January 2008

President's Message

Happy New Year!

On behalf of the officers and the board members, we would like to thank all of you who were able to participate in the 2007 ITS Texas Annual Meeting in Dallas. We had record attendance and great responses from those who attended. Plans for our 2008 annual gathering are already underway so be sure to mark your calendars.

2008 ITS Texas Annual Meeting
September 3-5, 2008
Sheraton Austin
Austin, Texas

I would also like to send my appreciation to our officers and board for their continued dedication and service to this organization. We have all recuperated over the holidays and are now ready to provide members with more opportunities to actively participate in ITS Texas. Here are just a few of the goals planned for the year. Our training program continues to be successful and we will hold two training courses this year. To continue to support the next generation of ITS professionals, we will offer ITS Texas Scholarships and support the University of Texas ITS Student Chapter. In addition, we would like to increase our membership and provide more opportunities and services to our existing members. If you have any suggestions, ideas, or would like to get more involved in ITS

Texas, please contact me or any of the board members. We value your input!

As we begin to move ITS into a 24/7 operation, as we did at the annual meeting, we begin to coordinate with more partners, integrate different systems and better serve the traveling public. I challenge all of you to put what you learned at the meeting into action throughout the year.

Natalie Bettger
President, ITS Texas

ITS Texas Board of Directors

President
Natalie Bettger
NCTCOG, Arlington

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2007 ITS Texas Annual Meeting

The annual meeting was held in Dallas at the Holiday Inn Select (Farmers Branch) from November 13th – 15th. The meeting set a record for attendance with over 150 people attending. The annual meeting got off to an exciting start with the opening session providing an opportunity for everyone to participate in an emergency disaster drill. During the opening session, people were assigned to different agencies that would need to respond to the incident. Darrell Toups, the Emergency Coordinator for the City of Garland ran the exercise. He provided information about the incident as it was happening. Each agency had to then determine what course of action they would be taking and document it. At the conclusion of the opening session, the incident continued to evolve.

Throughout the rest of the conference sessions, participants received news flashes that provided updates on the last events that had occurred.

At the closing session, everyone returned to their group and received final information about the incident and developed their final recommendations for action that their agency should take. A representative from each group then discussed what decisions they had made and why they had made them.

There were two tours conducted on Wednesday afternoon. A tour of the new DalTrans Traffic Management Center and a tour of the Dallas/Fort Worth International Airport Operations Center was conducted. Both tours were well attended.

The technical sessions were well attended throughout the conference. The sessions included:

- Traveler Information Who, What, How?
- ITS Applications in the Public Transportation World
- Communications Technologies
- Partnerships
- ITS in TxDOT
- Tolling and Managed Lanes: Local, State, and National Perspectives
- Engineering Ethics
- Show Me The Money!

The lunch time speaker on Thursday was Merrill Atwater. Mr. Atwater, the great grandson of President Dwight Eisenhower, spoke about the advent of the Interstate System and how VII could potentially change the traffic congestion. Our Friday lunchtime speaker was Michael Morris, Director of Transportation, NCTCOG. Mr. Morris spoke to the attendees about innovative financial methods and implications for ITS deployment.

The conference was very successfully with a record number of attendees that numbered in excess of 150 attendees, 26 vendors, and 12 sponsors.

Next year's meeting will be from September 3rd – 5th in Austin at the Sheraton. The meeting was moved to September to remove the conflict with the ITS World Congress in New York.

15th World Congress on ITS
November 16-20, 2008

Version: November 2007

ITS America's 2008 Annual Meeting to Combine with the 15th World Congress on ITS

With the theme of "ITS Connections: Saving Time, Saving Lives." the 15th World Congress on Intelligent Transport Systems & ITS America's 2008 Annual Meeting and Exposition will be the largest event in the world for ITS leaders, policy makers and other industry professionals. An expected 10,000 transport executives and ITS professionals from around the globe will come together at the Jacob K. Javits Convention Center in New York City from November 16-20, 2008.

Delegates to this combined event will have access to more than 200 extraordinary policy and technology sessions, exciting tours, a 200,000 square foot exhibition hall, and virtually limitless opportunities to connect with an international audience in one of the great cities of the world.

