



Innovation Technology Sustainability

2010 Annual Meeting
Chattanooga, TN
September 22-24, 2010

Engineering | Construction | Environmental | Architecture



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Dear Conference Attendee,

On behalf of the Board of Directors of the ITS Tennessee Chapter of ITS America, I welcome you to our fourth annual conference here in beautiful downtown Chattanooga, Tennessee. I am pleased to see all our participants from across Tennessee and also from surrounding states. I hope you will find this conference an excellent opportunity to learn more about intelligent transportation systems while making new friends and acquaintances in the industry.

Some of the highlights of this year's conference include the golf outing, active traffic management training session, transportation management center technical tour, social events, and many technical presentations. A special thanks to all of our sponsors whose financial support is critical to making this conference successful.

And don't forget to spend time in the exhibit area on Thursday and Friday to learn about the latest ITS technologies, applications, and services. Please spend some quality time with our exhibitors and let them know how much you appreciate their participation.

We would also like to thank the Tennessee Department of Transportation (TDOT) for letting our meeting participants experience the latest in ITS applications by touring the brand new TDOT SmartWay Transportation Management Center.

Last, I would like to express my heartfelt thanks to the Conference Planning Team, led by Gerald Bolden, for making this meeting a success. The outstanding program is a result of many long hours and hard work by a great group of volunteers dedicated to the advancement and success of ITS Tennessee.

Enjoy your time here at the meeting!

Marshall Elizer

Marshall Elizer
President, ITS Tennessee, 2010

Schedule at a Glance

Wednesday, September 22

- 11:00 — 5:00 — Golf Event at Moccasin Bend Golf Club
(Lunch at 11:00; tee times begin at 12:30)
- 12:00 — 6:00 — Registration Open (Mezzanine)
- 12:00 — 6:00 — Exhibitor Set-up (Plaza A)
- 1:00 — 4:00 — Active Traffic Management Training Session
(Tennessee River Room)
- 6:00 — 7:30 — Welcome Reception (Tennessee River Room)

Thursday, September 23

- 7:00 — 8:00 — Continental Breakfast (Mezzanine/Plaza B & C)
- 7:00 — 5:00 — Registration Open (Mezzanine)
- 8:00 — 5:00 — Exhibit Hall Open (Plaza A)
- 8:00 — 8:30 — Welcome Session (Plaza B & C)
- 8:30 — 10:00 — Technical Program —
Sustainability Roundtable (Plaza B & C)
- 10:00 — 10:30 — Break in Exhibit Hall (Plaza A)
- 10:30 — 12:00 — Technical Program —
Innovative Programs (Plaza B & C)
- 12:00 — 1:15 — Keynote Luncheon
(Convention Center Ballroom E)
- 1:30 — 3:00 — Technical Program —
Tools and Technologies (Plaza B & C)
- 3:00 — 3:30 — Break in Exhibit Hall (Plaza A)
- 4:00 — 8:00 — Ride on Lookout Mountain Incline Railway -
Dinner at International Towing & Recovery
Museum

Friday, September 24

- 7:00 — 8:00 — Continental Breakfast (Mezzanine/Plaza B & C)
- 8:00 — 12:00 — Exhibit Hall Open (Plaza A)
- 8:30 — 10:00 — Technical Program —
Advances in Traveler Information (Plaza B & C)
- 10:00 — 10:30 — Break in Exhibit Hall (Plaza A)
- 10:30 — 12:00 — Closing Session (Plaza B & C)
- 12:30 — 3:00 — TDOT Region 2 Traffic Management Center Tour



About the Extras...

Active Traffic Management Training

When: Wednesday, September 22
1:00 - 4:00 p.m.
Where: Tennessee River Room
Instructor: Glenn N. Havinoviski, PE

This training provides two Continuing Education Units and will cover the following items:

- (1) What is active traffic management (ATM) and why do we need it?
- (2) Historical overview of ATM strategies in the US and Europe
- (3) Overview of integrated operations concept (the core of ATM)
- (4) Various applications of ATM
- (5) Response planning, decision support, and automation of operations
- (6) Deployment issues (technical, institutional, operational, etc.)
- (7) Implementation strategies



TDOT Region 2 Traffic Management Center Tour

When: Friday, September 24
12:30 - 3:00 p.m.

