetooth Data and Existing Data Sources in Archived Data User Services to Determine and Report System Performance
Karl Petty, Berkeley Transportation Systems
Arterial Performance Measures Using Media Access Control (MAC) Readers: Portland Pilot
Shaun Quayle, Kittelson and Associates, Inc.; Peter J .V. Koonce, City of Portland

2:00 p.m.–3:30 p.m.
Demonstrations of Bluetooth Technology and Applications
Ed Christopher, Federal Highway Administration, *presiding*
Poster Session

1) **Portland Bluetooth MAC Reader Permanent Deployment Pilot Project**
   Shaun Quayle, Kittelson and Associates, Inc.
2) **Fusing Bluetooth Data and ITS Data for Performance Measurement**
   Karl Petty, Berkeley Transportation Systems
3) **Field Experiments on Bluetooth-Based Travel Time Data Collection**
   Yinhai Wang, University of Washington
4) **Bluetooth Basics**
   Stanley E. Young, University of Maryland, College Park
5) **Framework for Collecting Traffic Data with Anonymous Wireless Address Matching**
   Darryl Puckett, Texas Transportation Institute
6) **Bluetooth Travel Time Data Collection**
   Kaveh Farokhi Sadabadi, University of Maryland, College Park

2:00 p.m.–3:30 p.m.
Freight Data and Performance Measures
Jonathan D. Regehr, Montufar and Associates, *presiding*

For public agencies, developing freight-specific measures of performance from publicly available data has been a challenge. This session presents ways in which existing traffic monitoring and fleet technologies can be leveraged to generate truck-specific measures of performance.

Developing Corridor-Level Truck Travel Time Estimates and Other Freight Performance Measures from Archived ITS Data
Christopher M. Monsere, Portland State University
Techniques for Mining and Complementing Truck Traffic Data to Analyze Impacts of Congestion
Nikki Wheeler, Portland State University
The Freight PM Pilot Project: How Collection of Additional Truck Counts Furthers Research and (Coupled with GPS) Provides Performance Measurement Information
Dale Tabat, Washington State Department of Transportation
Freight Data for System Performance Measures
Jeffrey Bradford Short, American Transportation Research Institute

2:00 p.m.–3:30 p.m.
Data Quality Needs for Traveler Information
Catherine C. McGhee, Virginia Transportation Research Council, *presiding*

The boundaries between real-time traffic monitoring and planning-based traffic monitoring are becoming blurred as public agencies work toward providing more services and greater efficiency through shared resources. This session will include presentations on data quality issues related to real-time traveler information, with the expectation that when archived these data will be valuable for a variety of planning applications.

Assessing the Quality of Traffic Data
J.D. Margulici, California Center for Innovative Transportation
Statistical Issues Related to Evaluating the Quality of Traveler Information
James Richardson, University of Virginia
Section 1201: Requirements for Traveler Information
Walt During, Federal Highway Administration

4:00 p.m.–5:30 p.m.
Inductance Loop Detectors: Quality Control Methods and Techniques
Kurt Brian Matias, New York State Department of Transportation, *presiding*

Quality data from loop detectors is essential to the traffic monitoring community because inductance loops are one of the most widely used traffic sensors. Various methods and techniques to assure quality loop data will be presented in this session.

Loop Detector Data Quality Monitoring
Kristin A. Tufte, Portland State University
Affordable Loop Detector Simulator (LOOPSIM) for In-Laboratory Traffic Research and Training
Yinhai Wang, University of Washington
Dual Loop Data Correction at Microscopic Level
Xiao-Yun Lu, University of California, Berkeley
Using Advanced Loop Event Data Analyzer to Tune Up Dual-Loop Detectors for Improved Truck and Speed Data
Runze Yu, University of Washington

4:00 p.m.–5:30 p.m.
Getting Creative with Collecting Truck Traffic Data
Christopher M. Monsere, Portland State University, *presiding*

In response to rising demand for truck traffic data, the presentations in this session feature creative methods for collecting and disseminating truck traffic data. Enhancing the usability of existing data sets and integrating new types of truck-related data have the potential to enhance truck traffic knowledge bases.

