AGENDA

MONDAY

Symphony Foyer
Registration 1:00 – 5:00 PM
Symphony 4, 5, 6, & 7 Welcome Reception 5:00 – 8:00 PM

TUESDAY

Symphony Foyer
Registration 7:00 AM – 5:00 PM
Symphony 4, 5, 6, & 7 Continental Breakfast 7:00 – 9:00 AM

Symphony 2&3 General Session 8:45 – 10:00 AM
Moderator: M.R. Poole, NC DOT
Norris Tolson, North Carolina Secretary of Transportation
Nicholas Graf, FHWA, North Carolina Division Administrator
Jane Patterson, Office of the Governor, Senior Advisor – Science & Technology
North Carolina & the Information Highway

Symphony 4, 5, 6, & 7 Break 10:00 – 10:30 AM

Symphony 2&3 General Session 10:30 – 11:30 AM
Moderator: M.R. Poole, NC DOT
Gary Maring, FHWA, Office of Policy
Highway Information Management
William Harbour, Transport Canada
Canadian Roadside Survey
Charles Brown, NC DOT
Use of GPS for Navigation in North Carolina

Mecklenburg Ballroom Luncheon 11:30 AM – 1:30 PM
Tony Kane, Executive Director, Federal Highway Administration
Keynote Address

Concurrent Sessions 1:30 – 3:00 PM

Carolina C Session 1A: Truck Concerns
Moderator: Pat Strong, NCDOT
Fred Hanscom, Transportation Research Corp.
Developing Measures of Effectiveness for Truck Weight Enforcement Activities
James March, FHWA
The Highway Cost Allocation Study and the Truck Size and Weight Study
John Kinateder, Battelle
Approach to Data Collection for Evaluating Safety Benefits of CVISN

Symphony 1 Session 1B: Traffic Data Screening Mechanisms
Moderator: Mike Shamma, NYSDOT
Mark Flinner, Minnesota DOT
Traffic Data Editing Pooled-Fund Project
Henry Horsey, Intelligent Decision Technologies

NATMEC ’98 Agenda May 11-15, 1998
The ATR Expert System
TUESDAY (continued)

Symphony 2&3  
Session 1C: GPS Applications  
Moderator: Elaine Murakami, FHWA  
Dave Wagner, Battelle  
Truck Activity Survey  
David Roden, TransCore  
Travel Speed Studies  
Randy Guensler & Jean Wolf, Georgia Tech  
Travel Behavior and Air Quality  
Elaine Murakami, FHWA  
GIS Case Studies in Transportation Planning

Symphony 4, 5, 6, & 7  Break  3:00 – 3:30 PM

Concurrent Sessions  3:30 – 5:00 PM

Carolina C  
Session 2A: Weigh-in-Motion Issues  
Moderator: William Tansil, Michigan DOT  
Anne-Marie McDonnell, Conn. DOT  
Installation and Evaluation of Weigh-in-Motion Utilizing Quartz-Piezo Sensor Technology  
Richard Rogers, Texas DOT  
A State's Experience with ASTM E1318 for Acceptance Testing & Calibration of WIM Systems  
Wiley D. Cunagin, University of North Texas  
Implementable Calibration Procedures for Weigh-in-Motion Systems  
Robert Whitford, Purdue University  
Alaska's Proposed Plan for Weigh-in-Motion

Symphony 1  
Session 2B: VMT Estimation Methods: Sharing Lessons Learned  
Moderator: Pat Hu, Oak Ridge National Laboratory  
Rob Robinson, Illinois DOT  
A State's Perspective: Illinois  
Harshad Desai, Florida DOT  
A State's Perspective: Florida  
Mark Flinner, Minnesota DOT  
A State's Perspective: Minnesota  
Panel Discussion  
Ed Christopher, Chicago Area Transportation Study  
Tony Esteve, FHWA

Symphony 2&3  
Session 2C: Travel Time and Speed Data Collection and Applications  
Moderator: Shawn Turner, Texas Transportation Institute  
Shawn Turner, Texas Transportation Institute  
Overview of the Travel Time Data Collection Handbook  
Michael Kimbrel, Hampton Roads Planning District Commission  
Regional Travel Time Data Collection for the Hampton Roads CMS  
Michael DuRoss, Delaware DOT  
Application of GPS for Statewide Travel Time Data Collection  
Rick Dowling, Dowling Associates
Obtaining Freeway Densities, Speeds, and Volumes from Aerial Photography
WEDNESDAY

Symphony 4, 5, 6, & 7  Continental Breakfast  7:00 – 9:00 AM

Symphony 4, 5, 6, & 7  Field Day Overview  8:00 – 9:00 AM
Field Demonstrations  9:00 AM – 1:30 PM

Symphony 4, 5, 6, & 7  Lunch  11:30 AM – 1:30 PM

Executive Boardroom  Software Demonstrations  1:00 – 2:00 PM
Mark Hallenbeck, TRAC
Freeway Performance Evaluation Using ITS Data
Ralph Gillmann, FHWA
Vehicle Travel Information System (VTRIS)