A broad range of technical tours will also be available to delegates. These tours will feature both state-of-the-art facilities including the New York State Department of Transportation's INFORM Center on Long Island, as well as transport facilities of extraordinary significance, such as the George Washington Bridge, "the busiest vehicular crossing in the world."

This combined event will feature the largest fully-integrated demonstration of deployed and marketable ITS technologies ever. Vehicle-to-vehicle and vehicle-to-roadside communication technologies and applications will be highlighted. This demonstration will include innovative mobility solutions operating on the streets and highways of New York and will build upon the success of the Innovative Mobility Showcase that proved to be of enormous interest at the 2005 San Francisco World Congress. Live demonstrations will showcase advanced ITS technologies that provide effective management of public facilities, protect public investment in transport infrastructure, and enhance and expand mobility options.

Registration for the 15th World Congress on ITS will open in April 2008. For the latest information on the 15th World Congress on ITS, visit www.itsworldcongress.org.

The 15th World Congress on ITS is sponsored by ITS America, ERTICO and ITS Japan.

EVENT HIGHLIGHTS:

Highlights of the 15th World Congress on ITS
The 15th World Congress on Intelligent Transport Systems will be the largest ITS-related meeting in the world and will feature:

- The largest fully-integrated demonstration of deployed and marketable technologies which will be showcased on the streets and highways of New York
- Several opportunities to market your products, programs, and business before an international audience

- Over 200 educational sessions presented by 750 industry leaders offering the very latest in research results, technical innovations and market developments
- Six Forum Showcases providing a unique way to learn more about your specific business area by engaging in interesting discussions on hot industry topics and ongoing projects.
- A variety of technical tours to ITS facilities in and around New York
- Unparalleled networking opportunities
- A special ceremony honoring the industry's best and brightest ITS projects

This congress will offer a full agenda of technical sessions, ITS America's Forum Showcases, and technical tours, coupled with a sold-out exhibit hall displaying the latest in cutting-edge ITS technologies and product. If you are involved in the development or deployment of ITS technologies, you can't afford to miss this event!

EXHIBITION:

15th World Congress on ITS Exhibit Hall Nearly Sold Out
ITS America invites you to take advantage of a remarkable opportunity to showcase your business before the national and international ITS community by becoming an exhibitor of this world-class event to be held in New York City from November 16-20, 2008. With only a year to go, the 200,000 square foot exhibit hall is already 90% sold. If you're thinking of exhibiting, don't delay.

To secure your exhibit space, contact aclarke@ntpshow.com.

To download a copy of the Exhibitor & Sponsor Prospectus, visit www.itsa.org//itsa/files/pdf/WC08ExhibitorSponsorProspectus.pdf.

Virtual Tradeshow Live for the 15th World Congress on Intelligent Transport Systems
 ITS America has launched a "Virtual Trade Show" for the 15th World Congress on Intelligent Transport

Systems. The Virtual Trade Show is an online benefit that ITS America provides to World Congress exhibitors—creating a connection with thousands of transportation professionals and media looking for information on the products and services that will be showcased in the 200,000 square foot exhibition hall at the Jacob K. Javits Convention Center in New York City from November 16-20, 2008.

Visitors to the World Congress Virtual Trade Show can search for exhibitors by organization name, booth number or category. To "meet" the exhibitors online, visit www.itsworldcongress.org/exhibitor-list.

Over 90% of the exhibition hall has already been sold, so if you are thinking of exhibiting at this international event, don't wait too much longer. To secure your exhibit space, contact Alex Clarke at aclarke@ntpshow.com.

SPONSORSHIP:

Be Seen Everywhere! Sponsor the Ultimate Global ITS Event
The 15th World Congress on Intelligent Transport Systems & ITS America's 2008 Annual Meeting and Exposition is sure to be our most exciting and innovative show to date. You are invited to take advantage of a remarkable opportunity to showcase your organization to the national and international ITS community by exhibiting or serving as a sponsor of this world-class event.

If your business is involved in the design, development or manufacture of information, communication and transportation technologies that focus on transportation safety or efficiency, then you can't afford not to be in the exhibit hall measuring 200,000 square feet—the largest hall in which we've hosted a World Congress! Our attendees are looking for solutions to their transportation challenges directly from experts just like you.