Online Freight Data Collection Effort in United States
Amir Samimi, University of Illinois, Chicago
Using GPS Data to Estimate Link Speed
Wenjuan Zhao, University of Washington
Estimation of Truck Travel Times and O-D Volumes from Regular WIM Signature Data
Karl Petty, Berkeley Transportation Systems
The Use of Private Sector Truck GPS Data by Public Organizations
Edward McCormack, University of Washington

4:00 p.m.–5:30 p.m.
Traffic Data for Tolling and VMT Fees
Leslie N. Jacobson, Telvent, Inc., *presiding*

This session will review some of the strategic infrastructure-use methods being employed to reduce congestion and will also look at innovative financing methods being used to pay for projects.

A Delicate Balance: Generating Revenue and Managing Demand
Tyler Patterson, Washington State Department of Transportation
Monitoring High Occupancy Toll (HOT) System Performance Using Traffic Data
Cathy Liu, University of Washington
Traffic Data and VMT Pricing
Ginger D. Goodin, Texas Transportation Institute

Thursday, June 24

8:30 a.m.–10:00 a.m.
Use of Public–Private Sector Data: Challenges, Successes, and Opportunities
James Pol, RITA, U.S. Department of Transportation, *presiding*

This session will address the use of private sector transportation data (speed, volume, and incident) by public agencies. When archived, this blended data has the potential for use in numerous operational and planning applications. This session will cover potential uses of the data; show success stories, failures, data-use agreements; and also discuss what states should be wary of when pursuing these types of public–private partnerships.

University of Maryland Perspective
Michael L. Pack, University of Maryland
I-95 Corridor Coalition Perspective
George Schoener, I-95 Corridor Coalition
This is Not a Test … : The I-95 Corridor Coalition's Groundbreaking Vehicle Probe Project and How It Is Helping in Performance Measurement
Rick Schuman, INRIX
Using Private Sector Speed Data in Congestion Monitoring and Performance Reporting
Shawn M. Turner, Texas Transportation Institute

8:30 a.m.–10:00 a.m.
Using Private Sector Speed Data in Congestion Monitoring and Performance Reporting
Dan Middleton, Texas Transportation Institute, *presiding*

This session will describe the development, evaluation, and application of several different emerging and nonintrusive sensor technologies used to collect traffic data.

TPF-5(171)—Evaluation of Nonintrusive Traffic Detection Technologies: Phase III
Erik Minge, SRF Consulting Group, Inc.
Low-Cost, Minimally Intrusive, Light-Based Sensors for Vehicle Detection
Gregory Raymond Miller, University of Washington
Collecting and Monitoring Arterial Travel Times from Wireless Solar-Powered RFID Readers
Jeffrey Wojtowicz, Rensselaer Polytechnic Institute
Data Collection Technology Based on Taxi Floating Car Data
Liyun Zhu, Beijing Transportation Research Center

8:30 a.m.–10:00 a.m.
Applying Freight Data for Project Planning and Selection
Edward D. McCormack, University of Washington, *presiding*

This session will showcase how freight and trucking data are being incorporated into project planning and selection, presented from the data customer's perspective. Tools for data visualization and web-based dissemination allow for these knowledge bases to be more effectively communicated with data users.

How Does Washington State Use Truck Counts to Understand Freight Transportation System, Prioritize Needs, and Plan Projects?
Elizabeth Stratton, Washington State Department of Transportation
Conceptual Framework and Trucking Application to Estimate Impact of Congestion on Freight
David Lynn Schrank, Texas Transportation Institute
Use of Truck Counts for Travel-Demand Model Development at Puget Sound Regional Council
Alon Bassok, Puget Sound Regional Council

10:30 a.m.–noon
Closing Session
Shawn M. Turner, Texas Transportation Institute, *presiding*

Impacts of Transportation Technologies on Traffic Data Programs
Robert L. Bertini, RITA, U.S. Department of Transportation

Looking Ahead: The Federal Highway Administration—Proponent of Traffic Data Community
Anthony Furst, Federal Highway Administration

Themes from NATMEC 2010 and Challenges for Traffic Data Community
Elizabeth Stolz, Colorado Department of Transportation