Mini-Courses  2:00 – 3:30 PM

Symphony 1  Session 3A: Introduction to GIS for Transportation (Part 1)
Ben Williams, FHWA and Simon Lewis, GIS/Trans

Symphony 2  Session 3B: An Overview of GPS (Part 1)
Gary Thompson, NC Geodetic Survey

Symphony 3  Session 3C: National ITS Architecture
Bob Glass, Jet Propulsion Lab

Mini-Courses  3:30 – 5:00 PM

Symphony 1  Session 4A: Introduction to GIS for Transportation (Part 2)
Ben Williams, FHWA and Simon Lewis, GIS/Trans

Symphony 2  Session 4B: An Overview of GPS (Part 2)
Gary Thompson, NC Geodetic Survey

Symphony 3  Session 4C: The NTCIP Standard
Bob Deroce, Peek-Transit and Rick Stolowski, Peek-Traffic
**THURSDAY**

Symphony 4, 5, 6, & 7  Continental Breakfast  7:00 – 8:45 AM

**Concurrent Sessions**  8:30 – 10:00 AM

**Symphony 1**  
**Session 5A:** State / Provincial Traffic Data Systems  
*Moderator: David White, NCDOT*  
Marina Melchiorre et al, University of Manitoba  
*Manitoba Highway Traffic Information System Development*  
Allan Heckman, Missouri DOT  
*The Missouri Transportation Management System*  
Cliff Braam, NC DOT  
*North Carolina's Highway Safety Information Management System (HSIMS) Project*  
Tom Parker, NC DOT, and Ed Sirgany, City of Durham  
*The Durham Computerized Signal System*

**Symphony 2**  
**Session 5B:** Travel Monitoring System / Traffic Monitoring Guide  
*Moderator: Tony Esteve, FHWA*  
Mark Hallenbeck, University of Washington  
*Traffic Monitoring Guide Update Research*  
Tim Thex, Oregon DOT  
*Oregon TMS Coordination with Lower Jurisdictions*  
Fred Orloski, FHWA, Region 1  
*Northeast Data Partnering*  
Pat Hu, Oak Ridge National Lab.  
*Northeast Vehicle Classification and Weigh-in-Motion Research Findings*

**Symphony 3**  
**Session 5C:** New Technology to Collect Freight Data  
*Moderator: Russ Capelle, Bureau of Transportation Statistics*  
Kurt Heidtman, Battelle  
*New Technology for Truck Data Collection and Analysis*  
Marsha Anderson, StreetSmarts  
*Hand-held Computers in Freight Surveys*  
Jennifer Walton, Kentucky Transportation Cabinet  
*Data Collection Through ITS/CVO Initiatives*

**Symphony 4, 5, 6, & 7**  Break  10:00 – 10:30 AM

**Concurrent Sessions**  10:30 – 12:00 Noon

**Symphony 1**  
**Session 6A:** Truck Weight Data  
*Moderator: Pat Strong, NCDOT*  
David Jones, FHWA  
*An Overview of the Truck Weight Study*  
Rick Reel, Florida DOT  
*Traffic Survey Processing Software*  
Robert Whitford, Purdue University  
*A Strategy for Handling the Statistics of Truck Weight Data in Alaska*  
Herbert Southgate, Consultant  
*Interpretation of Computer Analyses of Traffic Data Using FHWA's VTRIS Computer Program*
Symphony 2  
**Session 6B:** ITS as a Data Source  
*Moderator: Bill McCall, Iowa State University*
John Hamrick, Idaho Transportation Dept. (Retired)  
*Idaho Transportation Department Case Study*
N. Robert Bostrom, Kentucky Transportation Cabinet  
*Kentucky Transportation Cabinet Case Study*
Mark Hallenbeck, University of Washington  
*Washington State DOT Case Study*  

Symphony 3  
**Session 6C:** GIS for Transportation  
*Moderator: Wende O’Neill, Bureau of Transportation Statistics*
Steve Gordon, Oak Ridge National Laboratory  
*The Location Referencing Message Specification and the Public Section Linear Datum*
Paula Okunieff, Cambridge Systematics  
*An Overview of TCIP Standards for Spatial Representation of Objects*
Steve Laffey, Chicago Area Transportation Study  
*(Title to be announced)*
Steve Perone, Metro Portland  
*Integrating Disparate Transportation Systems with GIS - Experiences at Metro, Portland OR*

Carolina A, B, & C  
**Luncheon**  
1 Noon – 2:00 PM  
Joseph I. Peters, ITS Joint Program Office, USDOT  
*Keynote Address*

**Concurrent Sessions**  
2:00 – 3:30 PM  

Symphony 1  
**Session 7A:** States' Successful Practices WIM Handbook  
*Moderator: Bill McCall, Iowa State University*
Panel Discussion  
Mark E. Hallenbeck, University of Washington  
Glenda Fuller, Idaho Transportation Dept.  
Andrew Pratt, International Road Dynamics, Inc.  
Ronald White, Electronic Control Measurement, Inc.