With sponsorship levels from Diamond to Friends of ITS, there are opportunities for marketing budgets of any size. Whether your organization is a well-known industry leader or an emerging one, make the choice to lock in a sponsorship today, and get ready for results!

For complete details on how best to build the sponsorship package that delivers the results you need, contact Edgar Martinez, Director of Business Development, ITS America, at emartinez@itsa.org or 800-374-8472.

CALL FOR PAPERS:

Call for Papers for the 15th World Congress on Intelligent Transport Systems:
On behalf of the organizers of the 15th World Congress on Intelligent Transport Systems, you are invited to submit a scientific or technical paper. Papers must be original and should report on recent significant and substantial achievements and results, reflecting the World Congress theme, "ITS Connections: Saving Time, Saving Lives." Technical paper drafts and full scientific papers are due January 31, 2008.

Papers must be original and should report on recent significant and substantial achievements and results, reflecting the World Congress theme, "ITS Connections: Saving Time, Saving Lives." One important new feature of this World Congress is the opportunity for authors of scientific papers to have their work peer-reviewed and published in one of three notable scientific journals:

- "Journal of Intelligent Transportation Systems" will focus on civil engineering aspects of intelligent transport systems, especially on issues related to intelligent infrastructure.
- "IEEE Transactions on Intelligent Transportation Systems" will focus on electrical engineering aspects of intelligent transport systems, especially on issues related to intelligent vehicles and fleet management.

- "IET Intelligent Transport Systems" will focus on all aspects of cooperation between vehicles and infrastructure.

Following the World Congress on ITS, authors of particularly notable papers will be contacted by one of the journals and invited to update and enhance their papers for inclusion in these special editions.

Technical papers may address technical subjects as well as the institutional, business and economic aspects of ITS. All proposals must be original and report on recent significant and substantive achievements. Draft technical papers should be no longer than three pages and written in English. Technical papers will be reviewed by a peer panel that will look for quality, relevance, and significance of the findings. Topics for technical papers include:

1. Policy and Strategy
2. Traveler Information
3. Vulnerable Users
4. Infrastructure and Traffic Management
5. Public Transport
6. Freight and Commercial Vehicles
7. Wireless Communications
8. Vehicle Systems and Electronics
9. Environmental Matters
10. Training and Education

For a list of key dates, guidelines, topics, and to submit a paper, please visit http://www.itsworldcongress.org/submit-a-paper.html. For questions regarding the program, please contact wanderson@itsa.org.

INTEGRATED TECHNOLOGY DEMONSTRATION:

Experience Dynamic Technology Demonstrations at the 15th World Congress on ITS

The 15th World Congress on ITS will be the most dynamic way to experience ITS. This event will feature the largest fully-integrated demonstration of vehicle-to-vehicle and vehicle-to-roadside communication technologies and services. This demonstration will include innovative mobility solutions operating on the streets and highways of New York and will build upon the success of the Innovative Mobility Showcase that proved to be of enormous interest at the 14th World Congress in San Francisco.

VII Test Beds
Three DSRC-equipped test beds are being developed in and around New York City.
These include a freeway test bed on the Long Island Expressway and two arterial test bed loops on the streets of Manhattan near the Convention Center. These test beds will be used to demonstrate applications such as in-vehicle signing, warnings, traveler information and e-commerce. Tour buses will be equipped with video screens that will replicate a driver interface so large numbers of delegates can experience these various applications. The test beds will be built in compliance with the National VII Architecture and will be left in place after the World Congress to serve as a national VII test bed for future research and development.

11th Avenue Theater
Located in front of the Jacob K. Javits Convention Center, the 11th Avenue Theater will be the site of live demonstrations of active safety systems and other dynamic applications not practical to conduct in real traffic. This site will be used primarily by automotive OEMs to demonstrate active VII-based safety systems. The DARPA Urban Challenge autonomous vehicles may also be included. Delegates will be able to watch these demonstrations in a narrated, theater-like environment in front of the Convention Center.

VII Transportation Management Center of the Future
The third component of the demonstration is the VII Traffic Management Center of the Future. The VII TMC of the Future will be located inside the exhibit hall and will feature a video wall, work stations and will illustrate transportation systems in 2020. Actual raw probe data will be brought into the VII TMC from the tour buses and other DSRC-

equipped vehicles in the New York area. This data will be displayed in the VII TMC inside the exhibit hall and delegates will be shown how vehicle-based sensor data can be used to generate information useful to highway operations. The VII TMC will also demonstrate probe vehicle-based applications of VII such as the generation of travel time data, signal timing, weather forecasting and road condition warnings.

