



September 2004

President's Message

Howdy once again! What an exciting year we have had so far! Much has been accomplished and the year is just $\frac{3}{4}$ done – and more is one the way.

First and foremost, I want to say “Congratulations” and “Thank you” to all those who worked so hard to make the ITS America Annual Meeting in San Antonio last April a huge success. The meeting was very well attended – one of the best in ITS America’s history. Texas and the Texas section of ITSA were well represented. The folks in San Antonio really know how to make everyone feel welcome. All those who served on the local arrangement committee and volunteers did an excellent job. Thanks for all your help. I also wanted to pass along my personal, and ITS Texas’ sincere appreciation to Andy Ballard of the Texas Transportation Institute; Laura Lopez, Brian Fariello, and Pat Irwin of the San Antonio District of the Texas Department of Transportation; Gloria Boysen of the VIA Metropolitan Transit Authority of San Antonio; Ken Appedole and Kent Hickingbottom of the City of San Antonio; and Steve Dellenback and Sterling Kinkler of the Southwest Research Institute for all the work they did behind the scenes preparing for the conference.

The Board is completing its planning of the ITS Texas Annual Meeting. This year’s meeting will be held at the Doral Tesoro Hotel and Golf Club, by the Texas Motor Speedway, in Fort Worth, Texas, November 17-19. A communications workshop is planned for the afternoon of Wednesday, November 17. We are developing an exciting slate of speakers and presenters as part of the main program and we are working to expand our tradeshow so that more vendors will be able to display their products. We will also be holding our Technology Forum on the afternoon of Thursday, November 18, where vendors will be able to make short 3-to 5-minute presentations about their products and services. Please plan on coming to the meeting and learning about what is new in terms of ITS technologies and projects in the State of Texas, networking with your peers, and renewing old acquaintances and building new friendships and relationships. Hope to see you there.

Kevin Balke, Ph.D., P.E.
ITS Texas President, 2004

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Lane Departure Warning System Receives Praise from Commercial Truck Drivers

On September 2, 2004, a recently commissioned International Driver Satisfaction Study on the effectiveness of Lane Departure Warning (LDW) systems in commercial trucks was released. The study, conducted over a six-month period with commercial truck drivers in both the U.S. and Europe, indicates that they consider the LDW system a valuable safety feature. Over 140 drivers in the U.S. and 100 in Europe responded to the comprehensive survey.

The study was conducted in an effort to gauge market receptivity as well as the effectiveness of the LDW system from drivers using the system first-hand on a regular basis. With more than 8000 lane departure warning systems installed in commercial trucks in the U.S. and Europe, driver responses were overwhelmingly positive, with many citing specific examples of how the system made them more alert and assisted in potentially dangerous situations.

With increasing highway fatalities, a positive feedback from drivers currently using active safety systems such as the Lane Departure Warning systems is critical to increasing corporate and consumer awareness and, ultimately, demand for intelligent vehicle safety systems. According to the results of the study, 98% of the drivers who used the system in America felt that the system could be useful toward preventing accidents. "This system has encouraged me to pay closer attention to the lanes. In bad weather and fog the system is also extremely helpful," said Bruce Higginbotham, a veteran truck driver for North Carolina-based Cargo Transporters.

The LDW system uses a windshield mounted camera that tracks the lane markings and provides "virtual" rumble strips anywhere there are lane markings. Using image recognition software and proprietary algorithms, the system monitors the relative position of the truck, and if it unintentionally crosses the lane markings, the system automatically emits a distinctive rumble strip sound on the right or left side depending on the direction of travel, alerting the driver to make a correction. Use of the truck's turn signals automatically overrides the system.

ITS Applications During Reconstruction of the Big I Interchange

The New Mexico State Highway and Transportation Department (NMSHTD) rebuilt the Big I interchange in Albuquerque, which connects I-25 and I-40, to make it safer and more efficient and to provide better access. The two-year project began on June 30, 2000 and involved 111 lane-miles of construction and 45 new and 10 rehabilitated bridges. Average Daily Traffic (ADT) at the interchange exceeded 300,000 vehicles and to ensure smooth operations and enhance work zone safety and driver safety during the construction phase, NMSHTD employed ITS in the form of a mobile traffic monitoring and management system. The ITS applications deployed at the Big I were used for the duration of the project, i.e. 2 years, with some portions of the system deployed as part of the permanent freeway management system.