Symphony 2  
**Session 7B:** The Uses of ITS Data for Transportation Planning in Metropolitan Areas  
*Moderator: Marsha Anderson, Street Smarts*
Allan DeBlasio, Volpe National Transportation Center  
*Mainstreaming ITS into the Transportation Planning Process*
Andy Meese, Metro Washington COG  
*Inside View of ITS within an MPO*
Joseph Mergel, Volpe National Transportation Center  
*The Capacity of ITS to Provide System Performance Data*
Shawn Turner, Texas Transportation Institute  
*ITS Data Management and Application*
Ed Christopher, Chicago Area Transportation Study  
*Using ITS Data in the Transportation Planning Context*
THURSDAY (continued)

Symphony 3

**Session 7C**: Non-Intrusive Detection Technology  
* Moderator: William Grush, FHWA  
* Erik Minge, SRF Consulting  
  - What Are Non-Intrusive Detection Technologies?  
* Charles Harlow, Louisiana State University  
  - Vehicle Identification and Classification System with Range Sensors  
* James Kranig, Minnesota DOT  
  - Evaluation of Non-Intrusive Detection Technologies for Traffic Detection and Data Collection

Symphony 4, 5, 6, & 7  **Break**  
3:30 – 4:00 PM

**Concurrent Sessions**  
4:00 – 5:30 PM

Symphony 1

**Session 8A**: Lessons Learned from the LTPP Project  
* Moderator: Barbara Ostrom, EBA Engineering  
* Barbara Ostrom, EBA Engineering  
  - LTPP Introduction and Overview  
* Randy Plett, ITX-Stanley  
  - Revisions in LTPP Traffic Data Sampling  
* Mark Gardner, Brent Rauhut Engineering  
  - Calibration Needs for LTPP Traffic Data  
* Richard Rogers, TX DOT and Anne-Marie McDonald, Connecticut DOT  
  - State WIM Calibration Experiences

Symphony 2

**Session 8B**: Emerging Issues: ITS as a Data Source  
* Moderator: Rob Puentes, ITS America  
* Rich Margiotta, SAIC  
  - Archived Data User Service for Intelligent Transportation Systems  
* Robert M. Winick, Consultant  
  - Using ITS-Derived Data for Transportation Planning, Programming, and Operations  
* Shawn M. Turner, Texas Transportation Institute  
  - Development of an ITS Data Management System  
* James A. Bunch, Donald Roberts, Karl Wunderlich, Mitretek Systems  
  - Development of Representative Day Scenarios to Capture the Impacts of Variation in Conditions in Transportation and ITS Planning

Symphony 3

**Session 8C**: Data Collection Methodology  
* Moderator: Terry Hopkins, NC DOT  
* Kurt Heidtman, Battelle  
  - Improved Vehicle Occupancy Data Collection Methods  
* Kurt Heidtman, Battelle  
  - Multimodal Measures of Mobility  
* Mark McCord, Ohio State University  
  - Incorporating Satellite Imagery in Traffic Monitoring Programs

**Mecklenburg Ballroom  Dinner**  
7:00 – 10:00 PM

NATMEC ’98 Agenda  May 11-15, 1998
**FRIDAY**

Symphony 4, 5, 6, & 7  Continental Breakfast

7:00 – 9:00 AM

### Concurrent Sessions

**9:00 – 10:30 AM**

**Symphony 1**

**Session 9A:** Fiber Optics  
Moderator: Dick Livingston, FHWA  
Jeff Muhs, Oak Ridge National Lab.  
A New WIM Demo Project  
Paul Cosentino, Florida Institute of Technology  
Using MicroBend Fiber Optic Technology for Traffic Classification and Weigh-in-Motion  
Sandee Vohra, Naval Research Laboratory  
Application of Bragg Grating Fiber Optics to Truck Weight Measurement

**Symphony 2**

**Session 9B:** Technology and Applications  
Moderator: David White, NCDOT  
Charles Tweedy, Orincon Corporation  
An Advanced Preformed Inductive Loop Sensor  
Wiley Cunagin, University of North Texas  
Testing Axle Sensors for Toll Facility Applications  
John Klemunes, FHWA  
Accuracy of Traffic Load Monitoring and Projections Pooled-Fund Study  
Ralph Gillmann, FHWA  
National Vehicle Detector Test Center Pooled Fund Study  
Jim Elliott, Los Alamos National Laboratory  
Static Weight Variations of Archived Data and WIM

**Symphony 3**

**Session 9C:** Integrated Transportation Information System – The Way of the Future  
Moderator: Ben Williams, FHWA  
Simon Lewis, GIS / Trans  
Integrated Transportation Information System – An Overview  
Anthony Pietropola, Penn DOT (retired)  
An Approach for the Developing of a GIS Strategic Plan for the 21st Century  
Tom Eldrige, TN DOT  
Tennessee Roadway Information Management System (TRIMS)  
Joe Bryant, Reebie Associates  
Visual Freight Data Base

**Symphony 2 & 3**  
**General Session**  
11:00 AM – Noon  
Moderator: M. R. Poole, NC DOT  
Ralph Gillmann, FHWA  
European Activities on WIM: COST 323 and WAVE  
Ralph Gillmann, FHWA  
Discussion of Travel Monitoring Research Needs  
NC DOT  
Prizes and Wrap-up