

Draft – NATMEC 2006 Preliminary Session List

Equipment

- 01 (S006) **Technologies for Communicating with your Data Collection Systems**. The need to obtain traffic data more rapidly and efficiently is on the rise. In some cases, customers are requesting data in real time. Communication technologies play a key role in allowing easy access to traffic data. This session will discuss the available communication technologies being used by data collection practitioners. This session will be especially useful for traffic data program managers, traffic monitoring technicians and supervisors.
- 02 (S008) **"How-To 101" - Equipment & Sensors**. Recently there has been a large turnover in traffic monitoring personnel. Many of the states have lost vast stores of knowledge as people have retired or moved on to other positions. Presenters in this session will share the basics and some best practices on day-to-day field operations as well as installation and maintenance of equipment and sensors. This information will be especially useful to traffic monitoring technicians and supervisors.
- 03 (S017) **Get Out of the Road - Application of Non-Intrusive Sensor Technologies for Traffic Monitoring**. This session is an overview that focuses on the successful development, testing and fielding of non-intrusive sensor technologies for use in traffic monitoring data collection activities. Presenters will discuss their experiences integrating these devices into their programs as a safe and cost-effective alternative to traditional in-pavement sensors and pneumatic tube-based methods to obtain traffic data.

Data Management

- 04 (S027) **Tools for Data Management and Distribution (Needs)**. Agencies are faced with the daunting task of sharing data they collect with a host of potential users, including but not limited to legislators, media, universities, and internal clients. Given the number of monitored sites, and resulting data volume, coupled with the variety of data requests, responding to these requests can be a labor intensive requirement. The purpose of this session is to identify NEEDS for tools to effectively and efficiently facilitate the dissemination of monitored traffic data, and the information derived from it. Audience: Traffic Data Program Manager; Local Government Public Works Manager; Operation Data Specialist
- 05 (S028) **Tools for Data Management and Distribution**. Agencies collect a huge volume of speed, count, classification, and weigh-in-motion data from a variety of sources. Some are developing in-house tools to manage this data, while others are seeking vendor sources. All are trying to find tools that will assist in this effort, to make the best use of available staff resources. This session provides an opportunity for discussion of the attributes and limitations of tools, primarily software utilized in the management, Quality Control/Quality Assurance, and distribution of monitored traffic data. Audience: Operation Data Specialist; Traffic Data Program Manager; Local Government Public Works Manager; Researcher.
- 06 (S029) **Monitored Traffic Data for Mechanistic Pavement Design**. The new Mechanistic-Empirical (M-E) Pavement Design process developed under NCHRP Project 1-37A is out for evaluation. Many agencies are investigating the impacts of this new design procedure on their operations. As agencies begin implementation planning, questions surface as to the amount of data required, and how best to use it in the M-E process. This session provides a forum for discussion of perceived issues and impacts. The specific requirements of the M-E design process may also be discussed. Audience: Traffic Data Program Manager; Researcher; Operation Data Specialist

- 07 (S015) **Weigh In Motion Data Issues**. This session will address some of the issues surrounding the collection and analyzing of WIM data. Sessions will cover best practices for analyzing and reporting WIM data and performing system diagnostics, in addition to investigating web-based connections to allow faster access to WIM data. This session will be of interest primarily to traffic data program managers.
- 08 (S024) **Best Practices and Common Pitfalls in Acquiring Software for Traffic Data Programs**. You probably have a few examples of failed technology acquisition projects of your own experiences ranging from interminable delays, unclear expectations, cost overruns, and to the extreme -- litigation. Considering that over 70% of IT projects are late, over-budget, or fail, this session's focus on best practices and common pitfalls in the acquisition and implementation of software applications is critical. Practical guidance will be provided that attendees can immediately apply to their programs. The experience and expertise of practitioners in the field will provide the insight for professionals who are trying to enhance the effectiveness of their software acquisition methods and techniques.

Guidelines and Quality

- 09 (S013) **Update of AASHTO Guidelines for Traffic Data Programs - Workshop**. The AASHTO Guidelines for Traffic Data Programs was published in 1992. Since that time there have been significant changes in technology and tools available for collecting, managing and reporting traffic data. The Guidelines are being updated to reflect new methodologies and requirements for traffic data programs. This workshop will be an opportunity to review recommended revisions to the Guidelines and to incorporate practitioner feedback.
- 10 (S010) **Operations Data Quality: What Works?**. What is the quality of data from transportation operations and ITS? What quality assurance measures enable the use of operations data for multiple purposes? What quality control methods can improve data from operations? How can data partnerships enable better cooperation and coordination between operations and traffic data collection for planning?
- 11 (S011) **Traffic Data Quality: What's New?**. Traffic monitoring data quality: what does it mean, how is it measured, and how can customer needs be met? What are new and emerging methods for assuring quality data from traffic detectors, automatic vehicle classifiers, and WIM? What technological and institutional challenges and solutions are there?
- 12 (S016) **"What kind of truck is that?" AKA Vehicle Classification Surveys**. This session will examine some of the fundamental issues facing all states collecting vehicle classification data, such as Scheme "F", data quality, length-based schemes, and non-intrusive surveys. Questions such as: "Why are we collecting this data?", "What do my customers want?", "What tools can be used to collect this data?", "Why won't my piezos stay in the road?", "Is a motor home a car or a truck?", and "Is the TMG recommendation to factor class data for real?" will be discussed, and possibly answered. This session will be of primary interest to traffic data program managers, state or metro data specialists, local government public works managers, and researchers.
- 13 (S025) **Traffic Data Research**. Traffic data collection seems like a fairly simple proposition to the uninitiated. Unfortunately, if you're responsible for collecting the data, you find it has its own set of problems. To try to get a handle on these problems, the data manager turns to the researcher. Sometimes the research is conducted with in-house staff; sometimes through a university; sometimes by hiring a consultant; sometimes through a national cooperative effort. With this session, we are hoping to publicize the traffic data research currently being conducted, explore different methods and sources of funding, examine the principles of sound research studies, determine skill sets necessary to conduct a valid research project, and try to determine the length of time required to