ITS was used for this major construction project because changes in traffic patterns, nighttime closures, and pre-determined alternate routes required that travelers be provided with high-quality real-time information on travel route availability. NMSHTD also wanted to reduce traffic in the area by 20 percent to alleviate the problem of congestion in the work zone area for increased safety. The ITS tools deployed in the area consisted of cameras and sensors for incident and traffic detection, permanent and portable Dynamic Message Signs, Highway Advisory Radio (HAR), a website and other media to transmit traveler information. The components relied on solar re-chargeable battery for power. Communications equipment for the system included spread spectrum radio, wireless Ethernet applications, and cellular digital packet data (CDPD) modems.

The benefits of having an ITS system overlooking the construction zone were manifold including increased mobility and safety and reduction in costs. One of the key benefits identified by the NMSHTD staff was the reduction in incident clearance time from 45 minutes to 25 minutes. This also led to the inestimable benefit of reduced secondary crashes as other motorists were less distracted by incidents. A 32 percent reduction in crashes was observed during the first three months of the work zone.

The use of ITS for the Big I proved to be very successful in mitigating the effects of construction on traffic mobility and safety. It serves as a case study on how ITS can be implemented nationwide to help agencies better manage traffic while performing necessary infrastructure improvements.

Reference: <http://www.ops.fhwa.dot.gov/wz/technologies/albuquerque/index.htm>

ITS America Partners with the Consumer Electronics Association

For the second year, ITS America is partnering with the Consumer Electronics Association (CEA) to feature telematics companies and products at the 2005 International Consumer Electronics Show. The "Telematics/Digital Car TechZone" will be a featured pavilion at the world's largest tradeshow. ITS America members have the opportunity to participate and experience the consumer market firsthand. "The TechZone will provide a business platform for our members in the consumer market or those planning to be in the consumer market," explains Neil Schuster, president & CEO of ITS America. "The pavilion will be an easy way for members to experience the consumer market and this huge, significant industry tradeshow."

The Consumer Electronics Show is scheduled for January 6-9 in Las Vegas. Exhibit space in the TechZone is very limited and booths will be assigned on a first-come, first-served basis. For more information about the TechZone and the 2005 International CES event, contact Edgar Martinez (emartinez@itsa.org or 202.721.4223) or download the pdf brochure from <http://www.itsa.org>

SAVE THE DATE

The ITS Texas Annual Meeting
will be
November 17-19



ITS America News, the monthly newsletter of ITS America, is now available online at:
<http://www.itsa.org/newsletter.html>.

ITS America Commends TTI Congestion Study for Inclusion of ITS and Operational Improvements

WASHINGTON, DC, Sept 7, 2004 - ITS America President and CEO Neil D. Schuster today praised the Texas Transportation Institute's Urban Mobility Study as validation that ITS is reducing delay and saving lives.

"The study released by TTI shows us that Intelligent Transportation Systems work, and a continued investment in their deployment is critical. Where ITS technologies are utilized, delays are being reduced, lives are being saved and traffic systems are running more efficiently. And, with ITS at work in only a fraction of our traffic systems, our nation's safety and mobility can only get better as ITS deployments increase and information networks and technologies become more sophisticated."

"ITS and other operational improvements have an immediate return on investment through significant congestion relief paybacks, a benefit demonstrated not only by reducing delay and driver frustration, but in helping to improve the movement of goods and provision of services nationwide. ITS systems and technologies also have a profound short- and long-term impact on safety, leading us toward our vision of zero fatalities."

TTI's annual "Urban Mobility Report" is one of the most respected benchmarks of traffic congestion across the U.S. This year's report includes for the second straight year various remedies to congestion, such as operational treatments that include intelligent transportation system (ITS) deployments. The report notes that these treatments are particularly effective in three ways. They are relatively low cost and high benefit which is efficient from a funding perspective. They can usually be implemented quickly and can be tailored to individual situations making them more useful because they are flexible. They are usually a distinct, visible change; it is obvious that the operating agencies are reacting to the situation and attempting improvements.

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Mineta Outlines Plans to Fight Traffic Congestion

The Bush Administration is promoting innovative, traffic-fighting solutions that will bring short-term relief to commuters and has proposed record levels of long-term investment in road and transit systems that would go even further in reducing congestion, U.S. Secretary of Transportation Norman Y. Mineta said on September 7, 2004.

"We need solutions that help drivers now, which is why the Administration is working to provide states with solutions to get commuters to jobs, shoppers to stores and families to their homes on time" said Secretary Mineta.

Short-term traffic solutions that the Transportation Department is providing to states include letting drivers pay tolls to use high-occupancy vehicle lanes, allowing states to price highways differently during the most congested periods of the day and using ramp metering technology to better move traffic on and off of highways. Additional measures include improving traffic signal timing to match traffic patterns and avoid gridlock and investing in new telephone and Internet-based information systems to help drivers avoid traffic and construction.