Continuing with our trend from the previous three annual meetings, there will be a tour of the local TDOT traffic management center (TMC). TMCs are the hubs of Smartway. The Chattanooga system consists of 74 miles of fiber optic backbone in the Chattanooga urban area with 16 dynamic message signs (DMS), 71 closed-circuit television (CCTV) cameras, 175 radio data systems (RDS), 5 highway advisory radio (HAR) transmitters, and 21 HAR beacons. The TMC is also interconnected with the Bradley and McMinn County Fog Warning System on Interstate 75, consisting of 10 DMSs, 21 CCTV cameras, 14 RDSs, 9 fog detection sensors, 10 changeable speed limit signs, and 2 HAR transmitters. The tour will consist of a PowerPoint presentation highlighting all aspects of the Smartway system, a walkthrough of the operations room, and a look at an incident response HELP truck.

Transportation is provided and will load in front of the hotel.

Ride on Lookout Mountain Incline Railway – Dinner at International Towing & Recovery Museum

When: Thursday, September 23
4:00 - 8:00 p.m.

(Includes transportation by CARTA and dinner at the museum)

We hope you join us for this unique event — *it's all free of charge!* We will leave the Marriott at 4 p.m. and take CARTA shuttles over to the Incline Railway for a ride up Lookout Mountain, which will be followed by a "meat and three" style dinner and tour at the International Towing & Recovery Hall of Fame and Museum. Here's some information on this unique event.

Incline Railway

Following the Civil War, development on Lookout Mountain was minimal. The four-hour trip up Whiteside Pike, a toll road, discouraged many people, and the \$2 toll discouraged the rest. During the railroad boom of the 1880s, speculators decided to develop a hotel on the mountaintop serviced by a narrow gauge railroad that would run up the mountain. A second, broad gauge line and an earlier incline were also competing for passengers. On November 16, 1895, the railroad known today simply as "The Incline" opened, rising up the steepest part of Lookout Mountain. Built by John Crass and the Lookout Mountain Railway Company, this technical marvel boasted an incline of 72.7 percent at one point, making it the steepest passenger incline in the world. By 1900, the success of this railway closed down all of its competitors. Originally the cars were made of wood and powered by huge coal-burning steam engines. Electric power was used after 1911 and now it uses two 100 horsepower motors. (Source: www.ridetheincline.com)



International Towing & Recovery Hall of Fame and Museum

Come walk among early towing and recovery history in the International Towing & Recovery Hall Of Fame and Museum. Enjoy restored antique wreckers and equipment, industry-related

displays of collectible toys, tools, unique equipment, and pictorial histories of manufacturers who pioneered a worldwide industry. Chattanooga, Tennessee, was chosen as the museum's home because the industry's first wrecker was fabricated approximately 3-½ miles away from the museum at the Ernest Holmes Company. (Source: www.internationaltowingmuseum.org)

Meet the Featured Speakers

What: Welcome Session

When: Thursday, September 23 — 8:00 - 8:30 a.m.

Where: Plaza B & C



Manuel Rico, Chattanooga City Council Chairman

Manuel Rico first entered public service about 20 years ago as a member of the Downtown Sertoma Club where he served as President. Councilman Rico enjoys working with young people and serves on the Metro YMCA board as well as Y-CAP.



Robert VanHorn, Tennessee DOT Region 2

Robert VanHorn is one of four Regional Incident Management Coordinators with the Tennessee DOT. He is responsible for region-wide incident management, the Tennessee DOT Freeway Service Patrol (HELP), and the transportation management center. He has

been with TDOT since 2000, after retiring a Chief Officer from the Chattanooga Fire Department.