conduct a research study and publish the results. This session should be of interest to traffic data program managers and researchers.

New Data Sources and Uses

- 14 (S004) **Acquiring ITS Data in Concert with Your Traffic Data Program.** Data acquired from Intelligent Transportation System (ITS) devices has captured the interest of the traffic data managers for quite some time. The possibility of using non obtrusive, automatic and virtually free data collection devices sounds like utopia for a data program manager. So why isn't everyone doing it, or are they? What do you need to know about how to use this potential data resource? In this session attendees will leave with a positive understanding of several "how to" approaches for incorporating ITS data into their existing traffic data programs. This session will be of interest to Traffic Data Program managers, Stand and MPO Data Specialists as well as Local Government Public Works Managers
- 15 (S014) **Who are the Customers for Data Collected in Operations.** There are many customers for data collected by operators in addition to the operations staffs themselves. There is a need for the spectrum of customers to help define and refine their needs and requirements for this type of data so that the operations activities can be more responsive.
- 16 (S021) **Using Traffic Data to Support Traveler Information Programs.** Travel time reliability is becoming an increasingly important issue throughout the country. Travelers want better information on how weather, incidents, construction schedules and congestion impact their travel plans. This session will explore best practices in using traffic data to develop effective traveler information programs for sharing system performance information with the public. This session will be primarily of interest to traffic data program managers and operations data specialists.
- 17 (S005) **Emerging "New" Data Sources for Practical Use.** Innovations and "new" data sources can come from many directions and disciplines. For example the RAdio Detection And Ranging technology (the current day radar speed gun), was developed just prior to World War II as a method to detect and locate hostile aircraft at long distances. Within the traffic data world low flight aerial photography, cell phone technology, in vehicle equipment, on the ground devices and even satellites are adding to the current day innovations. This session will focus on bringing the latest developing technologies "down to earth" for the data community. What is next on the horizon? And more importantly what is moving into practice? Conferees who attend this session will walk away with a richer understanding and broader scope of data sources available to them. This session will be of interest to Traffic Data Program Managers, State and Metro Data Specialists, researchers, Local Public Works Managers and Operation Data Specialists.
- 18 (S012) **Collect it Once, Use it Many Times: A Roundtable Discussion.** "Collect once, use repeatedly" has been a long-standing goal of transportation planners and engineers for some time. This session will bring together industry experts responsible for collecting and using transportation data to discuss how to achieve this goal. We will discuss how new technologies have brought us closer to reaching it and also what still needs to be accomplished. The session appeals to traffic data program managers, state and metropolitan data specialists and operations specialists.
- 19 (S026) **Effective Visualization Techniques for Sharing and Reporting Traffic Data.** This session would focus on new data visualization, GIS, and web tools available that help us better communicate our data. It will look at tools that allow users to create their own data files and maps from data bases. This session will also include other ways to effectively research and display data using web based or other tools. Primary audiences for the session include traffic data program managers, state or metro data specialists, researchers and others involved in sharing and reporting traffic data results and trends.

- 20 (S018) **Expanding Uses of WIM Data.** This session will explore how transportation agencies are expanding the use of weigh-in-motion (WIM) data for enforcement, freight planning, safety analysis and other activities. The session will include discussion of key coordination, data integration and data stewardship issues and challenges associated with expanding the utility of WIM data. This session will be of interest to traffic data program managers; researchers; and other state, metropolitan, and local data managers.
- 21 (S019) **Enriching Our Knowledge of Freight -- New Data Sources and Uses.** This session will present several case examples of how new strategies are being deployed to use passive data sets for enriching the information available to describe and analyze truck activity patterns. This session should be of interest to traffic and other data analysts and researchers who are involved and interested in learning more about how others are accessing data on truck and freight activities.