The Departmental traffic relief plan also includes reforms to attract private sector capital and innovation and move projects from the drawing board to completion more quickly. The Bush Administration has proposed letting states use private activity bonds and electronic tolling to find new ways to invest in transportation systems.

Intelligent Transportation Society of Texas
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Dallas Area Intercity Communication Project II

A number of years ago four agencies in the Dallas area signed agreements to share traffic information and exchange video through a common software application. The agencies involved included the Texas Department of Transportation Dallas District (TxDOT Dallas), the City of Dallas, the City of Richardson and the City of Plano. This effort was the Dallas Area Intercity Communication Project. The software application used for this project was the TxDOT DalTrans Prototype Software, the software TxDOT Dallas uses to command and control their ITS system. This project was not technically an integration project because no software was developed to integrate operating systems between agencies. Instead, this project provided the DalTrans Prototype Software to partner agencies that allowed access to real-time traffic information and video to monitor what is occurring on the state highway system.

In February, new funding agreements have been completed to add 8 more agencies to this system. This addition is the Dallas Area Intercity Communication Project II. The participating agencies are the North Texas Tollway Authority (NTTA), Dallas Area Rapid Transit (DART), the Cities of Farmers Branch, Carrollton, Irving, Mesquite, Garland and Grand Prairie. This system is very similar to the initial communication project. Under a license agreement

each agency will be given the DalTrans Prototype Software along with some require communication equipment. This software will allow each agency direct access to the Dallas Districts ITS system. This will allow the partner agencies to not only receive detailed real time information on the highway system in their area but will also allow them to independently switch selected videos to their control centers.

A number of the partner agencies have their own traffic surveillance cameras. This system allows those agencies with cameras to link their cameras into the system so that other agencies may choose and view their video. The communication path for the connections to the agencies is typically an ISDN phone line. This digital network allows bidirectional transfer speeds of up to 115K per second. This allows compressed video to be transmitted at about 10 to 15 frames per seconds. The NTTA will attempt to connect to the system with a single mode fiber optic cable patch whereby any video they receive or send will be at 30 frames per second broadcast quality. By the end of this year a majority of the agencies should be connected to this ever growing system.

For more information, contact Andy Oberlander at AOBERLA@dot.state.tx.us.

The ITS Texas Annual Meeting NOVEMBER 17-19

MARK YOUR CALENDARS

The ITS Texas Annual Meeting is scheduled for **November 17-19** at the Doral Tesoro Hotel in Fort Worth (across the street from the Texas Motor Speedway).

Here is a brief look at the Annual Meeting Program:

The Transportation Management Center Evolves
TMC Big and Small
HOT Topics in Transit
Integrating Operations
Vendor Technology Forum
ITS for Special Events
A Look Into the Future
Ethics in Engineering
The Hidden Price of Success

Business and Awards Luncheon with Keynote Speaker Maribel Chavez, P.E.
TxDOT Ft. Worth District Engineer

Please note the Special Events on November 17th:

ITS Texas Sponsored Training:
Coordinated Incident Management
with speaker John O'Laughlin

ITS Texas Sponsored Tour:
Burlington Northern Sante Fe Control Center

Watch the ITS Texas Website for registration and further program information.

WEBSITE REGISTRATION is coming soon!
Watch for the announcement..

ITS Texas Annual Awards Program

All ITS Texas members are invited to submit nominations for the ITS Texas Annual Awards Program. The awards program will recognize any individual or group (e.g., a city, agency or company) for a project or other contribution in the fields of ITS policy, planning, design, deployment, research or education. The nomination should identify the ITS Texas member making the nomination (name, phone number, and e-mail address), identify the individual or group being nominated, and should describe the unique innovation, distinctive service or outstanding leadership making the nominee worthy of statewide recognition. Members are encouraged to keep nominations brief (200 words or less.) The Awards Committee will evaluate all nominations and select nominees to receive awards. Awards will be presented at the ITS Texas Annual Meeting.

Please submit all nominations to Dave Davis (david.davis@farmersbranch.info) no later than Friday, October 15, 2004.

Reauthorization Update

According to CQ Daily, there is word on the Hill that a deal is in the works that could satisfy the concerns of lawmakers who feel highway spending formulas have shortchanged their states. However, key members of the conference committee working on the transportation reauthorization bill (HR 3550) have yet to approve the details. Basically, the idea is to give a type of "equity bonus" to states that send more federal gas tax receipts to the Highway Trust Fund than they get back for construction projects. The approach outlined would be significantly different than a proposal by so-called donor states to get 95 cents back for each dollar they pay, but the bottom line could work out to be roughly the same. There were high-level discussions Tuesday and Wednesday, and speculation that Congress could adopt a conference report before its target adjournment in October. The conferees are working with a plan to authorize \$299 billion for highway, transit and road safety projects for fiscal 2004 through fiscal 2009.