Bob has worked with nationally known incident management experts in presenting several National Highway Institute "Highway Incident Management and Roadside Emergencies" workshops. He recently received a Governors Highway Safety Lifesaving award for his work in prevention of secondary freeway crashes, responder safety, and quick roadway clearance.



Marshall Elizer, ITS America Chapters Council

Marshall Elizer has been involved in transportation planning and engineering for over 35 years. His professional experience includes 22 years of public service and 13 years of private sector practice. His public sector responsibilities have included the management, planning, design and operation of multi-modal

transportation systems in Colorado, Tennessee, Texas, and California. Marshall holds Bachelors and Masters Degrees in Transportation Engineering from the University of Tennessee and is Professional Engineer in 14 states.

What: Luncheon Speakers

When: Thursday, September 23 — 12:00 - 1:15 p.m.

Where: Convention Center Ballroom E



Patrick McGowan, ITS America

Patrick McGowan is President of Telvent Transportation North America and brings over two decades of experience in all aspects of transportation technology systems. Patrick is responsible for all corporate aspects of the Telvent ITS, tolling, traveler information and transit businesses in North America.

Patrick is dedicated to the growth and stability of our transportation industry, serving on several technical committees

through ITS America and holding positions on the ITS America Board of Directors, International World Congress Board and is serving as the Chairman of the 2011 World Congress in Orlando.

Keynote Speaker



Robert Arnold, USDOT, FHWA

Robert (Bob) Arnold is the Federal Highway Administration (FHWA) Director, Office of Transportation Management. This office is responsible for national programs focused on the reduction of roadway congestion, dealing mainly with reoccurring congestion in such areas as pricing, active traffic management, traveler information. As a

member of the FHWA's Senior Executive Service, he is responsible for contributing to the development of overall strategic planning, policy development, and developing legislative proposals.

Bob received a Bachelor of Science in Civil Engineering from Ohio Northern University in 1983 and has worked for FHWA since graduation. He is also a 2006 graduate from the US Government - Office of Personnel Management's Federal Executive Institute.

What: Closing Session

When: Friday, September 24 — 10:30 a.m. - 12:00 p.m.

Where: Plaza B & C



Jeffrey Jones, Tennessee DOT

Jeffrey (Jeff) C. Jones is the Assistant Chief Engineer of Design for the Tennessee Department of Transportation (TDOT) in Nashville, Tennessee. Prior to this, he served as the Director of the TDOT Design Division for 11 years where he was responsible for the roadway design criteria and plan development procedures used for projects in Tennessee. Prior to joining the TDOT, Mr. Jones served as an engineer with the Federal Highway

Administration for over ten years which included permanent assignments in the Georgia and Tennessee Division Offices.

Mr. Jones holds a bachelor's of science degree in Civil Engineering from the University of Tennessee at Knoxville. He is a licensed professional engineer in the State of Tennessee. He is a member of the AASHTO Subcommittee on Design and the AASHTO Technical Committee on Geometric Design.



Pam Kordenbrock, FHWA

Pamela M. Kordenbrock serves as the FHWA Tennessee Division Administrator. Since April 2005, she served as the Assistant Division Administrator in New Mexico. Prior to this assignment, Pamela served for over four years as a Senior Transportation Specialist in the Office of Operations. She holds a Bachelor's and Master's Degree in Civil Engineering from the University of Virginia.

USDOT ITS Joint Program Office Representative

The USDOT's ITS Joint Program Office, a part of the Research and Innovative Technology Administration (RITA), supports the deployment of integrated, intelligent vehicles and infrastructure technologies to create an intelligent transportation system focused on safety, mobility and environmental improvements.

Roundtable: Sustainability

Moderator:
Steve Novosad, PBS&J

Speakers:
Larry Yermack (Telvent)
Co-Chair, ITS America Sustainability Forum

Mett Davis (Davis & Floyd)
Clean Transportation and Advanced Vehicle Communications Research

Alan Jones (TDOT)
Manager, Policy Office, Long Range Planning Division

There is a movement in ITS on how it can be used to assist in the reduction of GHGs by using technologies to reduce congestion and provide travelers with smarter/greener choices, such as taking the bus over driving the car. This discussion has expanded now to include Sustainability. ITS America has setup a forum on Sustainability that has several committees looking at various areas of transportation and how ITS might play a role in that.