The Changing Environment for Traffic Data Programs

- 22 (S001) **Data Needs for Reauthorization.** While Congress and the Administration debated, discussed and developed the transportation reauthorization bill many in the transportation data community kept a watchful eye on the data implications of the new legislation. The results of this effort culminated in two national conferences where the data aspects of the legislation were discussed; one in November of 2003 and another in December 2005. The intent of the conferences were to jump start those responsible for overseeing the implementation of the legislation while assuring that the relevant data issues were not overlooked. In this session the results of the two data needs conferences will be discussed while focusing on those data issues of most relevance to the NATMEC community. This session should be of interest to Traffic Data Program Managers, State and Metro Data Specialists, Local Government Public Works Managers and Operation Data Specialists.
- 23 (S009) **Performance Measures at Different Levels of Government.** Often, performance measures are addressed in a "one-size-fits-all" approach. In this session, state, regional and local leaders in the collection of data supporting performance measurement will cover how they collect data, what they use it for, and how they present it to decision-makers. This session is geared towards all audiences invited to NATMEC including traffic data program managers, local government public works managers, state and metropolitan data specialist and researchers.
- 24 (S007) **Meeting Data Demands with Available Resources.** Local and State Traffic Monitoring Programs are continuously challenged to provide quality data to support HPMS, safety analysis, congestion monitoring, goods movement analysis and many more transportation needs. With limited resources and at times budget cuts, "How are Local and State Transportation agencies meeting these data collection requirements? This session will consist of presentations and discussion on how to best meet staffing needs, establishing local-state partnerships that could possibly maximize federal resources, best practices for implementing ITS data into a traditional program. This session will be of interest to Traffic Data Program Managers, State and Local Government Public Works Managers.
- 25 (S030) **The Impact of Warranties on Monitored Traffic Data Requirements.** Many agencies are moving towards larger design-build projects, usually including performance warranties. These warranties typically require a project to reach a certain minimum loading for satisfactory performance, with substantial penalties for premature failure. This session is intended to discuss learning experiences in the application of these warranties, as they pertain to the collection of loading information. Audience: Traffic Data Program Manager; Researcher; Operation Data Specialist.
- 26 (S003) **Outsource This! A Look at the Contractual Side of Outsourcing.** Within the traffic data community the debate over outsourcing has reached a slow

simmer even though the industry is replete with examples of full to partial outsourcing of services related to Operations, ITS and even HPMS. Should we outsource or not? Those close to the issue have vastly different viewpoints and philosophies. Embedded in the debate over outsourcing is the central notion of what do all the various contractual data agreements that are in place look like? What are the results of different approaches? How is data ownership approached? Are there any sleeping concerns? These issues are of the utmost concern for public agencies with operation, planning and programming responsibilities. Come to this session as we delve into the contractual side of outsourcing your data program. This session will be of interest to Traffic Data Program Managers, State and MPO Data Specialists, Researchers, Local Government Public Works Managers and Operation Data Specialists.

- 27 (S020) **Communicating and Sharing Traffic Data with the Media**. This panel discussion will include communications experts and television and newspaper reporters who will share their experiences, tips and suggestions for effectively communicating and sharing traffic data with the media. This session will be of interest to traffic data program managers, state, metro and operations data specialists, researchers and local government public works managers.
- 28 **031 University-DOT Partnerships: Making It Work**. In recent years, a number of state DOT's have partnered with their state universities to create archives of traffic and event data collected in transportation operations activities (these have often been referred to as ITS data archives). Ideally, the partnership benefits DOT's by providing them access to state-of-the-art information technology and innovative ideas for a reasonable investment; and benefits universities by providing a wealth of data and challenging research opportunities. However, there have also been cases where the "partnership" has simply become a data transfer – with little-to-no interaction and cooperation between the organizations. The purpose of this session is to explore what it takes to make university-DOT data partnerships work for both parties. The session is ideal for data program managers and university researchers to learn key success factors for building working relationships.
- 29 (S002) **Looking Ahead: Challenges and Opportunities for Traffic Data Programs in 2011**. Learning Objectives: 1) Stimulate thought and discussion on the future of travel monitoring programs, 2) Share success stories of how others are preparing for the future, 3) Identify actions and research that can help transportation agencies prepare for the future. This session will explore the political, institutional and policy changes that have potential to impact travel monitoring programs, products and services over the next five years. It will specifically focus on anticipated changes in traffic needs requirements, organizational arrangements, and resource opportunities and constraints that influence the delivery of quality traffic data products and services. It should be of interest to traffic data program managers, state, metro area and operations data specialists, researchers and managers of local public works programs.
- 30 (S032) **"Thinking Big Picture" in Data Gathering and Use**. In an era of significant fiscal constraints data collection efforts that support multiple uses and users are easier to justify and defend. However, creating a data system that effectively supports the needs of multiple users is difficult because of administrative as well as functional constraints. Money and staff resources are needed to collect data, quality assure the data, store and summarize the data, topics covered elsewhere in this conference. Just as important is the need to inform potential users about the existence of the data and provide easy ways for those users to obtain and integrate data sets so that existing data sources can be used in new ways. This session provides examples of how different agencies are approaching the challenges of creating and operating data systems that support multiple uses and users.