ITS Texas Scholarship for Graduate Study in Intelligent Transportation Systems

Awards: One \$1000 (non-renewable) scholarship for one academic year.

Degree Program: A Master's degree program in any ITS-related field, e.g., transportation engineering, electrical engineering, systems engineering, etc.

Conditions: Selection criteria will be based on academic ability, stated career objectives, and supporting letters of reference. To be eligible, candidates must be U.S. residents and registered as full-time students in a graduate studies program at a university in the State of Texas.

Submission Requirements:

1. Transcript showing previous courses;
2. Proposed list of courses anticipated for graduate degree;
3. Evidence of acceptance, or probable acceptance, for study in a graduate program at a university in the State of Texas;
4. Resumé describing work experience, participation in professional and/or student chapters of relevant associations, awards, etc.;
5. An essay of no more than 300 words indicating career objectives and particular interests in ITS;
6. Two letters of reference to be sent directly to the ITS Texas Selection Committee. References should be confidential assessments of the candidate's academic ability and record, research ability or potential, professional experience, commitment to career, and any other personal attributes, which indicate that the candidate is worthy of an award.

Deadline: Postmark no later than November 1, 2004
Availability: Scholarship is applicable to Spring 2005 semester.

Apply To: ITS Texas
P. O. Box 2021
College Station, TX 77843

Questions: Contact Mark Conway at (713) 630-7408, mconway@walterpmoore.com

Nationwide, ITS Commended for Helping Reduce Congestion

WASHINGTON, DC, Sept. 8, 2004 - Around the country experts are heaping praise at ITS and operational improvements in response to data from the annual TTI mobility report.

Below is a sampling of various media reports from coast to coast, noting the benefits gleaned from the continued investment in ITS and operational improvements.

Boston, *Boston Globe*, 9/8/04 - Bigger cities are realizing that they can help fix their traffic problems with operational solutions as well as by expanding roads. It's something you can do right away.

Chicago, *Chicago Tribune*, 9/8/04 - "This study shows we are not going to pave our way out of congestion, and we need to work on doing the kinds of things that will make the drive better," said Jacquelyne Grimshaw, transportation coordinator at the Center for Neighborhood Technology in Chicago.

Denver, *Denver Post*, 9/8/04 - "New techniques such as ramp metering, video monitoring of freeway congestion and electronic signs along the highway that can change messages instantaneously have helped to reduce congestion," said Tom Norton, executive director of the Colorado Department of Transportation.

Houston, *Houston Chronicle*, 9/8/04 - Short-term strategies such as clearing wrecked cars off freeways and synchronizing traffic lights are effective tools in coping with Houston's traffic problems, researchers reported Tuesday.

Portland, *The Oregonian*, 9/8/04 - Adding lanes and building more roads aren't enough to relieve the country's traffic chokeholds. Now, the idea is to manage the traffic in rush hour by placing meters at the entrance of freeway ramps, organizing driver assistance patrols to help stranded motorists off the shoulders of major roads and coordinating traffic signals on secondary roads so commuters won't find themselves stuck in stop-and-go traffic.

San Francisco-Oakland, *Oakland Tribune*, 9/8/04 - "This report buttresses the argument that many of the local measures are worth it...other highway efficiency measures, such as FasTrak, roving tow trucks and 5-1-1 service, saved 27,000 hours and \$500 million" said Stuart Cohen, the Transportation Land Use coalition's executive director.

Seattle, *Seattle Times*, 9/8/04 - The data indicate that much of Seattle's apparent improvement can be attributed to more widespread freeway-ramp metering, more-aggressive response to accidents, and other changes in how roads are managed.

Tampa, *Miami Herald*, 9/8/04 - Tampa, Fla., is a good example of a city that has eased traffic in ways other than building roads. Like many cities, it has coordinated its traffic signals, smoothed traffic flow on major roads and created teams to respond quickly to accidents. Such programs have reduced traffic delays in Tampa by 7 percent, or 3.2 million hours a year.

Twin Cities, *St. Paul Pioneer Press*, 9/8/04 - Twin Cities commuters each lost an average of 42 hours to rush-hour delays in 2002, although ramp meters and other traffic-management systems probably kept the total from rising above 50 hours.

PLACE YOUR AD HERE



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