ASSOCIATED CONFERENCE ACTIVITIES

Monday, June 21, 9:00 a.m.–4:00 p.m.
Considering a National Speed Data Program: A Workshop
With increased emphasis on performance-driven funding and growing public demand for accountability associated with transportation investments, FHWA is evaluating the feasibility of establishing a national speed data collection and reporting program. The proposed program would provide monthly speed trends at the national level to evaluate travel trend and travel conditions. This workshop will examine expected applications of the speed data and potential challenges. It will build on the November 4, 2009, FHWA Speed Data Summit. The workshop is open, with a registration fee. Registration is complimentary to potential cooperating public traffic data agencies. Registration is limited. For more information, contact Tom Palmerlee, TRB, 202-334-2907.

Tuesday, June 22, 1:30 a.m.–4:00 p.m.
Tour of the University of Washington Transportation Lab
Transportation Northwest (TransNow) at the University of Washington is pleased to invite NATMEC attendees to tour their new transportation lab, which includes a new Smart Transportation Applications and Research (STAR) Lab, a freight performance measures and logistics lab, and a sustainable transportation infrastructure lab. Researchers will offer brief presentations on the following projects: DriveNet traffic and freight travel time database, real-time arterial traffic congestion map, ALEDA loop detector error correction device, loop error correction software, video detection of pedestrians, and other ITS projects.

There will be no fee for the tour, which will take place on Tuesday afternoon, June 22, departing from the Conference Hotel at 1:30 p.m. and returning in time for the 4:00 p.m. session. TransNow will provide transportation from the conference hotel to the lab. On-site registration for the tour will be available, but to ensure a space (and allow us to arrange adequate transportation), please send an e-mail to Pete Briglia (briglia@u.washington.edu) if you would like to participate in this tour.

Pooled Fund Meetings

Monday, June 21, 7:00 a.m.–9:00 a.m.
Evaluation of Nonintrusive Traffic Detection Technologies, Phase III (members only)
The Minnesota Department of Transportation (Mn/DOT), with funding and technical guidance from 13 other states, is implementing a continuation of the "Evaluation of Non-Intrusive Technologies for Traffic Detection" (NIT Phase III) pooled fund project. The goals of this phase arre to conduct focused field tests of nonintrusive technologies and examine the traffic data collection capabilities of each sensor, including collection of volume speed and classification data. This meeting is the closeout and final meeting of the pooled fund. The meeting is intended only for stakeholders of the fund. If conference participants want to know the results of the study, they can attend the breakout session scheduled at the conference. For more information on the project, contact Jerry Kotzenmacher (Mn/DOT), jerry.kotzenmacher@dot.state.mn.us, or Steven Jessberger (FHWA) at steven.jessberger@dot.gov.

Tuesday, June 22, 5:30 p.m.–6:30 p.m.
Highway Performance Monitoring System (HPMS) Listening Session

Wednesday, June 23, 6:00 p.m.–9:00 p.m.
Loop- and Length-Based Classification (members only)
The Minnesota Department of Transportation (Mn/DOT) is the lead agency for a pooled fund project to determine the feasibility of a common length-based algorithm for Length-Based Vehicle Classification (LBVC). The pooled fund also seeks to determine the optimum loop characteristics to help DOTs collect accurate vehicle lengths. This is the second meeting of the pooled fund, during which the project scope will be finalized, and is intended only for stakeholders of the fund. If conference participants wish to join the pooled fund or attend the meeting, they should contact Gene Hicks (Mn/DOT), gene.hicks@state.mn.us, or Steven Jessberger (FHWA) at steven.jessberger@dot.gov.

TRB COMMITTEE MEETINGS

All TRB committee meetings are open to all conference attendees.

Monday, June 21

9:00 a.m.–4:00 p.m.
Regional Transportation Systems Management and Operations
This committee is concerned with regional transportation systems management to maximize transportation system performance in metropolitan areas, including coordinated and integrated decision-making approaches to operations and the harmonization of operations with planning, construction, preservation, and maintenance of transportation facilities.