On the other side of the coin, you have the climate change legislation that has been shot down a couple of times and is being reworked now. Is there a role for ITS in the bill? Then there are the issues of VMT and usage fees to raise funding, but will that also drive travelers to alternate means of transportation to avoid paying the fees? Can vehicles provide data to the infrastructure that will allow systems to better manage traffic from a "green" perspective.

- Where is sustainability going;
- What attributable impacts can ITS have on the environment; and
- What are the timeframes we should expect to see implementation?

Innovative Programs

Moderator:
Ben Robinson, ARCADIS

Grant Waldrop (Georgia DOT)
Georgia DOT Regional Traffic Operations Program

This presentation focuses on a unique and first of its kind program — possibly on a national scale — for delivering active traffic management for over 400 traffic signals along 15-20 key metro commuter corridors.

Koorosh Olyai (DART)
Integrated Corridor Management Strategies for Multi-Modal Operations: US 75 Dallas, TX

This presentation provides an overview of how the US-75 Integrated Corridor Management (ICM) Project helps transportation agencies collaborate to move more people and vehicles through this corridor. This presentation also describes how improved corridor operations are measured in the field.

Ray Murphy (FHWA)
Latest Results from FHWA's Road Weather Management Program

Weather is the second largest cause of non-recurring congestion, accounting for 25 percent of all delays. This presentation addresses Clarus system enhancements (latest developments in quality control) and Mobile Sensing - including IntelliDrive and the VDT (Vehicle Data Translator) developed by FHWA.

Farhad Poonan (Telvent)
An Integrated Solution for Traffic and Environmental Management

This presentation will provide information on the transportation air quality and congestion evaluation system (TRACE), an integrated platform of traffic management, ITS strategies, and air quality monitoring systems.

Tools & Technologies

Moderator:
Moe Zarean, Iteris

John Gray (AECOM)
TDOT Traffic Design Manual: New Chapter on Systems Engineering

The key to successful ITS project implementation is a structured systems engineering process. This presentation will highlight TDOT's newest resource to guide project compliance with *Federal Rule 23CFR 940.11*.

Bruce Winner (Citilog)
Intelligent Hard Shoulder Running

It's no secret that the ever-growing traffic and congestion problems are expanding as more and more vehicles appear on the roads. This is not only happening in the world's largest cities, but on secondary roads everywhere. Adding new lanes is not always the answer. This presentation will review project design and implementation of an intelligent hard shoulder at Europe's largest traffic bottleneck.

Mark Rogers (Siemens)
Active Traffic Management - Merging of ITS Technologies

This presentation covers worldwide examples of active traffic management systems which can address integration, with everything from parking systems to environmental sensors so that traveler information and greenhouse gas reduction may be taken to a new level.

Ed Turbyfill (GSP)
Leveraging Legacy Copper Cable

This presentation illustrates how to leverage legacy copper cable in an Ethernet ITS network. It covers: latest technology advances in Ethernet over twisted pair copper; Ethernet bandwidth expectations; video over this type installation; preparation and testing of legacy copper cable; advantages of using existing infrastructure; savings over newly installed fiber; and testing installed systems.

Advances in Traveler Information

Moderator:
Michael F. Rebick, TDOT

Rick Schuman (Inrix)
Smartphone Revolution

This presentation discusses how the smartphone revolution and associated applications are changing our world.

J. Morrison (MTN)
Audible Traffic Alerting

Test results from Las Vegas, Kansas City, UC Berkeley, and CANADA for the first Hands Free Alert Communications Platform will be shared. This platform promotes driver safety, reduces driver distraction, and complies with laws restricting the use of mobile devices in automobiles.