For the latest information on the 15th World Congress on ITS, visit www.itsworldcongress.org.

TxDOT Districts

DalTrans' New TMC

Over ten years ago, in June of 1997, the DalTrans ITS system went into operations in a 2100 square foot control center located in north Dallas. This center included a 550 square foot control room just large enough to accommodate 4 operators from 3 agencies. In mid-December of 2007, the new DalTrans Traffic Management Center went into operations in west Mesquite adjacent to the TxDOT Dallas District Offices. The 54,700 square foot facility will operate the DalTrans system well into this century.

On the floor of the control center there are a number of agencies with different functions. TxDOT personnel monitor the highways and respond to

planned and unplanned events. Dallas Area Rapid Transit (DART) has personnel that manage all of the HOV lanes and the Dallas County Sheriffs' Office has personnel dispatching the Dallas area Courtesy Patrol. The Courtesy Patrol is a joint partnership operation between TxDOT, Dallas County and the North Texas Tollway Authority (NTTA). Additional space is available for consoles to support traffic reporting services in addition to the future growth of the DalTrans system.

The DalTrans system currently covers 97 miles today, with 100 miles under construction and 31 miles in design, totaling 229 miles. This system covers five counties including Dallas, Denton, Collin, Rockwall and Ellis. There are currently 150 CCTV cameras operating, 108 under construction and 26 in design. The DalTrans system also includes 39 operating Dynamic Message Signs with 22 under construction. There is an extensive detector system utilizing a host of different technologies. In addition, DalTrans utilizes a variety of communication systems, all of which are integrated. These communication systems include ATM (asynchronous transfer mode) network, gigabit Ethernet, POTS telephone service, spread spectrum radio, ISDN phone lines and Wireless 802.11 Ethernet. Each component is fully integrated into one user client software application developed for DalTrans.

Information collected through the DalTrans system is conveyed to the public through the Dynamic Message Signs, traffic reports via radio stations, and the web page (www.dfwtraffic.org). In 2007, the web page had over 211 million hits. Traveler information is also provided to the public through the 5 television stations which all have live feeds into the system.

The DalTrans Traffic Management Center houses the Dallas District Transportation Operations staff. In addition, DART HOV and Texas Transportation Institute (TTI) staff have dedicated office spacein this facility. The Courtesy Patrol operated by the Dallas County Sheriffs' Office is also based out of this facility. The facility has a training center with 2 classrooms and an Emergency Management

Room for any event requiring additional staffing or space for cooperative management of an event. There is a media/observation room which looks into the facility along with a couple conference rooms to support of day to day business.

The official ribbon cutting event for the DalTrans Traffic Management Center will be the morning of January 23, 2008.

Andy Oberlander
ITS Texas Board Member

Technical Corner

DSRC Interoperability

The Federal Highway Administration Vehicle Infrastructure Integration (VII) program is paving the way for the next phase of intelligent transportation systems technology, where vehicle-to-vehicle and vehicle-to-road communications will enhance the safety and efficiency of crowded highways. Analysts estimate that several hundred thousand roadside DSRC devices will be installed over the course of several years as part of the VII program. The OmniAir Consortium, Inc has been tasked with developing a DSRC certification program for these communications devices.

The communications devices are critical to VII success, and Southwest Research Institute (SwRI) has been selected by OmniAir to develop the 5.9-GHz Dedicated Short Range Communication (DSRC) standards conformance test methods for the OmniAir DSRC certification program.

OmniAir, a nonprofit public-private consortium, is under a five-year contract to the Federal Highway Administration to develop a certification program deemed essential to the forward progress of the VII initiative. SwRI, a pioneer in intelligent transportation systems and communications

technologies and an OmniAir member, is responsible for developing the standards conformance test methods for the Institute of Electrical and Electronics Engineers (IEEE) P1609.2-4 DSRC standards.