Tuesday, June 22

7:00 a.m.–8:15 a.m.
Urban Transportation Data and Information Systems Committee
With an interest in the design, collection, analysis, and reporting of transportation supply and demand data needed for urban and metropolitan transportation planning efforts, this committee is focusing particularly on development of the data requirements of new and innovative techniques for measuring and monitoring the performance of metropolitan transportation systems as well as on evaluation of changes in demographic and urban travel characteristics. In terms of household and other transportation surveys, the committee is concerned with the analysis, reporting, archiving, and dissemination of results and data products. The committee is also interested in the effective use of census and other federal secondary data sources in metropolitan transportation planning and is concerned with advancements in information systems and information technology for the improved dissemination and sharing of knowledge about metropolitan transportation systems and urban travel behavior.

12:15 p.m.–1:45 p.m.
Highway Traffic Monitoring Committee
This committee is concerned with all aspects of research in the fields of highway traffic monitoring, including detection, counting, classification, and in-motion weighing of highway vehicles. Its scope encompasses the full range of monitoring technology, including traffic sensors (both intrusive and nonintrusive),

installation materials and techniques, signal processing algorithms, analysis and reporting techniques, and comprehensive monitoring programs. The committee is also concerned with highway monitoring standards to ensure the applicability and quality of traffic data in all its applications.

7:00 a.m.–8:15 a.m.
Archived Data User Service Subcommittee

Wednesday, June 23

12:15 p.m.–1:45 p.m.
Statewide Transportation Data and Information Systems Committee
The committee's scope includes research and technology transfer activities pertaining to statewide transportation planning data and information systems for all modes of transportation. A primary concern is the capability of information systems to integrate various transportation-related data sources into a strategic multimodal information database for statewide transportation planning. The committee serves as a forum for discussion of current planning data activities.

Thursday, June 24

7:00 a.m.–8:15 a.m.
Weigh-in-Motion Subcommittee

EXHIBITOR PRESENTATIONS AND DESCRIPTIONS

Booth 304
CA Traffic Ltd
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Forming part of the HS Roads Technology Division, CA Traffic provides a wide range of high-quality traffic monitoring products and software. The Company is dedicated to product development, most recently with the addition of the Black Cat Outstation, unique Evolution ANPR technology, and Journey Time System.

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Chaparral Systems Corporation specializes in the development and implementation of its flagship traffic data processing system, TRADAS. With TRADAS installed in its customer base, Chaparral strives to maintain a significant lead in both software technology and traffic data processing requirements.

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As a leading supplier for traffic data recording equipment, Diamond traffic products has been designing, manufacturing, and selling equipment for the industry for more than 30 years. We are committed to providing value to customers through quality products and services that are proven and reliable.

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ECM Inc.
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ECM Inc. is a worldwide company that manufactures and supplies traffic data collection equipment, specializing in weigh-in-motion systems, sensor technologies, and systems integration that include data collection, stand-alone (virtual) truck weight enforcement, rollover warning, and over-height protection systems. ECM offices, located in the United States, France, and South Korea (plus numerous distributors), work together to provide customers with expert and timely technical support.

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Eco-Counter provides cutting-edge technologies to count pedestrians and cyclists traffic. With experience in more than 30 countries and a research and development service exclusively oriented to nonmotorized traffic, we provide a complete range of sensors to monitor active transportation. The Eco-Visio software allows you to create custom reports in few clicks.

Booth 404
Econolite
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Econolite has been an innovator of transportation management solutions such as advanced traffic controllers (NEMA and ATC/2070); Aries®, icons®, Centracs®, and PYRAMIDS® traffic management systems; Autoscope® video vehicle-detection systems; arterial system masters; vehicle and pedestrian signals; traffic control cabinets; traffic data collection; network security solutions; and a full line of transportation maintenance services.

Booth 408
Federal Signal Technologies
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Federal Signal Technologies Group (NYSE: FSS) is a world leader of traffic data collection technology. Technologies include automated license plate recognition, RFID, and Idris vehicle classification.

Booth 502
FHWA Office of Highway Policy Information
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In addition to developing policy and implementing standards, the FHWA Policy Information Office collects, analyzes, and distributes highway-related information and statistics from federal, state, and local sources as it champions improved quality practices in data programs. Publications are available for your review, providing you with useful information for further research and planning activities.