Dowell Hoskins Squier (GSP)
ITS Needs for the Airport Traveler

Research results performed under the Airport Cooperative Research Program (a Transportation Research Board of the National Academies program) will be summarized in this presentation. It will also identify the difference between the state-of-the-practice and the state-of-the-art for providing ground access information and present findings on using ITS technology to help travelers to simply, efficiently, and interactively evaluate their airport ground transportation options.

John W. Hall (TDOT)
Traveler Information - What's Next?

This presentation explores what is new in the realm of SIT: where is it heading; and what initiatives TDOT is pursuing.

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In-state warehouse with traffic signal equipment and controller/cabinet inventory.
Providing local pole engineering services, field support / training, and installation assistance.

Join Us For Breakfast!

When: Thursday and Friday, September 23 & 24
7:00 - 8:00 a.m.

Where: Mezzanine/Plaza B & C

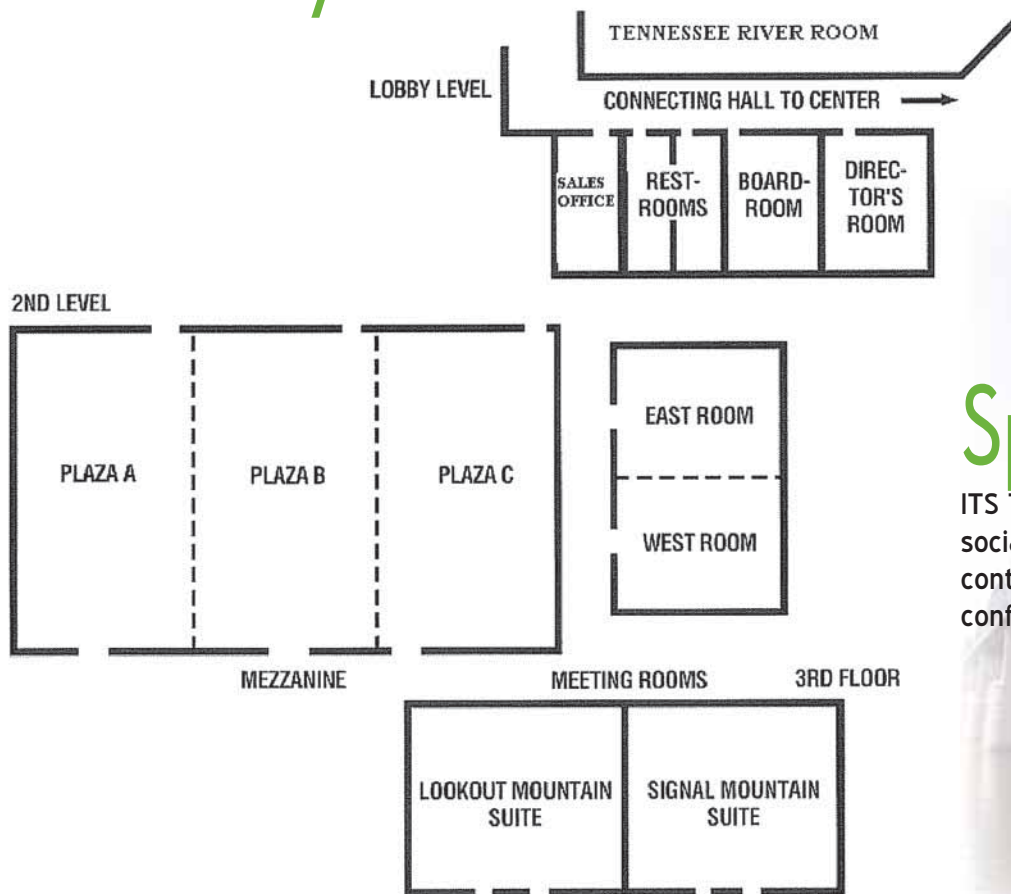
Don't Miss Lunch

with our keynote speaker

When: Thursday, September 23
12:00 - 1:15 p.m.

Where: Convention Center Ballroom E

Hotel Layout



Special Thanks!

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