"The IEEE working group is finalizing the DSRC standards," says Ryan Lamm, section manager of Intelligent Vehicle Systems and Networks at SwRI. "We are developing the corresponding test methods that will become a major component of the OmniAir certification program."

In addition to DSRC Device Certification, the OmniAir Consortium is beginning the development of a Toll and Payments ConOps for the USDOT VII Program and will also be developing and testing an Electronic Payment Services National Interoperability Specification (EPSNIS) for tolling. The project, in short, will define the interface protocol standards for transaction processing and test the specification on both legacy and 5.9GHz DSRC prototype systems.

The OmniAir Consortium is looking for public and private input in the development of the certification program. For more information visit www.omniair.org, or contact Mr. Tim McGuckin, Executive Director of the OmniAir Consortium at 202-756-0012 or via email mcguckin@omniair.org.

Southwest Safe Transport Initiative (SSTI)

Southwest Research Institute (SwRI) has began activities to develop a program, entitled the Southwest Safe Transport Initiative (SSTI), to investigate and develop sensor / computing / mobile technologies that could be utilized to augment a commercial-off-the-shelf vehicle platform to provide autonomous vehicle capabilities to perform specific tasks and improve safety in urban and trafficked environments. The SSTI program brings together five technical divisions at SwRI to

capitalize on cutting edge R&D in unmanned air vehicles, machine vision, robotics, intelligent transportation systems, cooperative vehicle-highway systems, vehicle dynamics, and advanced control systems in the development of a fully Autonomous Ground Vehicle (AGV). SwRI is also developing collaborations with multiple domestic and international firms to exchange research and innovations.

Technology for autonomous control of cars, trucks, tractors, and military vehicles has made dramatic advances in the last few years led by defense science programs such as the DARPA Grand Challenge, DARPA Urban Grand Challenge, and OEM car/truck industry advances in active safety devices. Furthermore, there is evidence that the field of autonomous vehicle technology is entering a rapid growth phase. For instance, the Department of Defense (DoD), along with a Congressional objective, has stated that 1/3 of ground combat vehicles will be unmanned by 2015 and the USDOT is investing heavily in the communications technology needed to link the intelligent highway with the intelligent vehicle through its Vehicle Infrastructure Integration (VII) program.

While fully automated vehicles are many years from reality, one day you may be able to relinquish control of your vehicle during your daily commute. SwRI has adopted a very aggressive schedule and is planning a demonstration within one calendar year.

For additional information please contact Dr. Steven Dellenback at sdellenback@swri.org or Ryan Lamm at rlamm@swri.org.

> ## ITS Texas on the web:
> ## www.itstexas.org

Have you visited the ITS Texas Web recently? Located at http://www.itstexas.org, the website is your source of information for what's going on in your state chapter. Information you can find at the website include items such as:

- Your information source for the 2008 ITS Texas Annual Meeting – as sessions are developed and speakers are confirmed, this section of the website is updated to provide the latest information. Start checking early in the calendar year for an announcement of annual meeting dates and location. Come back periodically to see if your favorite topic is being presented. If not, why not volunteer to present? Click "Annual Meeting" on the menu!

- Meeting archives – Did you know that ITS Texas maintains an archive of past meeting presentations? We've got coverage back to 2000 in Dallas! Looking for information on a particular topic? Why not check under the meeting archives?

- ITS Texas Events – this section details upcoming events that might be of interest to the ITS Texas membership. Do you have an event you'd like to see listed here? Email the ITS Texas webmaster and provide the information, including a link to the website or article for the event. (Publication of event information is at the discretion of the ITS Texas board of directors and should be limited to events pertaining to transportation and ITS). Click on "Upcoming Events" on the menu!

- Membership information – do you remember if you are a member? Don't pay a higher registration fee for the annual conference! Check prior to registering to ensure you receive the correct rate. The 2008 membership directory will be on-line soon. Click on "Membership" on the menu!

- Front Page – Remember that the front page of the website contains a bullet point listing all the breaking news we're aware of, with links to additional detail if available. Do you have something you'd like to see listed there? Would it be of benefit to the rest of the membership? Why not let us know about it? Simply go to http://www.itstexas.org

YOUR ARTICLE HERE

If you have information concerning an ITS project in Texas you would like to share, send it to aoberla@dot.state.tx.us for inclusion in the ITS Texas Newsletter.