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The Canoga™ Traffic Sensing System from GTT delivers precise, real-time traffic data, allowing you to monitor individual vehicle speeds and lengths, mean speed, count and occupancy, and speed and length—providing accurate and reliable data for effective traffic management and planning.

Booth 300
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ISS, Inc., is the world leader in nonintrusive traffic detection, with nearly 100,000 units sold worldwide. Brand solutions include Autoscope® video and RTMS® radar sensor. The RTMS G4 is the only advanced radar sensor to combine 12-lane, all-weather detection, Zero-Setback, low wattage, NTCIP, communication options, power management, and a built-in IP video camera.

Booth 403
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IRD is a highway traffic management products and systems technology company operating in the ITS industry. Experts in advanced technologies detect and weigh vehicles at highway speeds; integrate these and other complementary ITS technologies into systems designed to solve traffic problems; and supply custom-designed systems.

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JAMAR Technologies has been serving the transportation industry for more than 35 years. We are a manufacturer and supplier of automatic traffic counter–classifiers, W.I.M equipment, intersection turning movement boards, distance measuring instruments, and Windows software for all our products. Our company is committed to providing all the equipment, accessories, and services our customers require.

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Kistler's core competence is the development, production, and use of sensors for measuring pressure, force, torque, and acceleration. For vehicle weigh in motion, Kistler offers the Lineas sensor with Quartz Technology. The sensor operates on the piezoelectric effect and provides maintenance-free operation for a variety of weigh in motion applications

Booth 201
Measurement Specialties Inc.
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Measurement Specialties manufactures the Roadtrax BL piezoelectric axle sensors. These sensors are used for WIM, counts, and classification as well as for speed and red light camera triggers. The BL has a proven track record, with installations in all 50 states as well as 60 foreign countries.

Booth 208
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MetroCount is the world leader in traffic monitoring equipment and software. With clients in more than 80 countries, MetroCount's very popular 5600 and 5700 Classifiers, our all-new 5805 loop counter, and our sophisticated Traffic Executive software, give traffic and municipal engineers unmatched versatility with invaluable road statistics for all road projects.

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Miovision Technologies is the worldwide leader in video traffic data collection. With hundreds of clients among municipalities, DOTs, engineering firms, and data collection firms, our flagship platform for Automating Turning Movements is the only system available with a 95% accuracy rate and full suite of vehicle classifications and pedestrian options.

Booth 305
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MS2 specializes in the design and hosting of web-based transportation data management systems. Our clients are public-sector traffic

engineers and transportation planners from agencies throughout North America.

Booth 501
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Devices and software are used to count, classify, and weigh vehicles and traffic. Included are automated data recorder devices, weigh-in-motion units, AxleLight sensor, and data recording and processing software.

Booth 400
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PTV America is the North American distributor and developer of the PTV Vision software suite, including VISSIM, VISUM, TRAFFIX, TrafficCountManagement, and TrafficPlatform. We support PTV Vision products through exceptional technical support, training, and highly qualified transportation professionals. PTV America is a multidisciplinary transportation and transit engineering, planning, research, and software development company.

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Traffic Engineering; Data Collection; Installation; and Maintenance of Permanent Traffic Monitoring Systems

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The Traffic Group provides traffic engineering and transportation planning services to both the private and public sectors under three major disciplines: traffic engineering and transportation planning; traffic engineering graphics and design; and traffic data collection. The firm operates one of the largest data collection departments in the country and collects more than 20,000 traffic counts annually, nationwide.

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TimeMark Incorporated
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TimeMark has been a technologically leading manufacturer of portable traffic data collection devices since 1992. The NT series counters have USB download, GPS interface, and air switch strength features. The VIAS software completes the processing with an unmatched vehicle algorithm and multiple output options.

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Transmetric Traffic Server 5 is the latest release of the world's most comprehensive web-based traffic data management platform. This enterprise-level system provides comprehensive business solutions for managing permanent devices, counter scheduling, WIM systems, cameras, GIS, and much more, attracting large agency users such as Texas DOT and many others.

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